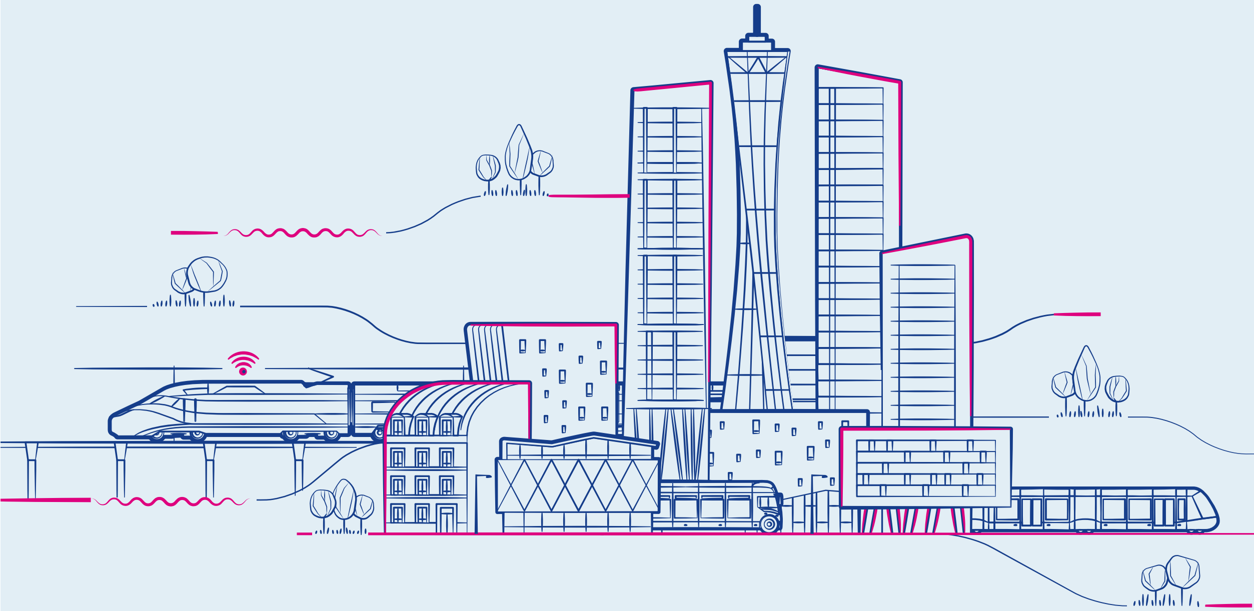

REGISTRATION DOCUMENT 2018/19

ALSTOM

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AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram.

ALSTOM

Société anonyme with share capital € 1,570,130,702
48, rue Albert Dhalenne – 93400 Saint-Ouen (France) – RCS: 389 058 447 Bobigny

REGISTRATION DOCUMENT
2018/19

AUTORITÉ DES MARCHÉS FINANCIERS
AMF

The original French version of this Registration Document was filed with the Autorité des marchés financiers (AMF) on 28 May 2019 in accordance with Article 212-13 of its General Regulation. It may be used in connection with an offering of securities if it is supplemented by a prospectus ("note d'opération") for which the AMF has issued a visa. This document has been prepared by the issuer under the responsability of its signatories. This Registration Document includes all elements of the Annual Financial Report specified by Article L. 451-1-2 of the Code monétaire et financier and Article 222-3 of the AMF's General Regulation. A table of reconciliation is provided on pages 305 to 307. This Registration Document is available on our website: **www.alstom.com**.

1
DESCRIPTION OF GROUP ACTIVITIES

AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram

As a promoter of sustainable mobility, Alstom develops and markets systems, equipment and services for the transport sector. Alstom offers a complete range of solutions (from high-speed trains to metros, tramways and e-buses), passenger solutions, customised services (maintenance, modernisation), infrastructure, signalling and digital mobility solutions. It benefits from a growing market with solid fundamentals. The key market drivers are urbanisation, environmental concerns, economic growth, governmental spending and digital transformation. In this context, Alstom has been able to develop both a local and global presence that sets it apart from many of its competitors, while offering proximity to customers and great industrial flexibility. Its range of solutions, one of the most complete and integrated on the market, and its position as a technological leader, place Alstom in a unique situation to benefit from the worldwide growth in the mobility market. Lastly, in order to generate profitable growth, Alstom focuses on operational excellence.

INDUSTRY **CHARACTERISTICS**

MARKET DRIVERS

The rail transportation market is supported by solid long-term drivers. Soaring urbanisation, economic growth and public & private investment in infrastructure create a growing demand for transport notably in emerging countries. Mature markets, on the other hand, are mainly supported by projects aiming at updating and modernising existing infrastructure and rolling stock enhanced by growing environmental concerns.

Urbanisation

The combination of both economic and demographic growth entices a growing number of people to live in cities. By 2050, world population should exceed 9.8 billion inhabitants, of which nearly 70% will reside in urban areas (source: UN 2018). This trend towards urbanisation is particularly strong in China, India and in many countries of Africa and Latin America.

This development triggers the growing saturation of airports, roads and existing railways and the need for new infrastructure. In this situation, railways typically offer a mass transit solution, safe, reliable and clean.

Additionally, in many cities, the population is encouraged to leave behind individual methods of transportation and favour collective transportation to limit traffic congestion. This change is usually supported by the active promotion of public transportation.

People responsible for urban planning and development are looking for efficient, green, inclusive and intermodal urban transportation systems [1].

In this context also, rail transportation offers ideal mobility solutions in term of capacity, punctuality, security, and reduction of noise, pollution and energy consumption.

Sustainable development

Greenhouse gas emissions, impact of air pollution on public health, climate change, recycling, recovery, energy efficiency and noise constitute some of the most significant environmental and sustainable development concerns currently voiced by populations and politicians. Today more than 90% of the world population lives in areas where air pollution exceeds the threshold recommended by the World Health Organisation while CO_2 emissions from transport continue to grow. Lead pioneer countries and cities announced or strongly consider future bans on cars running on combustion engines (Norway, France, United Kingdom, Netherlands, India…).

Rail transportation offers higher performance levels than other transportation modes, which should have a positive impact on the evolution of the rail transportation market. And indeed, rail represents 8% of worldwide motorised transports but only 2% of the energy consumption and 4% of CO_2 emissions (Source: The UIC-IEA, Railway Handbook 2017 Energy consumption and CO_2 emissions).

All transportation sectors will face major challenges to reach ambitious emission reduction goals within set time frames. This could favor the role of the railway sector, but it will also require an active participation of the latter.

Indeed, in the run-up to COP 21, the European Union issued its commitment to reduce greenhouse gas emissions by 40% compared to 1990 levels by 2030, in-line with its global ambition to reduce greenhouse gas emissions by 80% to 95% below 1990 levels by 2050. Transportation, which represents approximately 25% of these emissions, must contribute to this reduction. Among the ambitions set in the White Paper on Transport [2], the following should be noted:

- 60% reduction in emissions as compared with 1990 levels by 2050;
- 30% of road freight (for distances higher than 300 kilometres) must become rail freight and/or maritime freight by 2030;
- over 50% of intercity passenger transportation *via* rail by 2050;
- no more standard internal combustion engine cars in cities by 2050.

In September 2014, the International Railway Association, (UIC: *Union internationale des chemins de fer*), representing 240 members on six continents, presented the UIC Low Carbon Rail Transport Challenge. This initiative responds to the United Nations Secretary General's call to bring bold pledges to the Climate Summit. The 2050 targets focus on reducing final energy consumption and average CO_2 emissions from train operations by respectively 60% and 75%, relative to a 1990 baseline (source: UIC). To date, specific CO_2 emissions for passenger traffic have been reduced by more than 40%. Alstom supports this initiative and contributes to the objectives by developing and delivering railway solutions which are more energy efficient.

(1) Intermodal transportation corresponds to the use of several methods of transportation over the course of a single trip.

(2) European Commission, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system, 2011. Transport objective should be more ambitious in the new Strategy expected for 2020.

The coming into force of the Paris Agreement is a major step forward in the global fight against climate change. The Transport Decarbonisation Alliance launched at COP23 in Bonn, Germany, is gathering countries, cities, regions and companies, willing to work towards developing roadmaps to decarbonise transport. Alstom is a founding member of the Alliance.

The increased visibility of climate change consequences and the threat that air pollution poses on public health will drive the actions of governments and regulation bodies to limit the magnitude of impacts by reducing greenhouse gas and airborne emissions. From an international standpoint, transport is now clearly recognised overall as a sector which contributes significantly to worldwide emissions whilst offering a great potential to curb them.

For Alstom, rail is clearly positioned today among motorised transport emitting the lowest carbon emissions by transported passenger.

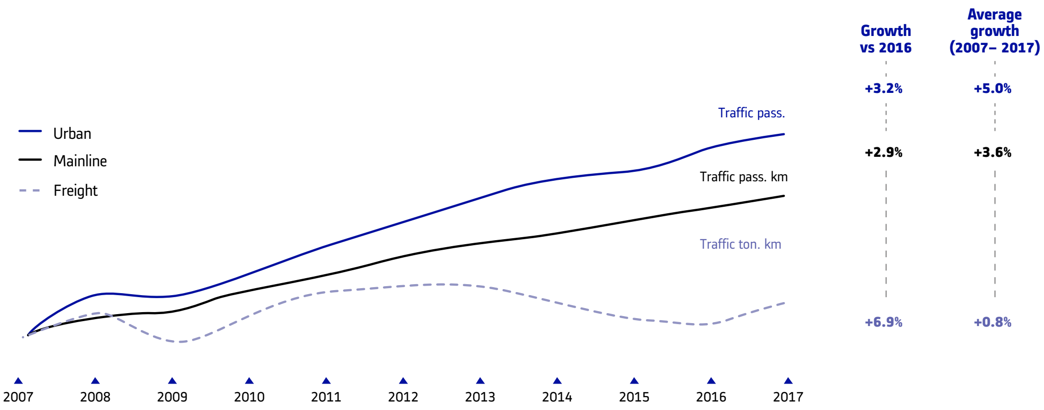
Economic growth

On the years following 2008, the global economy has experienced turbulence that has slowed down growth and increased public deficits. However the worldwide real Gross Domestic Product (GDP) growth should remain positive: c. +3.6% per year forecasted between 2018 and 2024. GDP growth is driven by emerging regions such as China, India and South-East Asia (c. +6% to +8% per year) as well as Middle East/ Africa (c. +3% to +4% per year) while advanced economies such as the European Union and the USA are expected to experience a more moderate growth around 2% per year (source: IMF 2019).

The passenger rail transport industry has not significantly been affected by the latest economic downturn. Over past years, both urban and mainline worldwide passenger traffic have grown steadily at respectively 5.2% and 3.7% average growth between 2007 and 2016. In the future, world passenger traffic should grow by 4.8% per year until 2020 (source: *SCI Verkehr*).

Freight traffic is more volatile and impacted by economic environment. It decreased by 2.6% in 2016 notably, followed by an increase by +6.9% in 2017.

WORLDWIDE TRAFFIC EVOLUTION FROM 2007 TO 2017 (1)



(1) Urban traffic figures are for Top 30 cities worldwide; mainline and freight traffic figures are for all major national operators worldwide.
Source: Alstom and UIC.

Governmental funding

Despite short-term budgetary constraints, governments in mature and emerging countries aim to develop the economy of their country through investment in infrastructure and efficient transport solutions. In that regards, the railway industry remains strategic, with investment plans throughout the world:

- EU funds worth €2 billion on transport development projects by 2030 in Croatia, including new electric trains purchase, tram modernisation projects (source: Government of the Republic of Croatia – August 2017).
- In UK, net government funding was £3.8 billion in 2017/18, increased by 0.8% since 2016/17.
- In 2017, in Germany more than €12.0 billion have been invested in the existing and new network infrastructure by external funding.
- 200 km of new metro lines and 68 metro stations will be opened by 2030 for a global investment of €35 billion for Grand Paris, France.
- Belgium SNCB approved €3 billion investment plan for the period 2018 to 2022, 66% focused on rolling stock acquisition and renovation (source: SNCB – October 2017).
- The Polish government has an undergoing €15 billion railway programme covered at 60% by EU fundings, aiming at modernising 9,000 km of tracks. (source: Industry Europe – September 2018).

- In Italy, the interdepartemental agency for economic planning authorised around €5 billion for high speed rail works and approved an additional €5.5 billion for the Ministry of Transport's plan for logistic and transport infrastructure works. (source: *Milano Finanza* – January 2018).
- In Europe, the "Connecting Europe Facility" initiative allocates €26 billion in investments in transportation infrastructure, notably in railway infrastructure and signalling systems between 2014 and 2020 (source: European Commission – October 2013).
- In 2019, China plan to expand its rail transportation network by 6,800 kilometres, including more than 3,200 kilometres of high-speed rail. Last year, China invested more than $117 billion in rail infrastructure. (source: Railway Technology – January 2019).

Beyond public financing, Roland Berger consulting led a study showing that private investments for rolling stocks in Europe increased significantly their participation: "In the UK, 63% of the rolling stock financing came from private investors (…). This trend is prevalent is Europe, but is particularly notable in Western Europe where private financing accounts for 22% of overall funding", compared to 13% in 2011-2013.

Digital Transformation

Due to the wide usage of smartphones and to the digital transformation of the society, passengers are more and more connected. Communicating has never been so obvious and easy. New needs are expressed: connectivity, well-being, real-time information, door-to-door solutions, individual mobility optimisation, punctuality, comfort and on the top safety and security reassurance. People wish to use their travel time to play, buy, network and work in a way to ease their day-to-day life.

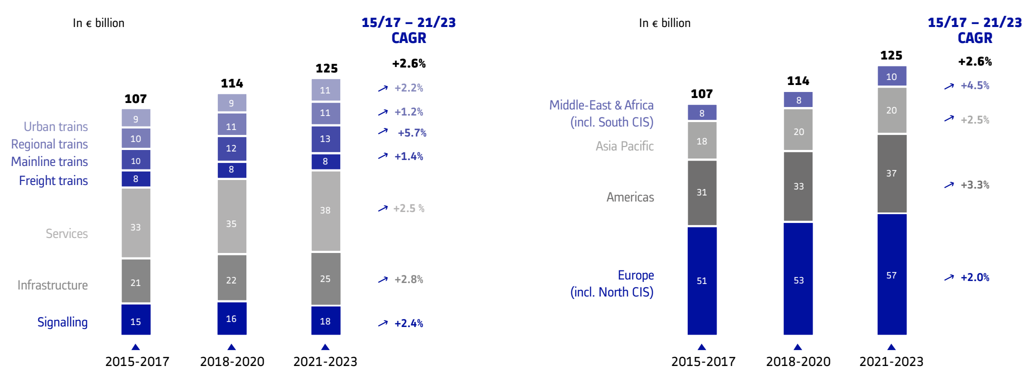
The digital transformation causes significant changes in the transportation landscape, not only for passengers, but also for operators. New technologies will lead to shifting operators' needs and to the implementation of new business models and new way of workings. Two examples: real-time data collection and transmission can be used on trains condition as a lever to improve fleet and infrastructure maintenance services through smart sensors, connected trains and the deployement of the internet of things. Beyond contactless payment thanks to smartphones, seamless intermodality keeps on growing in importance. Offerings of Mobility as a Service (MaaS) are developing using rail as backbone of multimodal routes for fast, punctual and energy-efficient journeys. This momentum will sustainably impact the rail industry and public transport, as a pillar of Smart Cities development, for which multimodality management is a cornerstone.

MAIN MARKETS(1)

Market evolution

According to UNIFE, the annual accessible worldwide market for the 2018-2020 period is estimated at €114 billion. This market should grow to reach an annual average of €124 billion over the 2021-2023 period, which corresponds to an average annual growth rate of +2.6% since 2015-2017 (source: UNIFE Market Study 2018).

MARKET PER REGION AND PRODUCT (1)



(1) Annual average – Accessible market.
(2) CAGR: Compound Annual Growth Rate. Source: UNIFE Market Study 2018.

The **European market,** which is the largest accessible railway market in the world, should rise from €51 billion to €57 billion per year from 2015-2017 to 2021-2023, which corresponds to an average annual growth rate of +2%. The situation remains quite heterogeneous from one country to another. Germany is the first European market with about €10 billion per year in 2015-2017 and should rise to €11 billion per year. The French market, at around €6 billion per year, has grown thanks to the renewal of very high speed trains and to the "Grand Paris" programme, a key project to improve infrastructure and urban transportation. The United Kingdom's market should reach €6 billion per year in 2021-2023. Investments continue to be made in regional segments in the Benelux and Scandinavian countries. Southern economies are recovering after the financial crisis: after Spain in the recent years, a large growth rate is expected in Portugal and Greece, more than twice the European average. In Eastern Europe, Poland remains the leading market with over €2 billion per year in 2015-2017. More generally, opportunities in the market for services are expected due to the needed modernisation and maintenance of existing fleets and infrastructure, and to the progressive opening of new services markets. The Russian market is impacted in the short-term by the economic crisis and geopolitical uncertainties. However long-term investments are expected in order to renew and renovate the fleet of locomotives and urban transportation systems, as well as the signalling systems and services.

Americas is the second largest market representing €31 billion per year in 2015-2017. It is expected to grow to €37 billion in 2021-2023 at +3.3% per year. In North America, freight transportation is historically significant with more than €12 billion per year. The passenger transportation segment is a vehicle for growth, in particular with urban transportation (tramways, metros and signalling). High-speed train projects should also be developed. Less significant in terms of volume, the Latin American market has been impacted by the economical crisis. Nevertheless the demand for urban systems in several countries of this region remains real.

The **accessible Asia-Pacific market** should reach €20 billion per year in 2021-2023, after a slowdown of investments in China. The Indian market should grow annually above 10% between 2015-2017 and 2018-2020 to almost reach €5 billion, driven by several metros projects and investments in mainline infrastructure. Other countries in the region, such as Vietnam or Philippines, should also experience significant growth.

Middle East and Africa market, according to UNIFE forecast, should reach about €10 billion per year in 2021-2023, driven by Saudi Arabia at high market levels of about € 1.5 billion per year, fuelled by large metro projects. Some economies of the region are yet subjected to the volatility of oil prices uncertainty. Growth should also benefit of other passengers transport projects and the continuation of investments in Turkey and South Africa.

COMPETITIVE POSITION

Alstom offers a wide range of railway products, services and solutions that are produced and sold worldwide leveraging the Company's extensive experience and its global commercial and industrial geographic market coverage. Alstom is among the leaders in all the major segments of the railway industry: urban and main line transportation, signalling, services and integrated solutions. In addition, Alstom has reinforced its international presence through partnerships and joint ventures, in particular in India, the Commonwealth of Independent States (CIS) and South Africa, which provides it with a competitive advantage in new high-growth zones.

Alstom has various competitors in the railway industry acting globally or locally and covering part of, or the entire portfolio. Among which Bombardier Transportation offers a similar range of products and services to Alstom and is also present on an international scale. Siemens is another competitor in the rail transportation market, particularly reliant on its domestic market and focusing its expansion on automation and signalling. Furthermore, Hitachi affirms itself as a global actor following the acquisition of Ansaldo Breda in 2015 and completion of acquisition of Ansaldo STS at the beginning of 2019.

The Chinese train manufacturer CRRC benefits from the development of its domestic market. The company has also expressed important international ambitions supported by governmental plans (*e.g.* Belt and Road Initiative – BRI).

Some manufacturers with a less diversified portfolio of products and industrial sites that are more geographically concentrated (CAF, Pesa, Rotem, Skoda, Stadler, Talgo, Thales, etc.) compete with Alstom in specific market segments, such as trains or signalling.

Alstom considers to be ranked first in the accessible market of passenger rail industry in North & South America and among the top three in Asia-Pacific, Middle-East-Africa and Europe (sources: Alstom, orders intake during the last three years and UNIFE, accessible market).

Alstom recently revealed a brand-new concept of electrical bus (Aptis™) with a disruptive architecture. The electric bus market is an emerging market with a high growth potential. Historical bus manufacturers include Asia and European players like BYD, Yutong, CNH Industrial, Solaris, Irizar, AD and VDL.

STRATEGY

The railway market, driven by a continuous urbanisation and increasing concerns for environmental issues, is growing steadily. In a context of globalisation and consolidation, Alstom is pursuing a strategy in line with its ambition: to become its customers' preferred partner for transport solutions by 2020.

CUSTOMER-FOCUSED ORGANISATION

Present in 60 countries, Alstom has adapted its organisation to strengthen its international coverage and better respond to the needs of customers on a local level. The Company is organised into empowered regions, each with their own supply chain to answer local needs using local resources and strengths. They rely on a network of local industrial sites and strategic partnerships around the globe. The need to continuously reinforce this network as well as local competences have triggered an additional circa €300 million transformation capex over three years.

COMPLETE RANGE OF SOLUTIONS

Alstom draws on an array of expertise spanning all rail transport segments. It offers the widest range of solutions in the industry combining its knowledge to offer customers more than products. These range from components, rolling stock, signalling and services to fully integrated systems, ensuring optimised costs, faster delivery times and an optimal level of performance for all equipment. Alstom is the world leader in integrated systems. By 2020, signalling, systems and services should represent 60% of Alstom's sales.

VALUE CREATION THROUGH INNOVATION

Because it ensures customers more effective solutions and reduced total cost of ownership, innovation is a source of competitiveness and differentiation for Alstom as well as a catalyst for new contracts and markets. Main programmes include complete renewal of mainline and urban train ranges as well as latest innovation in systems, signalling and services. Alstom intends to take full advantage of the digitalisation trend (*e.g.* predictive maintenance). So, Alstom is fully focused on a forward-looking approach to understand and anticipate the expectations of operators and passengers, who are central to its innovation strategy.

OPERATIONAL AND ENVIRONMENTAL EXCELLENCE

To improve customer satisfaction, Alstom executes its contracts with a focus on ensuring the highest standards in quality, costs and lead times. This operational excellence goes hand in hand with a commitment to environmental performance in response to high market demand with regard to products (energy savings), manufacturing processes (eco-design and green materials) and lifecycle management (recycling). Through the competitiveness improvement of its offering and excellence in project management, Alstom aims at reducing its costs to outpace global price decrease and support margin improvement. Sourcing savings are expected to increase to €250 million per year (cost to complete) based on three main levers: volume, design to cost and worldwide sourcing. Manufacturing and engineering footprints will continue to grow globally, while in Europe they will be adapted to the workload. A dedicated Cash Focus programme has been launched with strong management actions in place on working capital. In terms of environmental excellence, energy consumption is to be reduced by 20% for solutions and by 10% for operations in kWh per hours worked by 2020 *versus* 2014.

DIVERSE AND ENTREPRENEURIAL PEOPLE

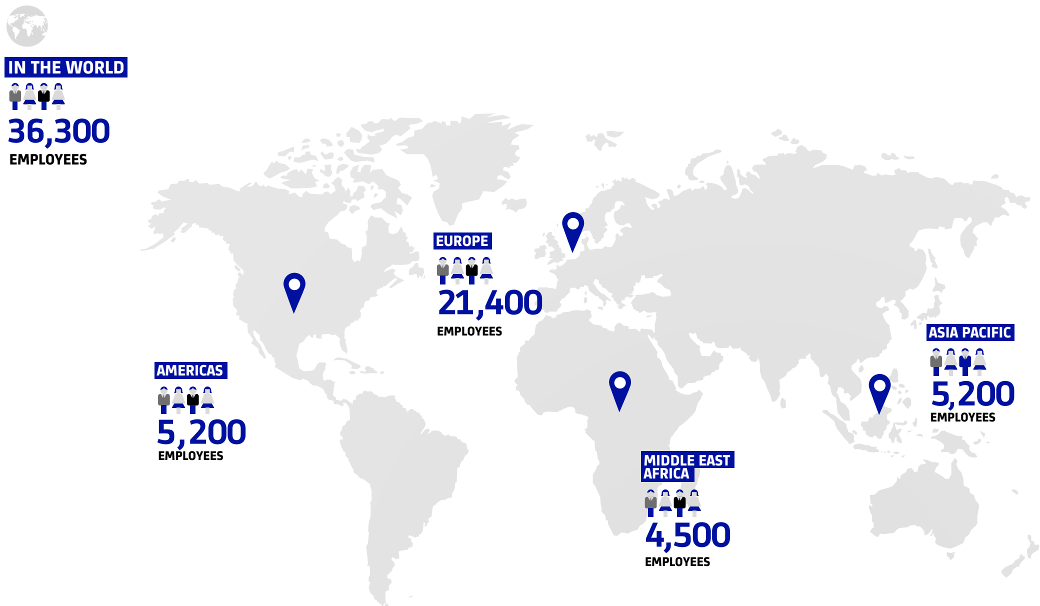
Alstom believes in differentiation as a source of performance and to reflect its passenger base, the Company encourages all types of diversity within its teams in areas such as gender and multiculturalism. This internal cohesion is rooted in the Company's values – team, trust and action – and stringent ethical rules. Alstom's development is also underpinned by an entrepreneurial spirit that promotes customer satisfaction, responsibility and responsiveness. In this way, Alstom has the ambition to significantly increase diversity, aiming for example for 25% of Management or Professional roles to be occupied by women by 2020.

OFFERING

Alstom designs solutions that are very diverse and adapted to the cities, regions and countries they serve. Its organisational structure covers the entire world and relies on a network of offices, engineering centres and manufacturing sites, warehouses and maintenance centres, which guarantees the smooth and uninterrupted supply of these various solutions.

Thanks to its global network and its strong local presence worldwide, Alstom is able to competitively meet the demand of its customers throughout the world, while working in increasingly demanding local environments. Its commercial and industrial proximity allows for the precise monitoring of changes in customer needs and the ability to respond quickly.

With approximately twenty alliances covering numerous business activities (rolling stock, components, systems, services and signalling) in Europe, the Middle East & Africa and Asia-Pacific, Alstom has built a solid, efficient and well-established network of partners. These alliances, which are mostly joint-ventures, but also include strategic and commercial partnerships enable Alstom to meet its customers' growing demand for a local presence, while developing adapted products.



STRATEGIC ACQUISITIONS AND PARTNERSHIPS

2018/19

- **Russia** TMH (trains); **Kazakhstan** EKZ (locos)
- **Algeria** CITAL (trams); **France** Metrolab (R&D); **Morocco** Cabliance (cabling)
- **France** NTL (trams)
- **South Africa** Gibela (suburban trains); **Kazakhstan** KEP (signaling)
- **United Kingdom** SSL (signaling)
- **India** Madhepura (locos); **Sweden** Motala (services); **Russia** TMH (trains); **Kazakhstan** EKZ (locos); **Worldwide** General Electric signalling
- **Morocco** Cabliance (cabling); **South Africa** CTLE; **United Kingdom** Nomad Digital (connectivity); **France** EasyMile (electric driverless shuttles) SpeedInnov
- **Kazakhstan** EKZ (locos)
- **Russia** TMH (trains)

With respect to the transportation of passengers by rail throughout the world, Alstom's range of products covers all market segments, from bus to very high-speed trains and offers its customers tailor-made solutions, based on standardised platforms. Alstom portfolio includes rolling stock, signaling solutions, integrated systems (including infrastructure) and services.

ROLLING STOCK

Road

Resulting from the collaboration between Alstom and NTL, Aptis™ is a new 100%-electric mobility solution that offers all the advantages of the tram in a bus. Designed to ensure a clean and efficient transport system for cities, Aptis™ offers a new passenger experience with its low floor and 20% more glass surfaces.

In October 2017, Aptis™ received the Innovation label at Busworld exhibition in Kortrijk, Belgium.

In March 2019, Alstom has received its very first order for 12 Aptis, from the Strasbourg transport company CTS.

Tramways

Alstom's Citadis™ range sets the standard in the market, with a 20-year track record and more than 2,000 trams in service in over 50 cities around the world.

Citadis X05™ is the latest evolution of the family. This model is based on observation of changing demand, ongoing dialogue with transport authorities, local officials and customers, and an in-depth analysis of feedback from passengers. The first Citadis X05™ was delivered in August 2017 to Transport for New South Wales (TfNSW) in Sydney, Australia, as part of the CBD and South East Light Rail project. Contracts for the supply of Citadis X05™ was signed this year notably In Greece and in Germany.

The modularity of the Citadis™ range allows Alstom to offer customers an array of different configurations. Citadis™ trams vary from 24 to 44 metres in length and are available in two standard widths, 2.4 metres and 2.65 metres.

Operating costs are low, reduced by 11% compared with previous versions thanks to improved energy efficiency and minimal maintenance requirements. Citadis X05™ also features a number of new on-board autonomy management solutions, such as Citadis™ Ecopack, as part of Alstom's catenary-free solutions.

Tramway development has also rekindled interest in tram-trains, an alternative method of transport. Once on the rail network, Citadis™ Dualis™ becomes a regional train, transporting passengers at speeds of up to 100 km/h.

Alstom also launched Citadis Spirit™ to meet demand for mobility and flexibility solutions in a number of fast-growing North American cities. Citadis Spirit™ is a highly customisable, modular light rail vehicle that ensures real accessibility, with a convenient low floor along its entire length. It is able to travel at speeds of up to 100 km/h. The first Citadis Spirit™ was delivered in 2017 to the City of Ottawa, Canada and will enter in service in 2019. In the meantime, Alstom has been awarded a firm order for the supply of 55 Citadis Spirit™ light rail vehicles for the Greater Toronto and Hamilton (GTHA) area by Metrolinx, an agency of the Government of Ontario.

Metros

Alstom has sold 5,500 Metropolis™ cars to over 25 cities around the world. The range now sets the standard in the market.

The Metropolis™ range was designed to achieve three goals: meet the needs of as many cities as possible; improve safety and passenger experience; and reduce operating costs. Metropolis™ can carry up to 70,000 passengers per hour and per direction.

The Metropolis™ range was designed with sustainable mobility in mind and incorporates state-of-the-art solutions such as weight reduction, new converter technologies and all-electric braking to improve energy efficiency and thus reduce running costs. It is also designed to keep maintenance costs to a minimum and anticipate servicing needs. On September 2018, Société du Grand Paris, in agreement with Île-de-France Mobilités, has selected Alstom to develop and supply the trains for metro lines 15, 16 and 17 of the Grand Paris Express.

To meet the individual needs and requirements of its customers, Alstom also develops tailor-made metro solutions such as the metro of Lyon (France). Latest generation rubber-tyred metro, the new trainsets will use the latest advances in technology to increase availability, accessibility and passenger information and to facilitate maintenance. Alstom has delivered customised metro solutions for a number of major networks in cities such as New York (United States) or London (United Kingdom).

Suburban and regional trains

Over the past 30 years, Alstom has developed experience in the market for regional and suburban trains, selling over 7,000 of these worldwide.

With X'Trapolis™, Alstom offers operators and passengers high-capacity, flexible solutions to transport users to and from suburban centres. X'Trapolis™ provides outstanding capacity of up to 100,000 passengers per hour per direction. X'Trapolis™ Mega, was designed specifically for the metric gauge market and high-density networks, and has been ordered by the Passenger Rail Agency of South Africa (PRASA). First deliveries started late 2015 in South Africa, as part of a total order for 600 trains. The latest addition to the range and already ordered by the STIF, X'Trapolis Cityduplex™ will guarantee the highest levels of availability, reliability and safety. Each train can transport up to 1,860 passengers in its 130 metre version. Numerous innovations will reduce energy consumption by 25% compared to previous generations of equipment.

With 30 years of experience and more than 2,900 regional trains sold around the world, Alstom has set the standard in the market with its Coradia™ range.

The range offers specific technical configuration adapted to the needs of each operator: Coradia™ Nordic is designed to run in wintry conditions and withstand extremely cold temperatures; Coradia™ Polyvalent is available in electric or dual mode (diesel and electric) and offers outstanding modularity. Coradia™ Lint™, powered by a diesel drive system, is in operation since many years in Europe and began running in March 2015 in Ottawa, Canada; Coradia™ Continental and Coradia™ Meridian are electric multiple units; and Coradia™ Liner V160 also has a diesel-electric dual-mode solution.

The new Coradia Stream™ is a success in particular with the supply of 79 Intercity trains to Netherlands national railway operator and 150 new regional trains in Italy.

In the context of the need to reduce significantly CO_2 emission, Alstom also launched in 2016 Coradia iLint™, an emission-free train for non-electrified lines, powered by fuel cells. It can run at 140 km/h, with an autonomy up to 1,000 km/tankful, and accommodate up to 300 passengers. In November 2017, Alstom signed a first contract with LNVG in Germany for 14 trains. The first trains entered in passenger service in Lower Saxony in September 2018.

High-speed and very high-speed trains

Alstom offers one of the widest ranges of high-speed trains in the market, from articulated and non-articulated trainsets to tilting technology, single or double-decker architectures, concentrated or distributed power. Three current flagship products of the Avelia™ range – Avelia™ Pendolino™, Avelia™ Euroduplex™ and Avelia™ AGV™ – represent the culmination of 35 years of expertise and more than 1,100 trains in service around the world.

Alstom's Avelia™ Pendolino™ high-speed trains ensure excellent flexibility, seamless cross-border service and superior passenger comfort. With its Tiltronix anticipatory tilting technology, Avelia™ Pendolino™ can travel more rapidly through curves on conventional lines (30% faster than a classic train), reaching speeds of 250 km/h on high-speed lines while guaranteeing an excellent level of passenger comfort inside the train, even on very winding stretches. Avelia™ Pendolino™ is available with or without tilting technology. Like the entire Avelia™ range, Avelia™ Pendolino™ is designed to facilitate maintenance. It is equipped with sub-systems for improved access and easier replacement. Its electric braking system enables a 10% reduction in energy consumption and reduces noise pollution in compliance with the latest European regulations. End 2015, Alstom and NTV (Nuovo Trasporto Viaggiatori), the Italian private operator, signed a contract for the purchase of eight Avelia™ Pendolino™ trains along with 20 years of maintenance. In September 2016, NTV leveraged two options included in this contract for the purchase of four Avelia™ Pendolino™ trains and related maintenance services.

Avelia™Euroduplex™ is the world's only double-deck high-speed train, able to travel at speeds of up to 320 km/h. It is totally interoperable, meaning it is capable of running seamlessly across several European rail networks. With its articulated design and concentrated power system, Avelia™ Euroduplex™ ensures high capacity with reduced acquisition and operating costs while offering numerous other advantages, including comfort and convenience, easier maintenance, the highest safety standards, reduced weight and lower energy consumption.

Operating on the French, German, Swiss, Spanish and Luxembourg rail networks, and in Morocco, Avelia™ Euroduplex™ trainsets feature signalling equipment compatible with each network and are fitted with traction systems adapted to the different voltages used in these countries.

Avelia™Horizon™ brings its predecessors' benefits to a further level, offer 20% more capacity together with high comfort and minimised total cost of ownership, thanks to an optimised architecture baser on compact power car and new articulated double deck coaches. In July 2018, the Board of Directors of SNCF Mobilités has approved a firm order for 100 next-generation Avelia™Horizon™ very high speed trains.

Avelia™ AGV™ is the first high-speed train (360 km/h) to be developed for an international, cross-border market. It features articulated trainsets and distributed power. As a result, it offers lower operating costs in terms of energy and maintenance. Avelia™ AGV™ is available in different configurations of multiple units including two eleven-car and three seven-car trainsets. Operators can easily reconfigure interiors and seat pitches throughout the train's lifecycle. Avelia™ AGV™'s energy consumption is 20% lower than its competitors thanks to its lighter weight, reduced number of bogies, improved aerodynamic design and permanent magnet motors.

Avelia Liberty™ is the latest development in Alstom's Avelia™ high-speed range. Based on proven technology, Avelia Liberty™ combines flexibility and comfort with accessibility and reduced operating costs. Amtrak already ordered 28 new high-speed trains, which will run on the Northeast Corridor (NEC) between Boston and Washington D.C.

Locomotives

The manufacturing of locomotives for the purpose of passenger or freight transportation is at the heart of Alstom's historical business activities and expertise. With over 3,000 locomotives sold throughout the world, for more than 25 years Prima™ has provided a response well adapted to operators' demands.

Fully compatible with the ERTMS (European Rail Traffic Management System) and ETCS (European Train Control System) signalling systems, Prima™ locomotives can cross borders with ease and operate on every freight corridor in Europe, as well as being able to run on any of four power supply voltages (25 kV, 15 kV, 3,000 V and 1,500 V). They are equipped with an independent traction system on each axle that reduces the risk of downtime due to immobilisation.

Both alone and with its partners, Alstom develops two electric locomotives, Prima T6™ and Prima T8™, for heavy freight operations guaranteeing low maintenance costs and high operational performances in extreme conditions. Alternatively, the Prima M4™ electric locomotive offers flexible platform with modular architecture to meet each operator's needs: freight (maximum speed 120 to 140 km/h), passenger (maximum speed of 200 km/h) and mix versions.

The Prima H3™ shunting locomotive platform meets the latest requirements of operators. It is available in four versions equipped with batteries and/or generators that power its electric motors. In 2016, six Prima H3™ hybrid locomotives have been ordered by German companies for shunting operations in the country.

The Prima H4™ can be used for shunting and track works services, and for limited mainline freight services. SBB Infrastructure, in Switzerland, will equipped its rail network with 47 Prima H4™ locomotives from 2018.

Components

For all its trains, Alstom controls each aspect of technological development, design, production, testing and quality control, relying on a network of partners and subcontractors. Some mechanical, electric and electronic components of the bogies, motors, and traction systems are designed, developed and manufactured internally. They are the result of several decades' experience acquired by Alstom's engineers, and are installed in all Alstom equipment, from tramways to very high-speed trains (from 70 km/h to 350 km/h). These components serve internal train solutions and are sold directly to other train manufacturers.

Control over the entire manufacturing process for these components is a key asset in Alstom's offer, and one that is acknowledged by its numerous customers. It is one of the market segments that benefits from powerful innovations. The use of permanent magnet motors, specifically designed for the latest generation of very high-speed trains, is a recent example of this power to innovate, together with the ongoing developments in traction systems through the use of Silicon Carbide technology (SiC).

SYSTEMS

Infrastructure

Alongside its expertise in the execution of track, electrification and electromechanical equipment projects, Alstom develops innovative infrastructure solutions to achieve reduced costs, faster delivery or improved energy efficiency of urban transport projects. As track works play a significant role in the duration of a project, Alstom designed Appitrack™, an automated track-laying solution enabling to install urban tracks up to four times faster than with traditional methods.

Alstom also co-developed HAS™, a metro track solution composed of concrete sleepers on resilient pads placed in a rigid boot, attenuating ground-borne noise and vibrations. HAS™ is under implementation on Crossrail project, United Kingdom, with more than 5,000 sleepers being installed in sensitive sections of the line.

To deliver better energy efficiency for urban and suburban rail transport networks, Alstom created Hesop™, an advanced power-supply substation. It allows reducing energy consumption by recovering over 99% of the available energy generated by trains in braking mode, and by re-injecting it into the network to feed station equipment or back into the grid. Alstom has already sold 124 Hesop™ substations.

Alstom also pioneered in the field of catenary-free tramway solutions, with APS™, a technology powering trams at ground level *via* a segmented third rail. To complete its catenary-free solutions, Alstom launched SRS™, a new ground-based static charging system for trams and electric buses equipped with on-board energy storage. Ordered in November 2015 by the city of Nice in France for its tramway, SRS™ will be installed on new Lines 2 and 3. In June 2018, the Cadam-Magnan section of new tramway line 2 for the Métropole Nice Côte d'Azur, Alstom commissioned for the first time its new-generation tram Citadis X05™, complete with its innovative SRS™ charging system.

Integrated solutions

In addition, Alstom combines all the know-how accumulated by a multi-specialised train manufacturer in order to offer integrated systems able to manage every aspect of a railway system (trains, signalling, infrastructure and maintenance). Alstom offers these solutions both in the urban transportation market (tramway or metro) and in the main line transportation market.

With more than 10 integrated systems projects underway around the world, Alstom continues to cement its position as a global leader in urban solutions. This is an area in which Alstom has an excellent track record. Such projects include the contracts signed in Sydney, Australia, in Lusail, Qatar, and Rio de Janeiro, Brazil.

Alstom pursues its drive for innovation with Attractis™, a pre-engineered integrated tramway system solution for fast-growing cities. It includes the Citadis™ tram, road works, related infrastructure along with control systems, ticketing and maintenance depots. It aims at reducing investment by up to 20% compared with conventional tramway systems offering the same capacity, ensuring optimal total cost of ownership and acquisition costs for operators and transport authorities.

Alstom provides the same global approach for metro systems like recently in Dubai (United Arab Emirates). To meet the needs of cities experiencing rapid growth and high population density, Alstom has developed Axonis™, a light metro system that is easy to incorporate into the urban environment. Using non-proprietary standard infrastructure, Axonis™ is able to carry between 10,000 and 45,000 passengers per hour per direction, easy to insert into a city, quick to build and driverless. The use of industry-standard subsystems such as Metropolis™, Urbalis™, Hesop™ and Appitrack™, along with performance optimisation and pre-defined interfaces, reduces the acquisition cost and the total cost of ownership.

SERVICES

Whether they are public or private rail operators, fleet managers or maintenance specialists, Alstom is present to assist its customers for the entire lifecycle of their products by offering a range of personalised services, be it for their trains, infrastructure or railway traffic control systems. The goal is to guarantee a complete, safe and optimal management of railway train – whether it was or not manufactured by Alstom – and equipment throughout their life cycle.

The Services activity enables Alstom to further strengthen its relationship with its customers and to better evaluate their needs and expectations.

Maintenance

Alstom is responsible for the maintenance of almost 13,000 cars in approximately 100 warehouses in 30 countries. Maintenance contracts are in place for periods of 15 years in average. Alstom's know-how with respect to railway maintenance is widely recognised, and approximately 20% of the equipment maintained by Alstom was initially manufactured by other market players in the railway industry (source: Alstom).

Alstom is leading the evolution in rail services with tools such as HealthHub™, a predictive maintenance solution. HealthHub™ is an integrated decision support tool providing deeper insight to trains as well as infrastructure railway networks. Operators or infrastructure managers are made instantly aware of any major malfunction, while maintenance crews can be ready and anticipate any spare parts orders. Natively compatible with Alstom's innovative monitoring services as TrainTracer™ or TrainScanner™, TrackTracer™ and CatenaryTracer™ it can be also integrated with third party environment data.

Modernisation

Alstom provides a range of services that also includes modernisation, which is key to extending the life of railway train (by up to 20 years) and systems, but also to improve performance, particularly regarding energy savings (up to 40% less), which results in reduced lifecycle costs, and also improves the passenger environment. For those operators with the industrial means to complete their projects internally, Alstom makes modernisation studies, manages the industrial process, and delivers the equipment and parts to the Company in charge of the assembly. Otherwise, in addition to the design work and delivery of kits, Alstom is also able to lead the entire project by taking charge of the industrialisation aspects of the modernisation. This offer includes all the necessary testing and a commitment regarding the delivery schedule.

Parts and repairs

Alstom offers a flexible range of services, from a one-time purchase *via* a spare parts catalogue (over 1 million references for spare parts, all of which comply with the specifications of their original manufacturers) to leading the integrated management of spare parts, which includes a plan for maintenance and revision work. Alstom relies on a global network of six "hubs" dedicated to providing critical spare parts and 13 repair workshops throughout the world. An e-business solution, Partsfolio™, was developed to facilitate transactions and the monitoring of orders.

Support services

Support services include the training of personnel by more than 150 experts, in particular train drivers, technical assistance for the management of the lifecycle of products, fleet control, and the management of obsolescence. Today, Alstom provides its technical expertise, in particular, to a fleet that includes over 1,700 trams. Alstom has launched a "Services customer web portal" to strengthen its proximity with its customers: ordering spare parts, training offers and Alstom's technical expertise are directly available to them through this portal. Although this activity does not currently generate significant revenues, it offers the benefit of creating closer ties with clients and, in doing so, building long-term relationships.

SIGNALLING

Alstom provides operators and infrastructure managers the means to ensure the safe and smooth transportation of passengers or merchandise, thereby optimising the efficiency of urban or main line networks. It supplies railway operators and infrastructure managers with control and information systems as well as onboard and on-track equipment that guarantee the effectiveness and safety of the use of products, on the one hand, as well as ensure that passengers are informed and comfortable, on the other hand.

Alstom's offer is focused on two separate segments of the market: main line networks and urban networks – for which Alstom offers complete and integrated solutions, which are customisable, based on the needs of its customers. In addition, it also offers passenger security solutions, and control centres for network management.

The development of signalling activity enables Alstom to meet the growing demand for integration expressed by its customers. At the same time, it makes every effort to reduce costs associated with this business by relying increasingly on outsourcing its electronic systems production and by establishing engineering centres in new regions, such as in Bangalore, India. In order to optimise its development efforts, Alstom's signalling products and solutions rely on shared processes.

Mainline networks

Atlas™ solution

The new ETCS/ERTMS standard (European Train Control System/ European Rail Traffic Management System) for railway network interoperability is intended to impose a single signalling system shared by all the countries in the European Union. Having played a key role in defining these ETCS/ERTMS standards, Alstom's answer to these challenges can be found in its Atlas™ offering, which is a complete solution that integrates all of the network's data in order to automatically adapt the speed and distance between trains, including whenever the train crosses borders. Atlas™ enables onboard equipment to remain connected to the integrated control system, which is constantly liaising and exchanging information with the network's trackside equipment and interlocking systems. The ETCS/ERTMS standard has now been adopted by rail operators for different types of rail operations from suburban to very high speed rail and by operators from many countries outside Europe. Alstom has enriched in consequence its Atlas™ solution with the Atlas™ 400 solution for low density lines and Atlas™ 500 solution for high density rail traffic.

Atlas™ solutions are now deployed on more than 2,350 trains in full commercial services comprising more than 160 different train types.

ITCS solution

ITCS is a GPS-based train control system well suited for long spread-out territory, remote section of tracks, low to medium frequency trains, challenging power and communication supplies, and simple interlocking needs. Acting in remote areas as vital virtual signalling system, ITCS wirelessly communicates train movement authority as though the territory were operating under centralised traffic control. This principle leads to the lowest possible trackside equipment for a signalling system allowing optimised life cycle costs and higher availability. This solution is scalable and can be adapted without changing the infrastructure. Safety is ensured through full situational awareness and continuous speed enforcement in the cab and wireless control of all trains from central office. ITCS offers proven performance in daily revenue service since 2001 having been deployed on freight, mining and mixed traffic lines in USA, China, Australia and Colombia.

Urban networks

Network congestion, security, environmental pollution, and the lack of adequate mobility solutions are the main challenges that urban transportation must face. One of the keys to solving these issues is increasing urban transportation capacity by improving signalling systems. For over 70 years, Alstom has been addressing such urban challenges, which is why it constantly upgrades its CBTC signalling system (Communication-Based Train Control), its most proven signalling system to date.

As part of its range of products for urban networks, Alstom offers both onboard and on-track products (interlocking and trackside equipment) and solutions (automated control system, control centre).

Alstom equips a number of the world's major cities and its CBTC solutions represent approximately 25% of CBTC solutions deployed worldwide. In addition, it has also developed a significant presence in China, particularly *via* its CASCO joint venture with CRSC.

Urbalis™ solution

Alstom's Urbalis™ range of signalling solutions uses CBTC technology. Urbalis™ 400 accurately controls the movement of trains, allowing more of them to run on the line at higher frequencies and speeds in total safety – with or without drivers. Alstom has equipped more than 2,000 km of metro line.

To further improve urban transport capacity, Alstom developed Urbalis™ Fluence, the first urban signalling solution with more on-board intelligence and direct train-to-train communication. The solution offers operators greater transport capacity, reducing headways to 60 seconds while ensuring the highest operational availability and improved total cost of ownership through a 20% reduction in the amount of equipment, energy savings of up to 30% and adds up to 30% in line capacity.

Pegasus™ 101

Alstom recently expanded its range of signalling solutions for urban networks to include Pegasus™ 101. Pegasus™ 101 is an ATP system (Automatic Train Protection) for tramways that ensures the highest standards in network safety. Quick and easy to install on both new and existing systems, Pegasus™ 101 assists and controls the driver in some crucial tramway functions, such as speed control and calculation, emergency stop signals, vigilance system, etc.

Smartlock™ and Smartway™

Compatible with the main signalling standards in existence today, Smartlock™ and Smartway™ are considered high-quality solutions recognised for their versatility. At the global level, 25 countries are currently utilising the technologies developed by Alstom.

Based on the overall level of network traffic, Smartlock™ interlocking systems will allow – or not – a train to continue its journey when it crosses a given point machine by following a safe itinerary that avoids all risks of conflict with other trains' itineraries, whether on urban, freight, or main line networks. They are interfaced with onboard control systems and control centres. With over 1,500 installations, the safety and reliability of this new generation of Smartlock™ electronic interlocking systems can be viewed as being particularly proven.

Smartway™ is a range of standard track signalling equipment that includes track circuits (detection of trains per section of track, in order to ensure traffic safety) and switch position motor control (ability to lead trains toward any given track).

Smartway™ products are versatile, and can be installed on urban lines, freight lines, high-density main lines, and high-speed lines, as well as in stations, on less used tracks, level crossings, or evacuation zones. They are interfaced with onboard control systems and control centres.

Network and passenger monitoring and surveillance systems

As the need for more efficient rail network operation increases as a result of an effort to optimise the use of assets, operators need a system that is able to provide a fully integrated monitoring and control system for all operational (train movement control, incident management, resource allocation) and functional (static in-station or onboard functions) elements of the network. This system must be easily customisable to rapidly take into account the operator's structure and operation procedures.

Alstom's solutions focus on passenger safety and the management of information intended for them. With over 100 control centres located throughout the world, Alstom is one of the few market players that benefits from a sufficient amount of credibility and experience to lead projects that involve the management of several lines.

Iconis™ control centre

Iconis™ control centre oversees and monitors all aspects of the network. It simultaneously coordinates various operational functions and traffic management *via* Iconis™ ATS (Automatic Train Supervision) for urban automated train supervision, *via* Iconis™ CTC (Centralised Traffic Control) for main lines, and *via* Iconis™ SCADA for infrastructure surveillance, in interaction with interlocking and automated train control (ATC) sub-systems.

The Iconis™ automated control system guarantees train adherence to schedules, the automatic optimisation of routes, and conflict-free resource utilisation. It provides network operators with a general view of the status of network traffic and enables them to interact directly with the system at that level. Iconis™ can take various forms: from a simple autonomous post for an independent station to several hundreds of interconnected servers and operator workstations, able to manage an entire network.

Iconis™ (freight and mining) control centres monitor all aspect of the transport system to support operation management. This solution is designed to address the needs of the most demanding freight and mining customers. Thanks to its modular architecture, Iconis™ (freight and mining) can add other functions for specific safety, operational, or maintenance needs such as track authorities and asset management. Iconis™ (freight and mining) improves the procedure of the traffic management for a better availability of trains. It integrates network wide scheduling and planning tools for optimised operations. Iconis™ (freight and mining) detects potential traffic conflicts as soon as they arise and offers operators resolution options, minimising delays. Thanks to its state-of-the-art technology, Iconis™ (freight and mining) enables a reduction of operating costs.

Mastria™ (multi-modal control centre)

In April 2017, Alstom launched Mastria™, designed to meet the current and future needs of "smart cities" and coordinate all types of public transport, from rail to road.

Mastria™ orchestrates all public transport modes from rail to road (metro, train, tramway, suburban, bus, taxi). This innovative solution enables coordination and collaboration between the different agents from each transport modes.

Mastria™ uses advanced data analytics and alogrithms to predict and anticipate impact on traffic in order to optimise trip plan.

Mastria™ manages incident over the whole public transport network (trip plan, capacity adjustment). The coordination of the stakeholders includes also fire stations, security, and maintenance through mobile devices.

Mastria™ generates high quality information accessible through open data platforms for on-demand services such as car-sharing, self-service bicycle, parking services. All the information is provided in real-time from all transport modes.

Optimet

In April 2017, Alstom launched Optimet, an innovative passenger experience enable the network to know how busy each station is at any given moment and monitors fluctuations to satisfy passenger demand as effectively as possible.

Optimet real-time train occupancy influences the distribution of passengers on the platform and in the station as a whole, and provides a way of controlling exchange times while at the same time enhancing passenger comfort. While the train is standing at the station, sensors count the number of people getting on and off, and the degree of occupancy for each area of the train is recalculated. Once the doors close, this data is processed, interpreted and sent to the next station to be displayed.

Optimet dwell-time optimiser offers a video analysis system that continuously monitors passenger flows. The data is then stored for subsequent timetable optimisation or sent to the ATS for use in real-time operation. The operator benefits from an accurate overview of the volume of passengers on the platform, exchanges times and situations of overcrowding.

Optimet passenger demand-based regulation regulates the length of time train doors remain open and modifies the run times between stations according to the volume of passengers detected on the platform. This solution is a way of managing peak demand situations more effectively, thus minimising the risk of delay and excessive waiting times.

Optimet e-verywhere provides smooth, seamless high-speed internet access on board trains and in stations. It allows cities to meet the high expectations of citizens who want instant fluid connection anywhere anytime. It is also possible today to offer new mobility choices by delivering geopositioning data on all the latest goings-on in the city (cultural events, shows, rallies…) thanks to Optimet OrbanMap.

Passenger information and entertainment

Rail operators have to satisfy ever-growing expectations from passengers wishing to utilise their travel time productively. Modern means of communication can contribute to meeting this need by making real-time information as well as on-board audio and video entertainment available.

Alstom uses the latest real-time Information and Communication Technologies (ICT). The system architecture integrates public address, intercom, passenger information, infotainment, seat reservation displays, Internet connectivity, etc.

Alstom's passenger information and entertainment system covers all types of needs for trains, stations, and control centres, ranging from public announcements to making onboard Internet available, for all Alstom's range of railway train products.

Alstom acquired NOMAD DIGITAL™, a world leading provider of passenger and fleet connectivity solutions to the railway industry. NOMAD DIGITAL™'s solutions include passenger Wi-Fi, innovative Passenger Information Systems and on-board passenger portals, entertainment and media platforms.

Security

Protecting passengers and their belongings from any potential security threats is a central focus for Alstom. Relying on its technical know-how, which enables it to evaluate precisely the risks faced in all the segments of the rail industry, Alstom offers a state-of-the-art advanced security system that is modular, easy to integrate and operate around the clock, and that handles all functions intended to guarantee the safety and security of passengers.

Alstom's security systems can be integrated within larger systems: the system can be run by an integrated security centre, which is itself part of the overall structure of the information and rail communication system. It covers all rail environments: stations, tracks, tunnels, signalling equipment, trains, warehouses, and control centres.

The integration of all this information makes it possible to instantaneously connect the network's global surveillance (through a CCTV system, access control, intrusion detection, and smoke and fire detectors), *via* the Ethernet network, to the appropriate response (passenger information, public announcements, emergency calls, or interventions).

Alstom's range of products extends from simple stand-alone security components to full integration within a control centre with assisted incident management capabilities. It offers a customisable security system structure that can be tailored to any type of train, station, control centre, or warehouse (under construction or renovation).

Cybersecurity of Alstom solutions

As other transport modes, the rail transport sector needs to prepare for potential cybersecurity threats. Operators shall also respect various new regulations and standards.

Considering customer expectations and the upcoming regulations, cybersecurity in Alstom is addressed as a core element in order to ensure the cyber-resilence of Alstom solutions (Products and services). Cybersecurity functions and services are offered on solutions of Alstom's portfolio, from Rolling Stock, to Systems and Signalisation.

To go further and faster on the definition and implementation of security measures, Alstom develops partnership with several stakeholders of the cybersecurity domain. Our objective is to propose state of the art services and solutions covering risk analysis, security by design, vulnerability management, vulnerability scanning. In this area the partnership with Airbus in the field of cybersecurity of transport systems is an example. Signed in April 2017, the partnership is a strategic cooperation agreement covering topics such as security governance, security processes, secure product design, maintenance of security. Alstom is also a key contributor to CENELEC workgroup defining the future European railway cybersecurity standard.

RESEARCH AND DEVELOPMENT

As a major actor of transport and mobility, Alstom invests continuously in research and development to increase the attractiveness and competitiveness of its offer for its customers and the passengers. Alstom is recognised for the development of new-generation trains, components and cutting-edge signalling products and solutions, as well as for innovative services and systems activities. All the R&D efforts are focused to address the expectations and the customers and passengers as well as taking into account the environmental and sustainability impact of its offers. Alstom aims at proposing attractive solutions with high capacity and an optimised life cycle cost to its customers. Alstom is also committed to contribute to the environmental performance of rail systems by reducing railway system energy consumption (motor efficiency, weight reduction, eco-driving…) and more generally the footprint of its solutions during the whole product lifecycle from manufacturing to the end of exploitation and recycling. The main R&D programmes of Alstom are presented hereafter.

DEVELOPMENT OF THE RANGE

Rolling stock

To address new markets and better fit with customer request on existing markets, most of the product lines of rolling stock have been improved during this year.

Aptis™

Taking into account some major evolutions of the E-mobility market, Alstom developed a brand new concept 100% electric mobility. This electrical bus stands out from traditional solutions to provide to passengers and operators unique and valuable advantages: full flat floor, outstanding radius of operation, longer lifespan and improved life cycle cost. The first vehicles performed demonstrations in several cities as well as in Innotrans fair 2018 in Berlin. This new electric bus can also be recharged by Alstom SRS™ solution. Aptis™ will start serial production In 2019.Aptis™ received the Innovation Award during Its presentation In Busworld 2017 fair in Kortrijk (Belgium).

Citadis™ Steel

Based on the recently renewed Citadis™ Aluminum range, Alstom is developing a steel carbody range eneabling to fullfil the need of customers already operating a fleet of tramways with steel carbody and having specific trainset architecture. The product will benefit from most of the sub-systems developped and in service on the aluminum range. A first contract based on Citadis™ Steel has been signed In 2018 for the city of Francfort. As the aluminum range, Citadis™ Steel power supply can be done either by pantograph, dynamic ground charging (APS) or static ground charging (SRS) including onboard energy storage.

Coradia iLint™

Hydrogen Fuel cell is a leading technology to replace conventional Diesel engines by electric engines. To replace trains powered by Diesel powerpacks, Alstom developed Coradia iLint™, a Zero-emission train featuring fuel cells and energy storage system. The first trains have cumulated more than 30,000 km in revenue service. To fully endorse its role in this emerging propulsion mode, Alstom is part of several organisations gathering the main industrial partners involved, from Hydrogen production, to supply and use in the field of transportation.

Development of the Avelia™ range

In July 2018, following the Innovation partnership, SNCF ordered from Alstom the first trainset of "TGV du Futur". As Avelia Liberty ordered by Amtrak to be operated on the East corridor In the USA, this order is based on the Avelia™ range allowing Alstom and the French rail industry to propose to its national and international clients a very high-speed train which is innovative and lies at the heart of an improvement and productivity strategy for the high-speed rail ecosystem. The very high-speed train of the future will offer a capacity of up to 750 seats and its total cost of ownership will be optimised with a strong reduction in energy consumption as well as greatly reduced maintenance costs compared to current trains.

Silicon Carbide (SiC) to improve power converters performance

Alstom has studied silicon carbide power components for many years for auxiliaries and traction converters. Recently won contracts already integrate the first equipments. Applications of these components in the area of traction are today launched and will accelerate thanks to European funding of Shift2Rail. The main advantages of this technology are the reduction of weight and volume of power converters, improved energy consumption and the ability in some cases to move from forced mechanical cooling to natural cooling with positive consequences such as noise reduction, better reliability and lower maintenance cost.

Systems

Infrastructure: SRS™

Derived from the proven solution APS™ deployed for nearly 15 years on more than 350 tramways, SRS™ is the Static Recharge System developed by Alstom to ensure recharge of on-board energy storage systems of a tramway when it is stopped at station. This solution is based on proven components and already demonstrated safety principles. The first deployment has been ensured on Nice tramway contract. SRS™ product is also adapted to recharge on-board energy storage systems on electrical buses.

Infrastructure: APS™ for road

This road version of APS™ aims to decarbonise long-distance road transport. A first 2 km long section of motorway, developed in partnership with Volvo Trucksand the operator Trafikverket will be developed In 2019 to allow to demonstrate the technology in real traffic conditions and under all weather conditions. The future looks bright for this technology, applicable to all types of heavy road vehicles (trucks, buses).

Infrastructure: Extension of reversible sub-stations range Hesop™

Hesop™ reversible sub-stations enable energy supply optimisation of the railway system and energy consumption reduction. Beyond the existing product 750 V/2 MW already in service, the range has been extended to 1500 V; 4 MW and 60 Hz, to cover customer needs all over the world.

Autonomous Driving

Having done with RATP a first demonstration of autonomous driving of a tramway in a depot, Alstom is currently working on the industrialization of this solution.

Several projects of autonomous driving are ongoing In partnership with Easymile company. Alstom is also member of the consortium launched by SNCF aiming at the autonomous driving of a freight train.

Through these initiatives, Alstom is positionned as a leader of the autonomous driving market, beyond the current market of autonomous metros.

Services

HealthHub™

Launched some years ago *via* TrainTracer™, this R&D programme has evolved and currently integrates all the initiatives associated with the management of the train, infrastructure and signalling status, including forecast of the future state of a given component. TrainTracer™ remotely monitors the health status of a fleet and presents its key parameters *via* a simple web interface. The maintenance efficiency is improved by accelerating detection, diagnostics, and repairs, as well as by achieving a 30% reduction in the amount of time the train is not in use. The programme facilitates the implementation of predictive maintenance. Part of HealthHub™, TrainScanner™ is a unique four-in-one diagnosis portal providing information on the key systems of the train.

StationOne™

Alstom unveiled during Innotrans fair 2018 the first Internet B-to-B market place dedicated to the railway market.

This initiative received a great interest from railway operators and suppliers of all size. It enters now in a fully operational phase.

Signalling

Mainline

Alstom is constantly improving its range of solution according to the latest European standards. After the world première on Berlin-Munich high speed line (inaugurated in 2017 with the on-board Alstom Atlas™ ERTMS baseline 3MR1), the development of latest ERTMS Baseline (B3R2) are ongoing and several contracts have already been secured in Spain, Norway and UK.

Moreover, Alstom is sustaining its investment to improve network operation with ERTMS. After the integration of new ATO (Automatic Train Operation) functionalities coming from the urban domain within the Atlas™ solution, demonstrated on intercity trains in China and on passenger trains in Belgium, a further experimentation has been concluded with a Dutch operator in 2018, and will be further completed with remote cab control in 2019. New technology for safe speed and distance measurement, based on satellite navigation and inertial movement sensors are also being integrated in our Atlas™ solution, and part of a first contract in Norway.

Urban

In order to keep its CBTC Metro worldwide leadership, Alstom is pushing its Urbalis™ 400 reference Solution with continuous improvement. 103 metro lines are currently equipped with Alstom technology representing more than 1,500 km. All Grade of Automation are today addressed with a GoA4 generalisation trend for driverless operations.

In addition, Alstom is pursuing its Urbalis Fluence™ Solution development. The system is being implemented within Lille Metro modernization project, the world-first driverless-to-driverless metro revamping. As compared to traditional CBTCs, Urbalis Fluence brings unprecedented operational performance and robustness to Alstom's customers. These leaps are achieved thanks to numerous innovations in the solution's architecture, principles and design.

Digital for Mobility

Facing mobility evolutions, transport operators are more and more looking for digital solutions to improve their financial and operational performance. Aware of this trend, Alstom has enriched its portfolio with more advanced decision support solutions, based on data or video analysis for example, and has launched new digital solutions in rail and beyond (StationOne, Mastria…).

Alstom has developed both new technological assets and new competencies in order to sustain this dynamic. A new Core Competency Network, named 'Smart Data and Artificial Intelligence', has been set up in October 2018. Its objective is to drive the ramp up of competencies in terms of staffing, methods & tools, technology watch, partnerships. Alstom also developed its Mobility Data Platform (MDP), a shared framework supporting Alstom portfolio of data applications (analytics for predictive maintenance, traffic optimization, energy consumption optimization, passenger counting etc.).

Another example of digital solution to enhance the future of mobility: Alstom and SNCF have been developing, together with SystemX research institute, a solution to detect obstacles and signals along the tracks through on-board sensors. This is a key step towards autonomous trains.

INNOVATION

Alstom has put innovation at the heart of its 2020 strategy to reinforce the competitiveness and attractiveness of its portfolio of offerings and anticipate future market trends.

Innovation strategy

The third pillar of the Alstom 2020 strategy is "Value creation through innovation" which means that for Alstom, innovation should:

- create value for the customer in terms of capacity, attractiveness and cost of the Alstom solutions and services;
- allow cost reduction;
- increase Alstom's Intellectual Property assets through patents, trademarks, esthetical designs, copyrights, etc.

The innovation strategy has been set-up using internal contributions and was also discussed with customers and other companies operating in the transport industry and facing similar innovation challenges. It is based on seven innovation axes:

- more energy efficient railway systems in terms of energy;
- advanced maintenance solutions;
- improved railway system sustainability and footprint;
- enhanced transport system attractiveness;
- more fluid design of operation cycles and process;
- information systems and telecommunications;
- systems control and supervision.

Data Management acts as a transverse axis which upholds the deployment of these seven axes. All of Alstom's innovation initiatives are aligned with at least one of the innovation axes.

Innovation governance

The innovation governance is fully integrated within a wider process, starting from innovation and detection of market needs, up to project delivery.

An innovation board is held every three months involving R&D and innovation managers as well as the Chief Technology Officer. This Board selects the most promising ideas submitted by Alstom employees and supports their development to ultimately include them in the R&D plan.

A worldwide network of innovation managers is in place on Alstom sites in order to deploy locally the innovation process and strategy and boost the idea creation, both internally and through external ecosystems.

More than 150 new ideas are submitted to the innovation board each year and around one third of them are funded *via* innovation programmes.

Main initiatives

Innovation Ecosystems

Innovation at Alstom is supported by a rich ecosystem of research centers with which the Company collaborates on its main areas of interest:

- Alstom has invested €14 million in EasyMile, an innovative start-up company developing the EZ10 electric driverless shuttle;
- Alstom has created a Joint Innovation Laboratory (JIL) with the *Institut national de la recherche en informatique et automatique* (INRIA) in France to reinforce its R&D and innovation in respect of the digital evolution and "systems of systems";
- Alstom is a founder of two *instituts de recherche technologique* (IRT Railenium and IRT SystemX) and one *Institut pour la transition énergétique* (ITE) (Supergrid) in France. Alstom collaborates with these research centers on power electronics (with ITE Supergrid), on system control and supervision with IRT SystemX and on energy management with IRT Railenium;
- Alstom also has framework agreements with major research centers worldwide such as *Politecnico Di Milano* in Italy, IMS Cincinnatti in USA or UTBM in France as a means of developing innovation and competences in key areas of interest;
- A Collaboration Agreement with Safran, enabling to share on technologies mastered by both respective companies was signed during Paris airshow 2017;
- A partnership has been put in place with CEA in France, to benefit from its expertise in numerous domains;
- Alstom is a member of numerous clusters in France (I-Trans, LUTB, *Véhicule du Futur*…), in Belgium (Mecatech, Logistics in Wallonia) and in Italy (CRIT) in order to maintain close relationships with the ecosystems of small and medium enterprises, start-ups and universities and to set-up collaborative research programs;
- Alstom is a shareholder of a venture capital fund, Aster Capital, which targets breakthrough innovations, just a few years before their large adoption, in the areas of digital energy, connected mobility and resources. Aster Capital is a valuable support for Alstom's strategy to detect early signals and collaborate with start-ups.

Innovation contest: "I Nove You™"

The "I Nove You™" contest aims at rewarding the most innovative projects deployed at Alstom and strengthening collaborative work and synergies.

In 2018, more than 500 ideas were submitted by more than 1,500 participants. This shows a remarkable mobilisation of teams across the Company. Diversity was a hallmark of the awards from cultural, geographic, gender, generational and technological standpoints. Innovations came from all the Alstom regions and from a large range of functions (R&D, Engineering, Human Resources, EHS, Project Management, etc.), which led to a high level of cross-functional initiatives encompassing different business lines and cultures.

16 projects were rewarded in the 2018 edition of the "I Nove You™" contest. Many of them anticipate the development of new technologies and services linked to digitalisation such as control center virtualisation or the Zero Emission Train project.

SIEMENS ALSTOM COMBINATION PROJECT

On 17 July 2018, following a business combination agreement between Siemens and Alstom signed on 23 March 2018, Alstom's shareholders had approved with a very large majority of above 95% the resolutions related to the proposed combination of Alstom with Siemens Mobility business including its rail traction drives business.

However, the European Commission announced on 6 February 2019 its decision to prohibit the proposed merger of the Siemens and Alstom mobility businesses. As a result of this prohibition, the merger has not proceeded.

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MANAGEMENT REPORT ON CONSOLIDATED FINANCIAL STATEMENTS, AS OF 31 MARCH 2019

AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram

MAIN EVENTS **OF YEAR ENDED 31 MARCH 2019**

THE COMBINATION OF SIEMENS AND ALSTOM'S MOBILITY BUSINESS

The proposed combination of Alstom with Siemens Mobility, including its rail traction drive business, will not proceed following the 6 February 2019 decision of the European Commission to prohibit the proposed merger.

EXCELLENT RESULTS FOR ALSTOM IN THE FISCAL YEAR 2018/19

Group's key performance indicators for the fiscal year 2018/19:

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018(*)	% variation March 2019/March 2018	
			Actual	Organic
Orders Received	12,107	7,183	69%	71%
Orders Backlog	40,481	35,239	15%	13%
Sales	8,072	7,346	10%	11%
aEBIT	570	397	44%	
aEBIT %	7,1%	5,4%		
EBIT	408	264		
Net Profit - Group share	681	365		
Free Cash Flow	153	128		
Capital Employed	2,088	1,487		
Net Cash/(Debt)	2,325	(255)		
Equity	4,159	3,430		

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standard.

ORGANIC GROWTH

Above mentioned figures are adjusted as follows for foreign exchange variation resulting from the translation to Euro from the original currency, as well as for change in scope.

The below table shows how we walk from actual to comparable figures:

(in € million)	Year ended 31 March 2019			Year ended 31 March 2018(*)		
	Actual figures	Scope Impact	Comparable Figures	Actual figures	Exchange rate	Comparable Figures
Orders Backlog	40,481	(623)	39,858	35,239	(56)	35,183
Orders Received	12,107	-	12,107	7,183	(83)	7,100
Sales	8,072	-	8,072	7,346	(44)	7,302

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

The actual figures for the fiscal year 2017/18 (orders backlog, orders received and sales) are restated taking into account March 2019 exchange rates, which showed an overall appreciation of the Euro against the majority of the currencies making up the Alstom portfolio.

- Orders received during the last fiscal year were impacted by the depreciation of the South African Rand (ZAR), Argentinean Peso (ARS), Canadian Dollar (CAD), Swedish Krona (SEK) against the Euro.
- Sales recorded during the last fiscal year have been impacted by an adverse translation effect driven by the depreciation of the Brazilian Real (BRL), Indian Rupee (INR), Australian Dollar (AUD), and offset by the appreciation of the US Dollar (USD) against the Euro.
- Orders backlog was adversely impacted by the depreciation of South African Rand (ZAR), offset by the observed appreciation of the US Dollar (USD), Indian Rupee (INR), Canadian Dollar (CAD), United Arab Emirates Dhiram (AED) and the British Pound (GBP) against the Euro.

In order to reflect the same scope of activity, actual figures for fiscal year 2018/19 have been adjusted for the Electrovoz Khurastyru Zauyty LLP (EKZ) acquisition, which took place during the calendar year 2019. However, actual figures have not been scope-adjusted for the 21net and NTL acquisitions, the scope impact being considered immaterial at the Alstom Group level.

ACQUISITIONS AND PARTNERSHIPS

In April 2018, Alstom completed the full acquisition of the UK-based 21net, an expert in on-board internet and passenger infotainment for the railway industry.

In June 2018, TMH and Locotech Services combined their activities under a new holding TMH Limited. Following the transaction, the contribution of Alstom has been diluted. In the meantime, additional shares of TMH Limited have been bought by the Group from the other shareholders to increase its ownership up to 20% for €115 million (before acquisition costs). The Group retains a significant influence on the new entity.

On 2 October 2018, Alstom has completed the transfer of all its interests in the three Energy Joint Ventures (Renewables, Grid and Nuclear Joint Ventures) to General Electric and received a total cash payment of €2.594 billion.

In January 2019, Alstom bought the remaining 49% of NTL Holding. This holding was created in 2012 jointly with Bpifrance to acquire the "Translohr" tramway on tires. Henceforth, Alstom owns 100% of the company and the consolidation method has been changed accordingly from equity to full consolidation. No significant impacts are expected for the Group in the frame of this acquisition.

As at 22 December 2017, Alstom signed an agreement with the Kazakh national railway company (KTZ) to acquire their 25% stake in the EKZ Joint Venture (JV) for €21 million, recognized in March 2018 Group Financial Statement as non-current assets because of unmet suspensive conditions. As at 25 February 2019, all the suspensive conditions have been met and Alstom owns 75% of the shares, conferring the control over the Kazakh company, which is specialized in the manufacturing and the maintenance of electric locomotives especially for the Eurasian Economic Union and CIS markets.

COMMERCIAL PERFORMANCE

During the fiscal year 2018/19, Alstom reported a record high commercial performance of €12.1 billion of orders intake as compared to €7.2 billion for the fiscal year 2017/18. This fiscal year marked the signature of several jumbo orders, notably in France to supply 100 next-generation very high-speed trains, in Canada to deliver a complete automatic and driverless metro system and associated maintenance and, in Saudi Arabia, a contract for full maintenance of the transit system. The commercial performance was further sustained by the signature of large contracts to supply regional trains in Italy along with the associated maintenance.

Geographic breakdown					% variation March 2019/March 2018	
Actual figures *(in € million)*	Year ended 31 March 2019	% of contrib.	Year ended 31 March 2018(*)	% of contrib.	Actual	Organic
Europe	7,337	60%	3,507	48%	109%	110%
Americas	2,155	18%	1,628	23%	32%	35%
Asia/Pacific	1,429	12%	980	14%	46%	47%
Middle East/Africa	1,186	10%	1,068	15%	11%	14%
ORDERS BY DESTINATION	**12,107**	**100%**	**7,183**	**100%**	**69%**	**71%**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

Product breakdown

Actual figures *(in € million)*	Year ended 31 March 2019	% of contrib.	Year ended 31 March 2018(*)	% of contrib.	% variation March 2019/March 2018 Actual	Organic
Rolling stock	6,078	50%	3,189	45%	91%	92%
Services	3,144	26%	2,180	30%	44%	47%
Systems	1,359	11%	523	7%	160%	164%
Signalling	1,526	13%	1,291	18%	18%	20%
ORDERS BY DESTINATION	**12,107**	**100%**	**7,183**	**100%**	**69%**	**71%**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

In Europe, Alstom reported strong a commercial orders intake at around €7.3 billion for the fiscal year 2018/19 as compared to €3.5 billion during the same period last year. The exceptional commercial performance of the region was steered by the historic order secured in France to supply 100 next-generation Avelia™ Horizon very high-speed trains to SNCF. The order was the result of collaborative work between SNCF and Alstom undertaken within the framework of the "TGV of the Future" program. In addition, Alstom signed large contracts, amongst which the supply of metro cars to lines 15, 16 and 17 of the Grand Paris Express, as well as the supply of 32 Citadis™ Dualis tram trains for Île-de-France region. In Italy, the Group secured several large rolling stock and maintenance contracts, which include supply and maintenance of Coradia™ regional trains and five additional Pendolino™ high-speed trains. The Group was also awarded a contract in Luxembourg to supply high-capacity double deck Coradia™ trains for their national network. In Germany, Alstom signed several breakthrough orders notably the tram order to supply 38 Citadis™ trams made of steel to the city of Frankfurt, Coradia™ iLint regional hydrogen powered trains in Lower Saxony and Coradia™ Lint regional trains to be operated in Bavaria. Signalling was fuelled by an order in Norway to equip the national railway fleet with on-board train control solution and associated maintenance for 25 years.

In Americas, Alstom reported €2.2 billion of orders for the fiscal year 2018/19 as compared to €1.6 billion during the last fiscal year. Alstom's Canadian footprint was further strengthened by the signature of a large contract with Réseau Express Métropolitain to deliver complete automatic and driverless light metro system to Montreal including rolling stock and signalling as well as operation and maintenance services for 30 years. In addition, the Group signed a contract with Société de Transport de Montréal for the supply of bogies and motors as well as Signalling solution systems for the 153 additional metro cars.

In Asia/Pacific, Alstom's order intake stood at €1.4 billion as compared to €1.0 billion during the same period last year. The performance was mainly driven by a major rolling stock contract in India to supply 248 metro cars for Mumbai metro line 3. In addition, the Group secured a large-scale order in Taiwan to supply 19 Metropolis™ trains including Urbalis™ CBTC(1) driverless signalling solution for line 7 of Taipei. Furthermore, Alstom has been awarded in Australia, a 15-year contract for the maintenance of 22 six-car Metropolis™ train sets and Urbalis™ 400 CBTC(1) systems for Sydney. As part of this order, Alstom will use its innovative predictive maintenance tool HealthHub™.

In Middle East/Africa, orders stood at €1.2 billion for the fiscal year 2018/19, as compared to €1.1 billion in the last fiscal year. The Group secured a contract in Saudi Arabia for the full maintenance of the transit system including the trains and fixed installations such as tracks, signalling, communication, passenger information systems and power supply. Also, Alstom secured an order in Morocco for the supply of 30 electric locomotives.

(1) CBTC: Communications-based train control.

Alstom received the following major orders during the fiscal year 2018/19:

Country	Product	Description
Australia	Services	Maintenance of 22 six-car Metropolis™ train sets and Urbalis™ 400 CBTC(1) signalling system
Canada	Systems/Services	Supply of 212 Metropolis™ metro cars, Urbalis™ 400 CBTC(1), control centre solutions and associated maintenance for 30 years
Canada	Rolling stock	Supply of bogies and motors as well as the train control, communication, passenger information and video surveillance systems for 153 metro cars
France	Rolling stock	Supply of 100 next-generation Avelia™ Horizon very high-speed trains
France	Rolling stock	Supply of 173 metro cars to lines 15, 16 and 17 of the Grand Paris Express
France	Rolling stock	Supply of 32 additional Citadis™ Dualis tram-trains to Île-de-France region
Germany	Rolling stock	Supply of 66 Coradia™ Lint trains to be operated in Bavaria
Germany	Rolling stock/Services	Supply of Coradia™ iLint hydrogen powered trains in Lower Saxony and associated maintenance
Germany	Rolling stock	Supply of additional regional trains to Deutsche Bahn
Germany	Rolling stock	Supply of 38 Citadis™ X05 steel trams for the city of Frankfurt
Italy	Rolling Stock/Services	Supply of Coradia™ stream regional trains to Puglia, Sicilia, Lombardia and Piemonte regions and associated maintenance
Italy	Rolling Stock/Services	Supply of five additional Pendolino™ trains and associated maintenance for a period of 30 years
India	Rolling Stock	Supply of 248 metro cars for Mumbai metro line 3
Luxembourg	Rolling Stock	Supply of 34 regional high-capacity double deck Coradia™ trains
Morocco	Rolling Stock	Supply of 30 electric Prima locomotives
Norway	Signalling	Supply of on-board train control solution for Norwegian railway fleet and maintenance for the period of 25 years
Saudi Arabia	Services	Maintenance of the transit system including the trains and fixed installations
Taiwan	Systems	Supply of an integrated metro system to Taipei line 7

(1) CBTC (see previous page).

ORDERS BACKLOG

On 31 March 2019, the Group backlog reached a new record high of €40.5 billion, as compared to €35.2 billion last year at the same period under the IFRS 15 standard, providing strong visibility over future sales. The backlog position improved by 13% as compared to March 2018, once adjusted for adverse foreign exchange translation effects and scope impacts. The strong commercial performance during the year resulted in improved backlog position mainly in Rolling stock and Services. Strong execution of Systems contracts in Middle East/Africa resulted in an expected backlog decrease for the region. The March 2019 backlog contribution to the next three fiscal years revenue is expected to land within a €16.5B-€17.5B range.

Geographic breakdown

Actual figures *(in € million)*	Year ended 31 March 2019	% of contrib.	Year ended 31 March 2018(*)	% of contrib.
Europe	18,212	45%	14,453	41%
Americas	6,297	16%	5,212	15%
Asia/Pacific	5,752	14%	5,017	14%
Middle East/Africa	10,220	25%	10,557	30%
BACKLOG BY DESTINATION	**40,481**	**100%**	**35,239**	**100%**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards. €35,274 million backlog as published in half year financial report as of 30 September 2018.

Product breakdown

Actual figures *(in € million)*	**Year ended 31 March 2019**	**% of contrib.**	**Year ended 31 March 2018(*)**	**% of contrib.**
Rolling stock	20,672	51%	17,971	51%
Services	12,779	32%	10,660	30%
Systems	3,311	8%	3,355	10%
Signalling	3,719	9%	3,253	9%
BACKLOG BY DESTINATION	**40,481**	**100%**	**35,239**	**100%**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards. €35,274 million backlog as published in half year financial report as of 30 September 2018.

INCOME STATEMENT

SALES

Alstom's sales for the fiscal year stood at €8.1 billion compared to €7.3 billion during the same period last year under the IFRS 15 standard. This performance reflects robust growth across all geographies driven by strong project execution. The book-to-bill ratio stands at 1.5x for the current period as compared to 1.0x for the same period last year.

Geographic breakdown

Actual figures *(in € million)*	**Year ended 31 March 2019**	**% of contrib.**	**Year ended 31 March 2018(*)**	**% of contrib.**	**% variation March 2019/March 2018** Actual	Organic
Europe	4,061	51%	3,749	51%	8%	8%
Americas	1,470	18%	1,333	18%	10%	12%
Asia/Pacific	921	11%	900	12%	2%	5%
Middle East/Africa	1,620	20%	1,364	19%	19%	19%
SALES BY DESTINATION	**8,072**	**100%**	**7,346**	**100%**	**10%**	**11%**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

Product breakdown

Actual figures *(in € million)*	**Year ended 31 March 2019**	**% of contrib.**	**Year ended 31 March 2018(*)**	**% of contrib.**	**% variation March 2019/March 2018** Actual	Organic
Rolling stock	3,448	43%	3,150	42%	9%	11%
Services	1,556	19%	1,354	19%	15%	16%
Systems	1,766	22%	1,527	21%	16%	16%
Signalling	1,302	16%	1,315	18%	(1%)	(1%)
SALES BY DESTINATION	**8,072**	**100%**	**7,346**	**100%**	**10%**	**11%**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

In Europe, Alstom reported sales of €4.1 billion as against €3.7 billion for the fiscal year 2018/19. Sales of the region contributed to 51% of the Group total sales, up 8% on an organic basis, thanks to continued deliveries of Euroduplex™ high-speed trains for the Paris-Bordeaux line and Coradia™ trains in France. The ramp-up of large Rolling stock contracts to supply regional and high-speed trains in Italy, as well as regional trains to Germany and the Netherlands generated sales for the period. The execution of Crossrail infrastructure track as well as the maintenance of Pendolino™ trains in United Kingdom further contributed to the performance of the region.

In Americas, Alstom sales stood at €1.5 billion, up 12% on an organic basis contributing to 18% of the total Group's sales compared to the same period last year. The region's sales were driven by the execution of a metro system project for Panama line 2. In addition, rolling stock refurbishment activities, together with the ramp-up of the Amtrak high-speed train project in the USA contributed to the region's performance. Also, deliveries of light rail vehicles for Ottawa, supply of bogies for the Montreal metro in Canada and deliveries of metro cars to Lima in Peru supported the sales of the period.

During the fiscal year 2018/19, Asia/Pacific reported sales of €0.9 billion, up 5% on an organic basis. Sales accounted for 11% of the Group total performance led by deliveries of suburban trains to Melbourne and Citadis™ X05 light rail vehicles to Sydney, Australia. In addition, execution of the infrastructure contract of Dedicated Freight Corridor as well as electric locomotives in India further contributed to the region's sales.

In Middle East/Africa, Alstom's sales amounted to €1.6 billion for the fiscal year 2018/19, contributing to 20% of total sales, up 19% organically as compared to the same period last year. The region's performance was largely fuelled by the ramp-up of Systems contracts including the production of metro cars for Dubai Route 2020 metro in the United Arab Emirates and Riyadh in Saudi Arabia and delivery of Lusail tramway in Qatar. Besides, the region's sales volume was impacted by the continued execution of rolling stock contracts, including the production of X'trapolis™ trains for PRASA in South Africa, the deliveries of Coradia™ trains to Algeria, Senegal and Prima freight locomotives to Azerbaijan.

RESEARCH & DEVELOPMENT

During the fiscal year 2018/19, the research and development gross costs amounted to €291 million *i.e.* 3.6% of sales, with a focus on sustainable mainlines developments and smart mobility solutions.

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018(*)
R&D gross costs	(380)	(345)
R&D gross costs (in % of Sales)	*4.7%*	*4.7%*
Funding received	75	58
Net R&D spending	(305)	(287)
Development costs capitalised during the period	68	90
Amortisation expense of capitalised development costs	(54)	(55)
R&D EXPENSES (IN P&L)	**(291)**	**(252)**
R&D expenses (in % of Sales)	*3.6%*	*3.4%*

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

Alstom directed some of the research and development effort on the Avelia™ range very high-speed train "TGV of the future". As a milestone, Alstom secured the order for the supply of 100 Avelia™ trains from SNCF in July 2018.

In addition, the Group further invested in the award-winning Coradia iLint™ regional trains. These trains are hydrogen fuel cell- powered, low noise and are known for zero-emission. The approval for the commercial operation in Germany has been received in September 2018, additionally the Coradia iLint™ successfully demonstrated its operational capabilities during a three-week tour in Germany.

The Group further developed its Citadis™ light rail vehicle product suite, the order secured by Alstom in Frankfurt, Germany coming as a concrete confirmation of this effort.

Aptis™, the 100% electric bus with new exteriors and interior designs that reflect the future mobility reported its first commercial success with the Strasbourg Transport Company, supplying 12 Aptis™ buses.

Alstom has continued to develop urban signalling solutions with Urbalis™ 500 and Urbalis™ 400.

As a provider of mobility solutions in the digitalization era, Alstom has showcased its vision of smart mobility and sustainable transportation during various events including the Innotrans 2018 Trade Show, European Mobility Exhibition, Smart City Expo World Congress and Expo Europa 360. A few breakthrough technologies addressing the evolving mobility needs are listed below:

- **Mastria™**, the first multimodal supervision solution which maximises traffic fluidity and orchestrates passenger routes;
- **Optimet OrbanMap™**, a real-time dynamic information system provided to passengers at metro stations;
- **Iconis Security**, an integrated solution to manage security operations, passenger information and communications within the control centre, providing efficient, responsive and seamless supervision of both the on-board and wayside installations;
- **Station One™**, the first online market place and a specialised platform for buying and selling mobility related products and services. The platform has been launched officially in March 2019.

OPERATIONAL PERFORMANCE

During the fiscal year 2018/19, the adjusted EBIT reached €570 million equivalent to a 7.1% operational margin, as compared to €397 million and 5.4% during the last fiscal year. During the period, this exceptional increase in Alstom's operational performance was steered by the revenue growth, stable product mix and efficiencies in operational performance and overhead costs.

Overhead costs have been stable while the revenue grew substantially as compared to same period last year. Selling and Administrative costs as a percentage of sales reached 7.0%, as compared to 7.8% for the same period last year. This contributed to the adjusted EBIT performance.

NET PROFIT

Restructuring costs amounted to €(65) million driven by the rationalisation of footprint and competitivity initiatives notably in Germany, Brazil and in the United Kingdom. Amortisation of intangible assets and integration costs related to business combinations, such as SSL, GE Signalling and Nomad decreased to €(15) million. Besides, the transaction costs related to the Siemens-Alstom deal amounted to €(74) million during the fiscal year 2018/19. Other costs mainly reflected the net of legal proceedings and capital gains on disposal of assets linked to the dilution of TMH and the takeover of EKZ. EBIT stood at €408 million as compared to €264 million for the fiscal year 2018/19 as a result of continued strong operational performance over the year.

Net financial expense decreased to €(88) million during the fiscal year 2018/19, as compared to €(99) million for the same period last year. This is partly linked to the decrease in the gross financial debt resulting from the repayment of €371 million bonds that matured during the year. A €6 million restatement has been recorded as a significant financial component to account for the timing difference of cash receipts and revenue recognition under the cost-to-cost method.

The Group recorded an income tax charge of €(70) million for fiscal year 2018/19, corresponding to an effective tax rate of 22%.

The share in net income from equity investments amounted to €195 million, mainly related to the re-evaluation of the Energy Joint Ventures put options over the period. Improved performance from Transmashholding (TMH) and Casco Signal Limited also contributed to the net income from equity investments over the period.

The Net profit from discontinued operations stood at €248 million including the reassessment of liabilities related to the disposal of activities.

As a result, the Net profit (Group share) stood at €681 million for the fiscal year 2018/19 compared to €365 million during the same period last fiscal year.

FREE CASH FLOW

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018(*)
EBIT	408	264
Depreciation and amortisation	194	168
Restructuring variation	15	10
Capital expenditure	(207)	(203)
R&D capitalisation	(68)	(90)
Change in working capital	(12)	91
Financial cash-out	(90)	(66)
Tax cash-out	(105)	(93)
Other	18	47
FREE CASH FLOW	**153**	**128**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

This year, the Group free cash flow was positive at €153 million compared to €128 million during the last fiscal year. Cash generation was positive notably due to progress payments received for the deliveries of projects and the first results of the second phase of cash focus program, notably trade receivables reduction. Working capital resources remained overall stable as resources used in the ramp-up of major projects signed in previous years were mostly compensated by a sound level of progress payments collected. Last year, working capital included large advance payments associated with main orders signed, while some other major projects were still in design and engineering phases. Year-on-year financial cash outflow increased driven by the timing of maturing derivatives.

During the period, Alstom invested €207 million in capital expenditures of tangible assets, of which €110 million in strategic capital expenditure on major project sites: Madhepura factory in India, Hornell plant for Amtrak project in the USA and Prasa production facilities in South Africa. These strategic projects represent an additional €300 million capital expenditure over the course of roughly three years. As at 31 March 2019, Alstom had invested €269 million in transformation capital expenditure since the beginning of these projects, €110 million of which was spent during the fiscal year 2018/19. In addition to the €110 million strategic capital expenditure, Alstom has continued to invest in facilities, tools and plants around the world to meet the needs of capacity developments, for a total spend of €97 million during this fiscal year.

NET CASH (DEBT)

On 31 March 2019, the Group recorded a net cash level of €2,325 million, compared to the net debt position of €255 million on 31 March 2018. Alstom's net debt turned into net cash over the period, mainly due to the €2,594 million proceeds from the sale of Energy Joint Ventures to General Electric. Free cash flow generated by operations was offset by €84 million dividends paid to shareholders and non-controlling interests, and by €114m of business acquisitions. Group's acquisitions and disposals in the period include the Alstom stake increase in the TMH Limited investment for €115 million.

In addition to its available cash and cash equivalents, amounting to €3,432 million as of 31 March 2019, the Group can draw from a €400 million revolving credit facility, maturing in June 2022 which is fully undrawn at March 2019. This resulted into a liquidity position as of March 2019 of €3,832 million.

EQUITY

The Group Equity on 31 March 2019 rose to €4,159 million (including non-controlling interests) from €3,430 million on 31 March 2018. This increase can be broken down as follows:

- net profit for the fiscal year 2018/19 of €681 million (Group share);
- actuarial hypothesis variation on pensions (recorded in equity) of €(49) million net of tax;
- dividends paid to Alstom shareholders for €(78) million;
- share-based payments for €39 million;
- fair value adjustment of Locotech investment in Transmashholding €53 million;
- currency translation reserve applied linked to Transmashholding dilution and EKZ takeover €53 million;
- currency translation adjustment of €36 million.

NON-GAAP FINANCIAL INDICATORS DEFINITIONS

This section presents financial indicators used by the Group that are not defined by accounting standard setters.

ORDERS RECEIVED

A new order is recognised as an "order received" only when the contract creates enforceable obligations between the Group and its customer.

When this condition is met, the order is recognised at the contract value.

If the contract is denominated in a currency other than the functional currency of the reporting unit, the Group requires the immediate elimination of currency exposure through the use of forward currency sales. Orders are then measured using the spot rate at inception of hedging instruments.

ORDER BACKLOG

Order backlog represents the amount of sales that are yet to be recognised from orders already received.

Order backlog at the end of a financial year is computed as follows:

- order backlog at the beginning of the year;
- plus new orders received during the year;
- less cancellations of orders recorded during the year;
- less sales recognised during the year.

The order backlog is also subject to changes in the scope of consolidation, contract price adjustments and foreign currency translation effects.

Order backlog corresponds to the transaction price allocated to the remaining performance obligations, as per IFRS 15 quantitative and qualitative disclosures requirement.

BOOK-TO-BILL RATIO

The book-to-bill is the ratio of orders received relative to the amount of sales traded for a specific period.

ADJUSTED EBIT

When Alstom's new organisation was implemented, adjusted EBIT ("aEBIT") became the Key Performance Indicator to present the level of recurring operational performance. This indicator is also aligned with market practice and comparable to direct competitors.

aEBIT corresponds to Earning Before Interests and Tax adjusted for the following elements:

- net restructuring expenses (including rationalization costs);
- tangibles and intangibles impairment;
- capital gains or loss/revaluation on investments disposals or controls changes of an entity;
- and any other non-recurring items, such as some costs incurred to realize business combinations and amortisation of an asset exclusively valued in the context of business combination as well as litigation costs that have arisen outside the ordinary course of business.

A non-recurring item is a "one-off" exceptional item that is not supposed to occur again in following years and that is significant.

Adjusted EBIT margin corresponds to Adjusted EBIT in percentage of sales.

The non-GAAP measure adjusted EBIT (aEBIT hereafter) indicator reconciles with the GAAP measure EBIT as follows:

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018(*)
Adjusted Earnings Before Interest and Taxes (aEBIT)	**570**	**397**
aEBIT (in % of Sales)	*7.1%*	*5.4%*
Restructuring costs	(65)	(47)
PPA amortisation and Integration costs	(15)	(25)
Siemens deal costs	(74)	(39)
Others and asset impairment	(8)	(22)
EARNINGS BEFORE INTEREST AND TAXES (EBIT)	**408**	**264**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

FREE CASH FLOW

Free cash flow is defined as net cash provided by operating activities, less capital expenditures including capitalised development costs, the capital expenditures being shown as net of proceeds from disposals of tangible and intangible assets. Free cash flow does not include any proceeds from disposals of activity.

The most directly comparable financial measure to free cash flow calculated and presented in accordance with IFRS is net cash provided by operating activities.

A reconciliation of free cash flow and net cash provided by operating activities is presented below:

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018(*)
Net cash provided by/(used in) operating activities	**425**	**418**
Capital expenditure (including capitalised R&D costs)	(275)	(293)
Proceeds from disposals of tangible and intangible assets	3	3
FREE CASH FLOW	**153**	**128**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

Alstom uses the free cash flow both for internal analysis purposes as well as for external communication: The Group believes it provides accurate insight regarding the actual amount of cash generated or used by operations.

During the fiscal year 2018/19, the Group free cash flow was positive at €153 million compared to €128 million during the previous year.

CAPITAL EMPLOYED

Capital employed corresponds to hereafter-defined assets minus liabilities:

- Assets: sum of goodwill, intangible assets, property, plant and equipment, equity-accounted investments and other investments, other non-current assets (other than those related to financial debt and to employee defined benefit plans), inventories, costs to fulfil a contract, contract assets, trade receivables and other operating assets;
- Liabilities: sum of non-current and current provisions, contract liabilities, trade payables and other operating liabilities.

At the end of March 2019, capital employed stood at €2,088 million, compared to €1,487 million at the end of March 2018. This movement was mainly driven by the reassessment of liabilities related to the disposal of discontinued activities, positive net income from equity investments along with the remeasurement of Locotech and TMH dilution profit overt the period. The strategic capital expenditure over the fiscal year also increased the capital employed.

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018(*)
Non-current assets	4,313	3,865
less deferred tax assets	(299)	(305)
less non-current assets directly associated to financial debt	(201)	(213)
less prepaid pension benefits	-	-
Capital employed – non-current assets (A)	**3,813**	**3,347**
Current assets	9,090	6,991
less cash & cash equivalents	(3,432)	(1,231)
less other current financial assets	(10)	(8)
Capital employed – current assets (B)	**5,648**	**5,752**
Current liabilities	8,059	7,625
less current financial debt	(1,032)	(543)
plus non-current provisions	346	530
Capital employed – liabilities (C)	**7,373**	**7,612**
CAPITAL EMPLOYED (A)+(B)-(C)	**2,088**	**1,487**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

NET CASH/(DEBT)

The net cash/(debt) is defined as cash and cash equivalents, other current financial assets and non-current financial assets directly associated to liabilities included in financial debt, less current and non-current financial debt.

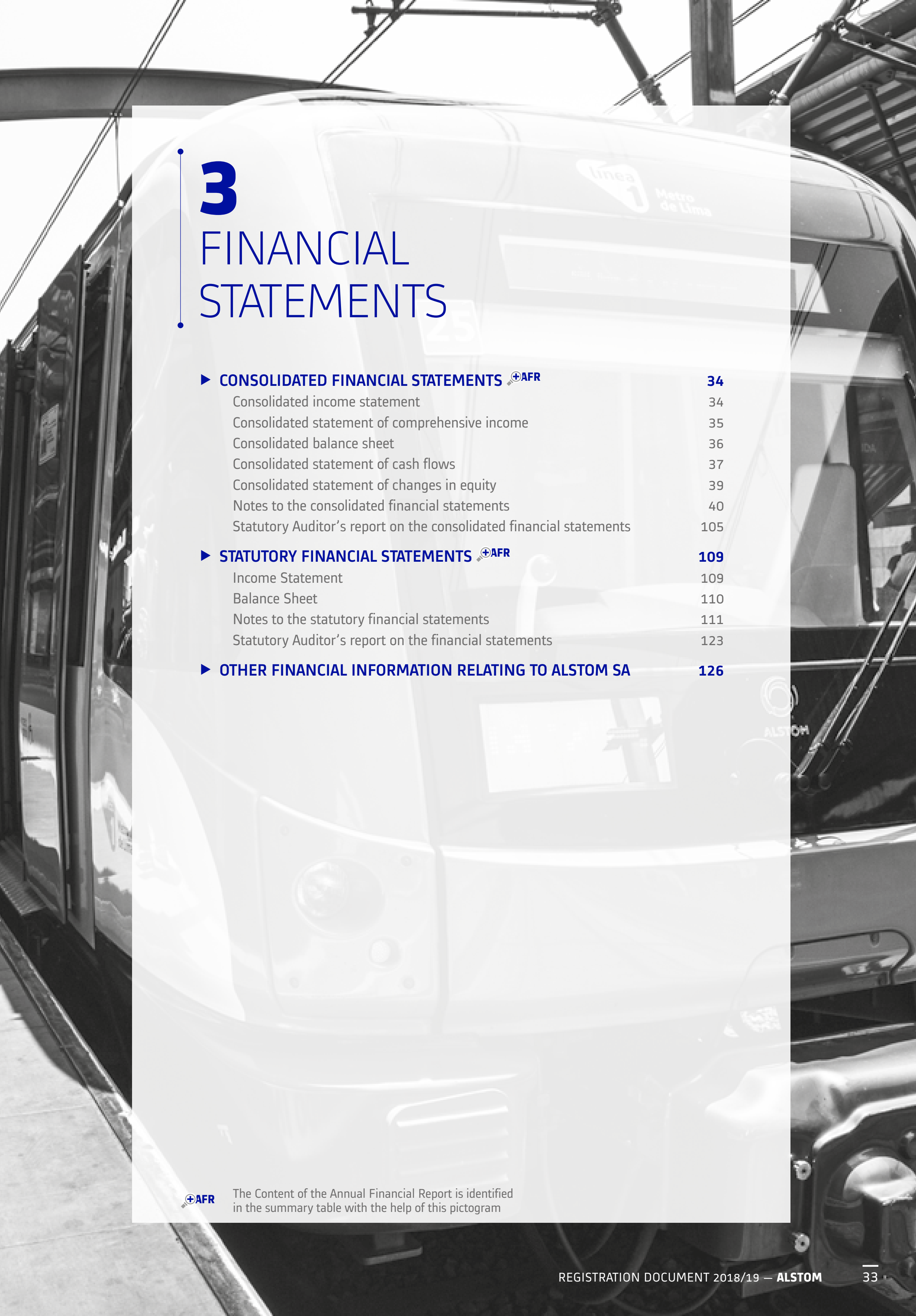
On 31 March 2019, the Group recorded a net cash level of €2,325 million, compared to the net debt position of €(255) million on 31 March 2018.

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018
Cash and cash equivalents	3,432	1,231
Other current financial assets	10	8
Financial non-current assets directly associated to financial debt	201	213
less:		
Current financial debt	1,032	543
Non-current financial debt	286	1,164
NET CASH/(DEBT) AT THE END OF THE PERIOD	**2,325**	**(255)**

ORGANIC BASIS

Figures presented in this section include performance indicators presented on an actual basis and on an organic basis. Figures given on an organic basis eliminate the impact of changes in scope of consolidation and changes resulting from the translation of the accounts into Euro following the variation of foreign currencies against the Euro.

The Group uses figures prepared on an organic basis both for internal analysis and for external communication, as it believes they provide means to analyse and explain variations from one period to another. However, these indicators are not performance measurement aggregates defined by the IFRS.



3 FINANCIAL STATEMENTS

AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram

CONSOLIDATED FINANCIAL STATEMENTS

Year ended 31 March 2019

CONSOLIDATED INCOME STATEMENT

(in € million)	Note	Year ended 31 March 2019	Year ended 31 March 2018(*)
Sales	**(3)**	**8,072**	**7,346**
Cost of sales		(6,641)	(6,127)
Research and development expenses	(4)	(291)	(252)
Selling expenses	(5)	(214)	(211)
Administrative expenses	(5)	(355)	(359)
Other income/(expense)	(6)	(163)	(133)
Earnings Before Interests and Taxes		**408**	**264**
Financial income	(7)	3	10
Financial expense	(7)	(91)	(109)
Pre-tax income		**320**	**165**
Income Tax Charge	(8)	(70)	(59)
Share in net income of equity-accounted investments	(13)	195	216
Net profit from continuing operations		**445**	**322**
Net profit from discontinued operations	(9)	248	52
NET PROFIT		**693**	**374**
Net profit attributable to equity holders of the parent		681	365
Net profit attributable to non controlling interests		12	9
Net profit from continuing operations attributable to:			
• Equity holders of the parent		433	313
• Non controlling interests		12	9
Net profit from discontinued operations attributable to:			
• Equity holders of the parent		248	52
• Non controlling interests		-	-
EARNINGS PER SHARE *(in €)*			
• Basic earnings per share	(10)	3.05	1.65
• Diluted earnings per share	(10)	3.03	1.64

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The accompanying notes are an integral part of the condensed consolidated financial statements.

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(in € million)	Note	Year ended 31 March 2019	Year ended 31 March 2018(*)
Net profit recognised in income statement		**693**	**374**
Remeasurement of post-employment benefits obligations	(29)	(50)	62
Equity investments at FVOCI	(13)/(14)	55	-
Income tax relating to items that will not be reclassified to profit or loss	(8)	5	(8)
Items that will not be reclassified to profit or loss		**10**	**54**
of which from equity-accounted investments	*(13)*	*54*	*-*
Fair value adjustments on cash flow hedge derivatives		-	5
Costs of hedging reserve		(8)	12
Currency translation adjustments	(23)	33	(214)
Income tax relating to items that may be reclassified to profit or loss	(8)	2	-
Items that may be reclassified to profit or loss		**27**	**(197)**
of which from equity-accounted investments	*(13)*	*(1)*	*(41)*
TOTAL COMPREHENSIVE INCOME		**730**	**231**
Attributable to:			
• Equity holders of the parent		718	226
• Non controlling interests		12	5
Total comprehensive income attributable to equity shareholders arises from:			
• Continuing operations		469	174
• Discontinued operations		249	52
Total comprehensive income attributable to non controlling interests arises from:			
• Continuing operations		12	5
• Discontinued operations		-	-

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED **BALANCE SHEET**

Assets

(in € million)	Note	At 31 March 2019	At 31 March 2018(*)
Goodwill	(11)	1,574	1,422
Intangible assets	(11)	470	416
Property, plant and equipment	(12)	953	854
Investments in joint-venture and associates	(13)	711	533
Non consolidated investments	(14)	64	58
Other non-current assets	(15)	242	277
Deferred Tax	(8)	299	305
Total non-current assets		**4,313**	**3,865**
Inventories	(17)	1,533	1,440
Contract assets	(18)	1,448	1,212
Trade receivables	(19)	1,661	1,772
Other current operating assets	(20)	1,006	1,328
Other current financial assets	(25)	10	8
Cash and cash equivalents	(26)	3,432	1,231
Total current assets		**9,090**	**6,991**
Assets held for sale	(13)	7	2,390
TOTAL ASSETS		**13,410**	**13,246**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Equity and Liabilities

(in € million)	Note	At 31 March 2019	At 31 March 2018(*)
Equity attributable to the equity holders of the parent	(23)	4,091	3,376
Non controlling interests		68	54
Total equity		**4,159**	**3,430**
Non current provisions	(22)	346	530
Accrued pensions and other employee benefits	(29)	533	468
Non-current borrowings	(27)	89	952
Non-current obligations under finance leases	(27)	197	212
Deferred Tax	(8)	21	22
Total non-current liabilities		**1,186**	**2,184**
Current provisions	(22)	847	826
Current borrowings	(27)	1,013	525
Current obligations under finance leases	(27)	19	18
Contract liabilities	(18)	3,001	3,157
Trade payables	(16)	1,751	1,346
Other current liabilities	(21)	1,428	1,753
Total current liabilities		**8,059**	**7,625**
Liabilities related to assets held for sale		6	7
TOTAL EQUITY AND LIABILITIES		**13,410**	**13,246**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED **STATEMENT OF CASH FLOWS**

		Year ended	
(in € million)	Note	31 March 2019	31 March 2018 [1]
Net profit		**693**	**374**
Depreciation, amortisation and impairment	(11)/(12)	195	171
Expense arising from share-based payments	(31)	20	18
Cost of net financial debt and costs of foreign exchange hedging, net of interest paid and received (a), and other change in provisions		(14)	17
Post-employment and other long-term defined employee benefits		11	19
Net (gains)/losses on disposal of assets [2]		(57)	2
Share of net income (loss) of equity-accounted investments (net of dividends received)	(13)	(143)	(198)
Deferred taxes charged to income statement	(8)	10	(65)
Net cash provided by operating activities – before changes in working capital		**715**	**338**
Changes in working capital resulting from operating activities (b)	**(16)**	**(290)**	**80**
Net cash provided by/(used in) operating activities		**425**	**418**
Of which operating flows provided/(used) by discontinued operations	*(9)*	*-*	*-*
Proceeds from disposals of tangible and intangible assets		3	3
Capital expenditure (including capitalised R&D costs)		(275)	(293)
Increase/(decrease) in other non-current assets	(15)	10	21
Acquisitions of businesses, net of cash acquired [3]		(114)	(4)
Disposals of businesses, net of cash sold	(9)	2,576	(80)
Net cash provided by/(used in) investing activities		**2,200**	**(353)**
Of which investing flows provided/(used) by discontinued operations	*(9)*	*(16)*	*(82)*
Capital increase/(decrease) including non controlling interests		19	47
Dividends paid including payments to non controlling interests		(84)	(60)
Repayments of bonds & notes issued	(27)	(371)	(272)
Changes in current and non-current borrowings	(27)	(8)	7
Changes in obligations under finance leases	(27)	(17)	(27)
Changes in other current financial assets and liabilities	(27)	3	-
Net cash provided by/(used in) financing activities		**(458)**	**(305)**
Of which financing flows provided/(used) by discontinued operations	*(9)*	*-*	*-*
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		**2,167**	**(240)**
Cash and cash equivalents at the beginning of the period		1,231	1,563
Net effect of exchange rate variations		37	(92)
Transfer to assets held for sale		(3)	-
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	**(26)**	**3,432**	**1,231**
(a) Net of interests paid & received		(62)	(66)
(b) Income tax paid		(105)	(93)

(1) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).
(2) Mainly including the impact of the change in EKZ consolidation method for €33 million and TMH dilution gain for €25 million (see Note 6).
(3) Of which €115 million related to the acquisition price of TMH (see Note 13).

(in € million)	Year ended 31 March 2019	Year ended 31 March 2018 [1]
Net cash/(debt) variation analysis [2]		
Changes in cash and cash equivalents	2,167	(240)
Changes in other current financial assets and liabilities	(3)	-
Changes in bonds and notes	371	272
Changes in current and non-current borrowings	8	(7)
Changes in obligations under finance leases	17	27
Transfer to assets held for sale	-	-
Net debt of acquired/disposed entities at acquisition/disposal date and other variations	20	(99)
Decrease/(increase) in net debt	2,580	(47)
Net cash(debt) at the beginning of the period	**(255)**	**(208)**
NET CASH/(DEBT) AT THE END OF THE PERIOD	**2,325**	**(255)**

(1) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).
(2) The net cash/(debt) is defined as cash and cash equivalents, marketable securities and other current financial assets and non-current financial assets directly associated to liabilities included in financial debt (see Note 15), less financial debt (see Note 27).

The accompanying notes are an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT **OF CHANGES IN EQUITY**

(in € million, except for number of shares)	Number of outstanding shares	Capital	Additional paid-in capital	Retained earnings	Actuarial gains and losses	Cash-flow hedge	Currency translation adjustment	Equity attributable to the equity holders of the parent	Non controlling interests	Total equity
At 31 March 2017 (as published)	**219,711,830**	**1,538**	**890**	**1,906**	**(322)**	**1**	**(352)**	**3,661**	**52**	**3,713**
IFRS 9 & 15 restatement	-	-	-	(531)	-	-	20	(511)	(7)	(518)
At 31 March 2017 (restated)	**219,711,830**	**1,538**	**890**	**1,375**	**(322)**	**1**	**(332)**	**3,150**	**45**	**3,195**
Movements in other comprehensive income	-	-	-	11	59	6	(215)	(139)	(4)	(143)
Net income for the period	-	-	-	365	-	-	-	365	9	374
Total comprehensive income	**-**	**-**	**-**	**376**	**59**	**6**	**(215)**	**226**	**5**	**231**
Change in controlling interests and others	-	-	-	2	-	-	(2)	-	11	11
Dividends	-	-	-	(55)	-	-	-	(55)	(7)	(62)
Issue of ordinary shares under long term incentive plans	1,020,164	7	-	(7)	-	-	-	-	-	-
Recognition of equity settled share-based payments	1,478,477	10	27	18	-	-	-	55	-	55
At 31 March 2018 (1)	**222,210,471**	**1,555**	**917**	**1,709**	**(263)**	**7**	**(549)**	**3,376**	**54**	**3,430**
Movements in other comprehensive income	-	-	-	49	(48)	-	36	37	-	37
Net income for the period	-	-	-	681	-	-	-	681	12	693
Total comprehensive income	**-**	**-**	**-**	**730**	**(48)**	**-**	**36**	**718**	**12**	**730**
Change in controlling interests and others (2)	-	-	-	(10)	-	(7)	53	36	6	42
Dividends	-	-	-	(78)	-	-	-	(78)	(4)	(82)
Issue of ordinary shares under long term incentive plans	638,610	5	-	(5)	-	-	-	-	-	-
Recognition of equity settled share-based payments	723,232	5	14	20	-	-	-	39	-	39
AT 31 MARCH 2019	**223,572,313**	**1,565**	**931**	**2,366**	**(311)**	**-**	**(460)**	**4,091**	**68**	**4,159**

(1) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).
(2) As part of the TMH combined operation, currency translation reserve has been recycled through profit and loss for €(61) million (see Note 13).

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

DETAILED SUMMARY OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Alstom is a leading player in the world rail transport industry. As such, the Company offers a complete range of solutions, including rolling stock, systems, services as well as signalling for passenger and freight railway transportation. It benefits from a growing market with solid fundamentals. The key market drivers are urbanisation, environmental concerns, economic growth, governmental spending and digital transformation.

In this context, Alstom has been able to develop both a local and global presence that sets it apart from many of its competitors, while offering proximity to customers and great industrial flexibility. Its range of solutions, one of the most complete and integrated on the market, and its position as a technological leader, place Alstom in a unique situation to benefit from the worldwide growth in the rail transport market. Lastly, in order to generate profitable growth, Alstom focuses on operational excellence and its product mix evolution.

The consolidated financial statements are presented in euro and have been authorised for issue by the Board of Directors held on 6 May 2019. In accordance with French legislation, they will be final once approved by the shareholders of Alstom at the Annual General Meeting convened for 10 July 2019.

A. MAJOR EVENTS AND CHANGES IN SCOPE OF CONSOLIDATION

NOTE 1 • MAJOR EVENTS AND MAJOR CHANGES IN SCOPE OF CONSOLIDATION

1.1. Combination project of Siemens and Alstom's mobility businesses

The proposed combination of Alstom with Siemens Mobility, including its rail traction drive business, will not proceed following the decision of the European Commission occurred on 6 February 2019 to prohibit the proposed merger.

The project costs have been recognized in the net income and disclosed in the Note 6.

1.2. Scope of consolidation

The three Energy Alliances

On 2 October 2018, the Group has completed the transfer of all its interests in the three Energy Alliances (Renewables, Grid and Nuclear) to General Electric and received a total cash payment of €2.594 billion (see Note 9 and Note 13).

Electrovoz Kurastyru Zauyty LLP (EKZ)

As at 22 December 2017, Alstom signed an agreement with the Kazakh national railway company (KTZ) to acquire their 25% stake in the EKZ Joint Venture (JV) for €21 million, recognized in March 2018 Group Financial Statement as non-current assets because of unmet suspensive conditions. As at 25 February 2019, all the suspensive conditions have been met and Alstom owns 75% of the shares, conferring the control over the Kazakh company, which is specialized in the manufacturing and the maintenance of electric locomotives especially for the Eurasian Economic Union and CIS markets.

Accordingly, the consolidation method has been changed from equity to full consolidation in application of IFRS 3R. The gain related to the equity disposal amounts to €33 million (see Note 6).

The fair value of the consideration transferred for the acquisition of EKZ has been estimated at €45 million.

In accordance with IFRS 3R, a preliminary valuation, based on the full goodwill option, has resulted in the recognition of new intangible assets (order backlog margin (for projects) and customer relationships), the re-measurement of liabilities as well as deferred tax liabilities recognition.

Recognised assets and liabilities may be subsequently adjusted during a maximum of twelve months from the acquisition date, depending on new information obtained about the facts and circumstances existing at the acquisition date (25 February 2019).

The preliminary goodwill amounts to €97 million (see Note 11) and is mainly supported by the pipeline of opportunities on the Rolling stock business in this geographic area as well as by expected future synergies between EKZ and Alstom businesses.

(in € million)	25 February 2019
Total non-current assets	61
Total current assets	36
Total assets	**97**
Total non-current liabilities	20
Total current liabilities	129
Total liabilities	**149**
FAIR VALUE OF ASSETS/(LIABILITIES) ATTRIBUTABLE TO THE SHAREHOLDERS OF THE GROUP	**(52)**
Consideration price	45
Goodwill	97

The contribution of EKZ (as a fully integrated entity) to the revenue and to the net result is not significant because of only one month of full consolidation.

NTL Holding

In January 2019, Alstom bought the remaining 49% of NTL Holding. This holding was created in 2012 jointly with Bpifrance to acquire the "Translohr" tramway on tires. Henceforth, Alstom owns 100% of the company and the consolidation method has been changed accordingly from equity to full consolidation. No significant impacts are expected in the Group financial statement in the frame of this acquisition.

TMH Limited

In June 2018, TMH and Locotech Services agreed to combine under a new holding TMH Limited.

Following the transaction, the contribution of Alstom has been diluted. In the meantime, additional shares of TMH Limited have been bought by the Group from the other shareholders to increase its ownership up to 20% for €115 million (before acquisition costs). The Group retains a significant influence. The financial impacts of this operation, and notably the dilutive effect, are presented in Notes 6 and 13.

21net

In April 2018, Alstom completed the 100% acquisition of 21net, expert in on-board internet and passenger infotainment for the railway industry. The company is headquartered in the UK with subsidiaries in Belgium, France, Italy and India.

The price allocation is now fully completed and generates a goodwill amounting to €10 million.

B. ACCOUNTING POLICIES AND USE OF ESTIMATES

NOTE 2 • ACCOUNTING POLICIES

2.1. Basis of preparation of the consolidated financial statements

Alstom consolidated financial statements, for the year ended 31 March 2019, are presented in millions of Euros and have been prepared:

- in accordance with the International Financial Reporting Standards (IFRS) and interpretations published by the International Accounting Standards Board (IASB) and endorsed by the European Union and whose application was mandatory as at 31 March 2019;
- using the same accounting policies and measurement methods as at 31 March 2018, with the exceptions of changes required by the enforcement of new standards and interpretations presented here after.

The full set of standards endorsed by the European Union can be consulted at:

http://www.efrag.org/Endorsement

2.2. New standards and interpretations mandatorily applicable for financial periods beginning on 1 April 2018

2.2.1. IFRS 15 Revenue from contracts with customers

Context

On 22 September 2016, European Union endorsed IFRS 15 "Revenue from Contracts with Customers" (issued by IASB on 28 May 2014), which supersedes IAS 11 on "Construction contracts", IAS 18 on "Revenue for the sale of goods and the rendering of services", as well as other related interpretations. The new standard has become effective for Alstom for fiscal year beginning on 1 April 2018.

Transition method elected

Alstom has elected to apply the full retrospective method. Accordingly, opening equity at 1 April 2017 has been restated. To reflect the impact of applying IFRS 15, the 2018/19 consolidated financial statements include also restated comparative data for fiscal year 2017/18.

Final impacts on equity restatement at 1 April 2017 and 31 March 2018

Alstom achieved several qualitative and quantitative conclusions:

- The identification of performance obligations has not led to significant changes *versus* previous practice.
- Most "construction contracts" as well as long term service agreements fulfill the requirements for revenue recognition over time and remain accounted for under the percentage of completion method. Nevertheless, the percentage of completion method used by Alstom changed. Previously, the stage of completion on "construction contracts" and long-term service agreements was assessed upon the milestones method which ascertained the stage of completion of a physical proportion of the contract work or the performance of services provided in the agreement.

  Under IFRS 15, the percentage of completion method retained is the cost to cost method: revenue is now recognized for each performance obligation based on the percentage of costs incurred to date divided by the total costs expected at completion.

  For each contract, depending on the stage of completion and the milestones reached compared to the costs incurred to date, this change in method impacts the phasing in the recognition of revenue and margin from one period to another. The analysis performed on the current portfolio of contracts has reduced equity at the opening date of 1 April 2017 by €229 million (€286 million at 31 March 2018).
- Moreover, the new standard provides more restrictive guidance on the transaction price estimates and especially on variable consideration and contract modifications. The estimation of the transaction price should include variable amounts and/or contract modifications to the extent that it is highly probable that no significant reversal in the amount of cumulative revenues recognized will occur when the uncertainty associated with these elements is subsequently resolved. The introduction of this constraint on the price escalation estimates on the one hand, as well as the incorporation of amendments under negotiation on the other hand, has led to recognize these effects on contract value at a later point in time, when they become enforceable. This had thus the effect of deferring revenue and margin and contributed to reduce equity at restatement date by approximatively €96 million for price escalation estimate and €193 million for contract amendments at 1 April 2017 (respectively €90 million and €221 million at 31 March 2018).

- No significant financial component has been identified except for one contract, since timing of cash receipts and revenue recognition under cost to cost method do not differ substantially. This has led to no material effect on equity either at restatement date or at 31 March 2018.

The impact of applying IFRS 15 resulted in a reduction of equity of, respectively €518 million at 1 April 2017 and €597 million at 31 March 2018.

These changes have an impact on the timing of revenues and margins and resulted in a reduction of equity at the date of restatement as well as at 31 March 2018, but the new standard does not affect the cash position of the contracts and has no impact on the economy of the contracts at completion.

Final impacts on balance sheet presentation

Besides, changes to the balance sheet presentation occurred due to IFRS 15 implementation.

The main changes in the balance sheet presentation can be summarized in the following way:

- With respect to the "construction contracts" and long term service agreements, the captions "construction contracts in progress, assets" and "construction contracts in progress, liabilities" disappeared. The advance payments received from customers were presented exclusively in the aggregate "construction contracts in progress, liabilities".
- New aggregates called "contract assets" and "contract liabilities" are disclosed for "construction contracts" and long term service agreements in progress and are determined on a contract-by-contract basis. The aggregate "contract assets" corresponds to the unbilled part of revenues recognized to date net of the advance payments received from customers. Unbilled part of revenue corresponds to revenue recognized to date in excess of progress billings.

  On the contrary, when progress billings are in excess of revenue recognized to date, the net amount is accounted for as deferred income and aggregated with the related advance payments received from customers under the caption "contract liabilities".
- In accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", the present obligations under contracts remain measured using the same valuation principles. Nevertheless, they are presented as current provisions and no longer in "construction contracts in progress" (as per former IAS 11 application).
- In addition, for costs incurred in fulfilling a contract with a customer that are within the scope of other standards, namely IAS 2 "Inventories", IAS 16 "Property, Plant and Equipment", IAS 38 "Intangible assets", these costs are accounted for in accordance with those other standards that apply primarily. For instance, product development costs falling under the scope of IAS 38 were reclassified from project to research and development costs.

  For other costs incurred in fulfilling a contract that are not within the scope of the standards stated above, those costs should be accounted for under a new caption called "costs to fulfil a contract" when eligible for capitalization. Therefore, related amounts in "construction contracts in progress" have been reclassified accordingly.

Other topics

- Under IFRS 15, quantitative and qualitative disclosures are requested on transaction price allocated to the remaining performance obligations, which corresponds to Alstom's definition of order backlog as reported in Management Report.
- Order backlog represents sales not yet recognized from orders already received. Order backlog at the end of a financial year is computed as follows:
  - order backlog at the beginning of the year;
  - plus new orders received during the year;
  - less sales recognized during the year;
  - plus/less adjustments on transaction price (including cancellations of orders, changes in scope of consolidation, contract price adjustments, foreign currency translation effects…).

The change in percentage of completion method from milestones to cost to cost, as well as the deferral of revenue at a later point in time for price escalation estimates and contract amendments, resulted in a new valuation of the order backlog to approximatively €37.1 billion at 1 April 2017 and €35.2 billion at 31 March 2018.

2.2.2. IFRS 9 "Financial instruments"

IFRS 9 "Financial Instruments" introduces a single approach to classification and measurement of financial instruments based on the characteristics of the financial instruments and on the Group's management intention. The standard includes also a revised guidance on impairment on financial assets as well as new general hedge accounting requirements.

This new standard has become effective for Alstom for fiscal year starting 1 April 2018. The review and analysis of this standard has not concluded to any material impact on its consolidated financial statements. IFRS 9 new accounting treatments have been applied retrospectively, with disclosure of comparative information for FY 2017/18.

All hedging relationships existing under IAS 39 are maintained under IFRS 9.

In addition, two options have been elected:

- In the course of its operations, the Group is exposed to currency risk arising from operational transactions in foreign currency: future cash in but also future cash out transactions. Thus, the Group puts in place a significant volume of hedges at inception of the contract to cover these exposures applying fair value hedge accounting. As the hedged item is a Firm Commitment, Group retained the "time period related approach", allowing to recognize cost of hedging impacts over hedge maturity on a linear basis. When Alstom designates only foreign exchange spot changes as hedged item, the cost of hedging approach will be retained, allowing the Group to recognize the change in fair value of forward points in Other Comprehensive Income (rather than in income statement under IAS 39). This option has no significant impact on March 2018 restated equity, but a reclassification was performed between Profit and Loss and Other Comprehensive Income with an impact of €(11) million on the financial result of fiscal year 2017/18 restated.

- For the portfolio of non-consolidated investments (previously designated as available for sale financial assets), Alstom has elected to record the change in fair value on these investments through Other Comprehensive Income with no subsequent recycling in income statement. This option has no impact on March 2018 restated equity.

Finally, the new standard modifies the recognition of the credit risk related to financial assets and especially trade receivables, moving from the incurred loss approach to an expected loss approach.

Nevertheless, from the Group perspective, the application of IFRS 9 impairment requirements resulted in no material impact over the impairment already accounted for under IAS 39.

2.2.3. Restated financial statements

The following tables present the impact of changes related to the application of the new accounting standards, IFRS 15 and IFRS 9 as described above:

Income statement

At 31 March 2018

(in € million)	Year ended 31 March 2018 published	Restatement IFRS 9 & 15	Year ended 31 March 2018 restated
Sales	**7,951**	**(605)**	**7,346**
Cost of sales	(6,686)	559	(6,127)
Research and development expenses	(188)	(64)	(252)
Selling expenses	(204)	(7)	(211)
Administrative expenses	(359)	-	(359)
Other income/(expense)	(133)	-	(133)
Earnings Before Interests and Taxes	**381**	**(117)**	**264**
Financial income	7	3	10
Financial expense	(98)	(11)	(109)
Pre-tax income	**290**	**(125)**	**165**
Income Tax Charge	(73)	14	(59)
Share in net income of equity-accounted investments	216	-	216
Net profit from continuing operations	**433**	**(111)**	**322**
Net profit from discontinued operations	52	-	52
NET PROFIT	**485**	**(111)**	**374**
Net profit attributable to equity holders of the parent	475	(110)	365
Net profit attributable to non controlling interests	10	(1)	9
Net profit from continuing operations attributable to:			
• Equity holders of the parent	423	(110)	313
• Non controlling interests	10	(1)	9
Net profit from discontinued operations attributable to:			
• Equity holders of the parent	52	-	52
• Non controlling interests	-	-	-

Balance sheet

At 31 March 2017

Assets

(in € million)	At 31 March 2017 published	Restatement IFRS 9 & 15	At 31 March 2017 restated
Goodwill	1,513	-	1,513
Intangible assets	395	3	398
Property, plant and equipment	749	33	782
Investments in joint-venture and associates	2,755	-	2,755
Non consolidated investments	55	-	55
Other non-current assets	316	-	316
Deferred Tax	189	69	258
Total non-current assets	**5,972**	**105**	**6,077**
Inventories	916	487	1,403
Construction contracts in progress, assets	2,834	(2,834)	-
Contract assets	-	1,152	1,152
Trade receivables	1,693	249	1,942
Other current operating assets	1,365	27	1,392
Other current financial assets	8	-	8
Cash and cash equivalents	1,563	-	1,563
Total current assets	**8,379**	**(919)**	**7,460**
Assets held for sale	10	-	10
TOTAL ASSETS	**14,361**	**(814)**	**13,547**

Equity and liabilities

(in € million)	At 31 March 2017 published	Restatement IFRS 9 & 15	At 31 March 2017 restated
Equity attributable to the equity holders of the parent	3,661	(511)	3,150
Non controlling interests	52	(7)	45
Total equity(*)	**3,713**	**(518)**	**3,195**
Non current provisions	614	-	614
Accrued pensions and other employee benefits	526	-	526
Non-current borrowings	1,362	-	1,362
Non-current obligations under finance leases	233	-	233
Deferred Tax	23	-	23
Total non-current liabilities	**2,758**	**-**	**2,758**
Current provisions	250	582	832
Current borrowings	416	-	416
Current obligations under finance leases	28	-	28
Construction contract in progress, liabilities	4,486	(4,486)	-
Contract liabilities	-	3,320	3,320
Trade payables	1,029	-	1,029
Other current liabilities	1,674	288	1,962
Total current liabilities	**7,883**	**(296)**	**7,587**
Liabilities related to assets held for sale	7	-	7
TOTAL EQUITY AND LIABILITIES	**14,361**	**(814)**	**13,547**

(*) €(469) million as published in half year 30 September 2018 consolidated accounts.

At 31 March 2018

Assets

(in € million)	At 31 March 2018 published	Restatement IFRS 9 & 15	At 31 March 2018 restated
Goodwill	1,422	-	1,422
Intangible assets	410	6	416
Property, plant and equipment	831	23	854
Investments in joint-venture and associates	533	-	533
Non consolidated investments	58	-	58
Other non-current assets	277	-	277
Deferred Tax	224	81	305
Total non-current assets	**3,755**	**110**	**3,865**
Inventories	1,146	294	1,440
Construction contracts in progress, assets	2,675	(2,675)	-
Contract assets	-	1,212	1,212
Trade receivables	1,589	183	1,772
Other current operating assets	1,328	-	1,328
Other current financial assets	8	-	8
Cash and cash equivalents	1,231	-	1,231
Total current assets	**7,977**	**(986)**	**6,991**
Assets held for sale	2,390	-	2,390
TOTAL ASSETS	**14,122**	**(876)**	**13,246**

Equity and liabilities

(in € million)	At 31 March 2018 published	Restatement IFRS 9 & 15	At 31 March 2018 restated
Equity attributable to the equity holders of the parent	3,966	(590)	3,376
Non controlling interests	61	(7)	54
Total equity(*)	**4,027**	**(597)**	**3,430**
Non current provisions	530	-	530
Accrued pensions and other employee benefits	468	-	468
Non-current borrowings	952	-	952
Non-current obligations under finance leases	212	-	212
Deferred Tax	22	-	22
Total non-current liabilities	**2,184**	**-**	**2,184**
Current provisions	313	513	826
Current borrowings	525	-	525
Current obligations under finance leases	18	-	18
Construction contract in progress, Liabilities	4,147	(4,147)	-
Contract liabilities	-	3,157	3,157
Trade payables	1,346	-	1,346
Other current liabilities	1,555	198	1,753
Total current liabilities	**7,904**	**(279)**	**7,625**
Liabilities related to assets held for sale	7	-	7
TOTAL EQUITY AND LIABILITIES	**14,122**	**(876)**	**13,246**

(*) €(548) million as published in half year 30 September 2018 consolidated accounts.

Cash-Flow Statement

At 31 March 2018

(in € million)	Year ended 31 March 2018 published	Restatement IFRS 9 & 15	Year ended 31 March 2018 restated
Net profit	**485**	**(111)**	**374**
Depreciation, amortisation and impairment	161	10	171
Expense arising from share-based payments	18	-	18
Cost of net financial debt and costs of foreign exchange hedging, net of interest paid and received (a), and other change in provisions	5	12	17
Post-employment and other long-term defined employee benefits	19	-	19
Net (gains)/losses on disposal of assets	2	-	2
Share of net income (loss) of equity-accounted investments (net of dividends received)	(197)	(1)	(198)
Deferred taxes charged to income statement	(52)	(13)	(65)
Net cash provided by operating activities – before changes in working capital	**441**	**(103)**	**338**
Changes in working capital resulting from operating activities (b)	**(33)**	**113**	**80**
Net cash provided by/(used in) operating activities	**408**	**10**	**418**
Of which operating flows provided/(used) by discontinued operations	-	-	-
Proceeds from disposals of tangible and intangible assets	3	-	3
Capital expenditure (including capitalised R&D costs)	(283)	(10)	(293)
Increase/(decrease) in other non-current assets	21	-	21
Acquisitions of businesses, net of cash acquired	(4)	-	(4)
Disposals of businesses, net of cash sold	(80)	-	(80)
Net cash provided by/(used in) investing activities	**(343)**	**(10)**	**(353)**
Of which investing flows provided/(used) by discontinued operations	*(82)*	-	*(82)*
Capital increase/(decrease) including non controlling interests	47	-	47
Dividends paid including payments to non controlling interests	(60)	-	(60)
Issuances of bonds & notes	-	-	-
Repayments of bonds & notes issued	(272)	-	(272)
Changes in current and non-current borrowings	7	-	7
Changes in obligations under finance leases	(27)	-	(27)
Changes in other current financial assets and liabilities	-	-	-
Net cash provided by/(used in) financing activities	**(305)**	**-**	**(305)**
Of which financing flows provided/(used) by discontinued operations	-	-	-
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	**(240)**	**-**	**(240)**
Cash and cash equivalents at the beginning of the period	1,563	-	1,563
Net effect of exchange rate variations	(92)	-	(92)
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	**1,231**	**-**	**1,231**
(a) Net of interests paid & received	(66)	-	(66)
(b) Income tax paid	(93)	-	(93)

2.2.4. Other new standards and interpretations mandatorily applicable for financial periods beginning on 1 April 2018

Several amendments are applicable at 1 April 2018:

- Interpretation IFRIC 22 "Foreign Currency Transactions and Advance Consideration";
- Amendment to IFRS 2 "Clarifications of classification and measurement of share-based payment transactions";
- Annual Improvements to the 2014-2016 IFRS Cycle.

All these amendments effective at 1 April 2018 for Alstom have no material impact on the Group's consolidated financial statements.

2.3. New standards and interpretations not yet mandatorily applicable

New standards and interpretations endorsed by the European Union not yet mandatorily applicable

- IFRS 16 "Leases", applicable from 1 January 2019, introduces a single lessee accounting model for almost all leases contracts under which a lessee is required to recognize a right-of-use leased asset and a lease liability representing its obligation to make lease payments.

  For its transition method, the Group has elected to apply the simplified approach. Prior-period comparative data will therefore not be restated at the transition date. The Group doesn't expect any significant impact on the opening equity. On initial application of IFRS 16 to operating leases, the right-of-use asset will generally be measured at the amount of the lease liability, using a discount rate per currency at the date of initial application, with the discount rate applied to each contract depending on the term and the currency of this contract.

  The Group has decided to apply the exemptions related to short-term leases and to leases of low value assets as soon as the new standard is effective.

  The Group's operating leases mainly relate to real estate assets, company cars and industrial equipment. The company has finalized the implementation of software to compute IFRS 16 calculations.

  IFRS 16 preliminary debt computation was performed based on the detailed inventory and on the review of the operating lease commitments, which are presented in Note 34. Based on a first estimate, the lease financial liability would approximatively be comprised between €0.4 billion and €0.5 billion for the next fiscal year 2019/20.
- IFRIC 23 "Uncertainty over income tax treatments". The interpretation will be applicable for annual periods beginning after 1 January 2019.
- Amendments to IAS 28: Long-term interests in associates and joint ventures. The amendment will be applicable for annual periods beginning after 1 January 2019.
- Amendments to IAS 19: Plan Amendment, curtailment or settlement. The amendments will be applicable for annual periods beginning after 1 January 2019.
- Annual Improvements to the 2015-2017 IFRS Cycle. The amendments will be applicable for annual periods beginning after 1 January 2019.

The potential impacts of these last amendments are currently being analyzed.

New standards and interpretations not yet approved by the European Union

- Amendments to References to the Conceptual Framework in IFRS Standards. The amendments will be applicable for annual periods beginning after 1 January 2020.
- Amendment to IFRS 3 "Business Combinations". The amendment will be applicable for annual periods beginning after 1 January 2020.
- Amendments to IAS 1 and IAS 8: Definition of material. The amendments will be applicable for annual periods beginning after 1 January 2020.

The potential impacts of these new pronouncements are currently being analyzed.

2.4. Use of estimates

The preparation of the consolidated financial statements in conformity with IFRS requires management to make various estimates and to use assumptions regarded as realistic and reasonable. These estimates or assumptions could affect the value of the Group's assets, liabilities, equity, net income and contingent assets and liabilities at the closing date. Management reviews estimates on an on-going basis using information currently available. Actual results may differ from those estimates, due to changes in facts and circumstances.

The accounting policies most affected by the use of estimates are the following:

Revenue and margin recognition on construction and long-term service contracts and related provisions

The Group recognises revenue and gross margin on most construction and long-term service contracts fulfilling the requirements for revenue recognition over time, using the percentage of completion method based on cost to cost: revenue is in that case recognized based on the percentage of costs incurred to date divided by the total costs at completion. Moreover, when a project review indicates a negative gross margin, the estimated loss at completion is immediately recognised.

Recognised revenue and margin are based on estimates of total expected contract revenue and cost, which are subject to revisions as the contract progresses. Total expected revenue and cost on a contract reflect management's current best estimate of the probable future benefits and obligations associated with the contract.

Assumptions to calculate present and future obligations take into account current technology as well as the commercial and contractual positions, assessed on a contract-by-contract basis (one performance obligation corresponding in most cases to one contract). The introduction of technologically-advanced products exposes the Group to risks of product failure significantly beyond the terms of standard contractual warranties applicable to suppliers of equipment only.

Obligations on contracts may result in penalties due to late completion of contractual milestones, or unanticipated costs due to project modifications, suppliers or subcontractors' failure to perform or delays caused by unexpected conditions or events. Warranty obligations are affected by product failure rates, material usage and service delivery costs incurred in correcting failures.

Although the Group makes individual assessments on contracts on a regular basis, there is a risk that actual costs related to those obligations may exceed initial estimates. Estimates of contract costs and revenues at completion in case of contracts in progress and estimates of provisions in case of completed contracts may then have to be re-assessed.

Estimate of provisions relating to litigations

The Group identifies and analyses on a regular basis current litigations and measures, when necessary, provisions on the basis of its best estimate of the expenditure required to settle the obligation at the balance sheet date. These estimates take into account information available and different possible outcomes.

Valuation of deferred tax assets

Management judgment is required to determine the extent to which deferred tax assets can be recognised. Future sources of taxable income and the effects of the Group global income tax strategies are taken into account in making this determination. This assessment is conducted through a detailed review of deferred tax assets by jurisdiction and takes into account past, current and future performance deriving from the existing contracts in the order book, the budget and the three-year plan, and the length of carry back, carry forwards and expiry periods of net operating losses.

Measurement of post-employment and other long-term defined employee benefits

The measurement of obligations and assets related to defined benefit plans makes it necessary to use several statistical and other factors that attempt to anticipate future events. These factors include assumptions about the discount rate, the rate of future compensation increases as well as withdrawal and mortality rates. If actuarial assumptions materially differ from actual results, it could result in a significant change in the employee benefit expense recognised in the income statement, actuarial gains and losses recognised in other comprehensive income and prepaid and accrued benefits.

Valuation of assets

The discounted cash flow model used to determine the recoverable value of the group of cash generating unit to which goodwill is allocated includes a number of inputs including estimates of future cash flows, discount rates and other variables, and then requires significant judgment.

Impairment tests performed on intangible and tangible assets are also based on assumptions. Future adverse changes in market conditions or poor operating results from underlying assets could result in an inability to recover their current carrying value.

Inventories

Inventories, including work in progress, are measured at the lower of cost and net realisable value. Write-down of inventories are calculated based on an analysis of foreseeable changes in demand, technology or market conditions in order to determine obsolete or excess inventories. If actual market conditions are less favourable than those projected, additional inventory write-downs may be required.

2.5. Significant accounting policies

2.5.1. Consolidation methods

Subsidiaries

Subsidiaries are entities over which the Group exercises control.

The Group controls an entity when (i) it has power over this entity, (ii) is exposed to or has rights to variable returns from its involvement with that entity, and (iii) has the ability to use its power over that entity to affect the amount of those returns.

Subsidiaries are fully consolidated in the consolidated financial statements from the date on which control is transferred to the Group and deconsolidated from the date that control ceases.

Inter-company balances and transactions are eliminated.

Non-controlling interests in the net assets of consolidated subsidiaries are identified in a specific line of the equity named "Non-controlling interests". Non-controlling interests consist of the amount of those interests at the date of the original business combination and their share of changes in equity since the date of the combination. In the absence of explicit agreements to the contrary, subsidiaries' losses are systematically allocated between equity holders of the parent and non-controlling interests based on their respective ownership interests even if this results in the non-controlling interests having a deficit balance.

Transactions with non-controlling interests that do not result in loss of control are considered as transactions between shareholders and accounted for in equity.

Joint arrangements

Joint arrangements are the entities over which the Group has joint control.

The Group jointly controls an entity when decisions relating to the relevant activities of that entity require unanimous consent of the Group and the other parties who share control.

A joint arrangement is classified either as a joint operation or as a joint venture. The classification is based on the rights and obligations of the parties to the arrangement, taking into consideration the structure and legal form of the arrangement, the terms agreed by the parties in the contractual arrangement and, when relevant, other facts and circumstances (see also Note 13).

Joint operations

Joint operations are entities in which the Group has rights to the assets and obligations for the liabilities.

The Group recognises the assets, liabilities, revenues and expenses related to its interests in the joint operation. A joint operation may be conducted under a separate vehicle or not.

Joint ventures

Joint ventures are entities in which the Group only has rights to the net assets.

Interests in joint ventures are consolidated under the equity method as described in the paragraph below.

Investments in associates

Associates are entities over which the Group has significant influence. In other words, the Group has the possibility to participate in decisions related to these entities' financial and operating policies without having control (exclusive or joint).

Generally, the existence of significant influence is consistent with a level of voting right held by the Group between 20% and 50%.

If need be, accounting policies of associates will be standardized with the Group accounting policies.

Interests in associates are consolidated under the equity method in the consolidated financial statements as described in the paragraph below.

Equity method

The Group accounts for its interests in associates and joint ventures under the equity method. Wherever necessary, accounting policies of associates and joint ventures have been changed to ensure consistency with the IFRS framework.

Under the equity method, investments in associates are carried in the consolidated balance sheet at cost, including any goodwill arising and transaction costs. Earn-outs are initially recorded at fair value and adjustments recorded through cost of investment when their payments are probable and can be measured with sufficient reliability.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of the associate or joint venture recognized at the date of acquisition is recognized as goodwill. The goodwill is included within the carrying amount of the investment and is assessed for impairment as part of the investment.

In case of an associate or joint venture purchased by stage, the Group uses the cost method to account for changes from non-consolidated investments category to "Investments in joint ventures and associates".

Associates and joint ventures are presented in the specific line "Investments in joint ventures and associates" of the balance sheet, and the Group's share of its associates' profits or losses is recognized in the line "Share of net income of equity-accounted investments" of the income statement whereas its share of post-acquisition movements in reserves is recognized in reserves.

Losses of an associate or joint venture in excess of the Group's interest in that associate or joint venture are not recognized, except if the Group has a legal or implicit obligation.

The impairment expense of investments in associates and joint ventures is recorded in the line "Share of net income of equity-accounted investments" of the income statement.

According to IAS 28, if the financial statements of an associate used in applying the equity method are prepared as of a different date from that of the investor, adjustments shall be made for the effects of significant transactions or events that occur between that date and the date of the investor's financial statements. In any case, the difference between the end of the reporting period of the associate and that of the investor shall be no more than three months.

According to IFRS 9, liquidity rights related to Energy alliances are booked at fair market value without external model based on observable factors, taking into account internal assumptions. These put options are considered and accounted for by the Group as share derivatives under cash flow hedge. This liquidity rights are accounted for as part as the joint venture caption on the line "investments in joint-ventures and associates".

2.5.2. Assets held for sale

Non-current assets held for sale are presented on a separate line of the balance sheet when (i) the Group has made a decision to sell the asset(s) concerned and (ii) the sale is considered to be highly probable. These assets are measured at the lower of net carrying amount and fair value less costs to sell.

When the Group is committed to a sale process leading to the loss of control of a subsidiary, all assets and liabilities of that subsidiary are reclassified as held for sale, irrespective of whether the Group retains a residual interest in the entity after sale.

2.5.3. Cash flow hedge

When cash flow hedge applies, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized in other comprehensive income.

If a hedge of a forecast transaction subsequently resulting in the recognition of a non-financial asset qualifies for cash flow hedge, then the entity shall reclassify the associated gains and losses that were recognized in other comprehensive income to profit or loss in the same period or periods during which the asset acquired or liability assumed affects profit or loss.

2.5.4. Translation of financial statements denominated in currencies other than euro

Functional currency is the currency of the primary economic environment in which a reporting entity operates, which in most cases, corresponds to the local currency. However, some reporting entities may have a functional currency different from local currency when that other currency is used for the entity's main transactions and faithfully reflects its economic environment.

Assets and liabilities of entities whose functional currency is other than the euro are translated into euro at closing exchange rate at the end of each reporting period while their income and cash flow statements are translated at the average exchange rate for the period.

The currency translation adjustments resulting from the use of different currency rates for opening balance sheet positions, transactions of the period and closing balance sheet positions are recorded in other comprehensive income. Translation adjustments are transferred to the consolidated income statement at the time of the disposal of the related entity.

Goodwill and fair value adjustments arising from the acquisition of entities whose functional currency is not euro are designated as assets and liabilities of those entities and therefore denominated in their functional currencies and translated at the closing rate at the end of each reporting period.

2.5.5. Business combinations

Business combinations completed between the 1 January 2004 and the 31 March 2010 have been recognised applying the provisions of the previous version of IFRS 3.

Business combinations completed from the 1 April 2010 onwards are recognised in accordance with IFRS 3R.

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the sum of fair values of the assets transferred and the liabilities incurred by the acquirer at the acquisition date and the equity-interest issued by the acquirer. The consideration transferred includes contingent consideration, measured and recognized at fair value at the acquisition date.

For each business combination, any non-controlling interest in the acquiree may be measured:

- either at the acquisition-date fair value, leading to the recognition of the non-controlling interest's share of goodwill (full goodwill method) or;
- either at the non-controlling interest's proportionate share of the acquiree's identifiable net assets, resulting in recognition of only the share of goodwill attributable to equity holders of the parent (partial goodwill method).

Acquisition-related costs are recorded as an expense as incurred.

Goodwill arising from a business combination is measured as the difference between:

- the fair value of the consideration transferred for an acquiree plus the amount of any non-controlling interests of the acquiree and;
- the net fair value of the identifiable assets acquired and liabilities assumed at the acquisition date.

Initial estimates of consideration transferred and fair values of assets acquired and liabilities assumed are finalised within twelve months after the date of acquisition and any adjustments are accounted for as retroactive adjustments to goodwill. Beyond this twelve-month period, any adjustment is directly recognised in the income statement.

Earn-outs are initially recorded at fair value and adjustments made beyond the twelve-month measurement period following the acquisition are systematically recognised through profit or loss.

In case of a step-acquisition that leads to the Group acquiring control of the acquiree, the equity interest previously held by the Group is remeasured at its acquisition-date fair value and any resulting gain or loss is recognised in profit or loss.

2.5.6. Sales and costs generated by operating activities

Measurement of sales and costs

The amount of revenue arising from a transaction is usually determined by the contractual agreement with the customer. IFRS 15 provides more restrictive guidance on the transaction price estimates and especially on variable consideration and contract modifications.

The estimation of the transaction price should include variable amounts and/or contract modifications to the extent that it is highly probable that no significant reversal in the amount of cumulative revenues recognized will occur when the uncertainty associated with these elements is subsequently resolved. The introduction of this constraint on the price escalation estimate on the one hand, as well as the incorporation of amendments under negotiation on the other hand, leads to recognize these effects on contract value at a later point in time, when they become enforceable.

In the case of "construction contracts" claims are considered in the determination of contract revenue only when it is highly probable that the claim will result in additional revenue and the amount can be reliably estimated.

Penalties are first taken into account as an increase of contract costs and in a second step as a reduction of contract revenue as soon as they are accepted.

Finally, a significant financial component should be introduced positively or negatively on revenue, when timing of cash receipts and revenue recognition under cost to cost method differ substantially.

Production costs include direct costs (such as material, labour and warranty costs) and indirect costs. Warranty costs are estimated on the basis of contractual agreement, available statistical data and weighting of all possible outcomes against their associated probabilities. Warranty periods may extend up to five years. Selling and administrative expenses are excluded from production costs.

Recognition of sales and costs

Revenue on sale of manufactured products is recognised according to IFRS 15 at a point in time, *i.e.* essentially when the significant risks and rewards of ownership are transferred to the customer, which generally occurs on delivery. Revenue on short-term service contracts is also accounted for at a point in time and recognised on performance of the related service. All production costs incurred or to be incurred in respect of the sale are charged to cost of sales at the date of recognition of sales.

Revenue on most of "construction contracts" and long-term service agreements is recognised according to IFRS 15 based on the percentage of completion method as they fulfill the requirements for revenue recognition over time: the stage of completion is assessed on the cost to cost method. Revenue is recognised for each performance obligation based on the percentage of costs incurred to date divided by the total costs expected at completion. Consequently, the revenue for the period is the excess of revenue measured according to the percentage of completion over the revenue recognised in prior periods.

Cost of sales on "construction contracts" and long-term service agreements is computed on the same basis. The cost of sales for the period is the excess of cost measured according to the percentage of completion over the cost of sales recognised in prior periods. As a consequence, adjustments to contract estimates resulting from work conditions and performance are recognised in cost of sales as soon as they occur, prorated to the stage of completion.

When the outcome of a contract cannot be estimated reliably, but the Group expects to recover the costs incurred in satisfying the contract, revenue is recognised only to the extent of the costs incurred until such time that the outcome of the contract can be reasonably measured.

Costs incurred that are attributable to significant inefficiencies in the Group's performance and that were not reflected in the price of the contract when the contract was negotiated with the customer should not be included in the percentage of completion formula and expensed when incurred.

When it is probable that contract costs at completion will exceed total contract revenue, the expected loss at completion is recognised immediately as an expense. Bid costs are recorded as selling expenses when incurred.

2.5.7. Impairment of goodwill, tangible and intangible assets

Assets that have an indefinite useful life – mainly goodwill and intangible assets not yet ready to use – are not amortized but tested for impairment at least annually or when there are indicators that they may be impaired. Other intangible and tangible assets subject to amortization are tested for impairment only if there are indicators of impairment.

The impairment test methodology is based on a comparison between the recoverable amount of an asset and its net carrying value. If the recoverable amount of an asset or a cash-generating unit (CGU) is estimated to be less than its carrying amount, the carrying amount is reduced to its recoverable amount and the impairment loss is recognised immediately in the income statement. In the case of goodwill allocated to a group of CGUs, the impairment loss is allocated first to reduce the carrying amount of goodwill and then to the other assets on a pro-rata basis of the carrying amount of each asset.

A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other groups of assets. If an asset does not generate cash inflows that are largely independent of other assets or groups of assets, the recoverable amount is determined for a cash-generating unit.

The recoverable amount is the higher of fair value less costs to sell and value in use. The value in use is elected as representative of the recoverable value. The valuation performed is based upon the Group's internal three-year business plan. Cash flows beyond this period are estimated using a perpetual long-term growth rate for the subsequent years. The recoverable amount is the sum of the discounted cash flows and the discounted terminal residual value. Discount rates are determined using the weighted-average cost of capital.

Impairment losses recognised in respect of goodwill cannot be reversed.

The impairment losses recognized in respect of other assets than goodwill may be reversed in a later period and recognized immediately in the income statement. The carrying amount is increased to the revised estimate of recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined, if no impairment loss had been recognized in prior years.

C. SEGMENT INFORMATION

NOTE 3 • SEGMENT INFORMATION

The Group organization, customer focused and also influenced by an increasing number of integrated services, leading to complete and turnkey solutions, leads to present financial information issued through various axes of analysis (regions, sites, contracts, functions and products). None of these axes allow for a comprehensive operating profit and loss measure nor segment assets and liabilities.

The segment information issued to the Alstom Executive Committee, identified as the Group's Chief Operating Decisions Maker (CODM) presents Key Performance Indicators at Group level. Strategic decisions and resource allocation are driven based on this reporting. The segment information has been adapted according to a similar method as those used to prepare the consolidated financial statements.

3.1. Sales by product

	Year ended	
(in € million)	**31 March 2019**	**31 March 2018(*)**
Rolling stock	3,448	3,150
Services	1,556	1,354
Systems	1,766	1,527
Signalling	1,302	1,315
TOTAL GROUP	**8,072**	**7,346**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

3.2. Key indicators by geographic area

Sales by country of destination

	Year ended	
(in € million)	**31 March 2019**	**31 March 2018(*)**
Europe	4,061	3,749
of which France	*1,218*	*1,040*
Americas	1,470	1,333
Asia/Pacific	921	900
Middle-East & Africa	1,620	1,364
TOTAL GROUP	**8,072**	**7,346**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Non-current assets by country of origin

Non-current assets by country of origin are defined as non-current assets other than those related to financial debt, to employee defined benefit plans and deferred tax assets (see section E).

	Year ended	
(in € million)	**31 March 2019**	31 March 2018(*)
Europe	1,647	1,349
of which France	*622*	*600*
Americas	149	119
Asia/Pacific	253	225
Middle East/Africa	189	119
Total excluding alliances and goodwill	**2,238**	**1,812**
Alliances	-	113
Goodwill	1,574	1,422
Alliances and goodwill	**1,574**	**1,535**
TOTAL GROUP	**3,812**	**3,347**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

3.3. Orders Backlog

Product breakdown

(in € million)	**At 31 March 2019**	At 31 March 2018
Rolling stock	20,672	17,971
Services	12,779	10,660
Systems	3,311	3,355
Signalling	3,719	3,253
TOTAL GROUP	**40,481**	**35,239**

Geographic breakdown

(in € million)	**At 31 March 2019**	At 31 March 2018
Europe	18,212	14,453
of which France	*6,802*	*4,016*
Americas	6,297	5,212
Asia/Pacific	5,752	5,017
Middle-East & Africa	10,220	10,557
TOTAL GROUP	**40,481**	**35,239**

The March 2019 backlog contribution to the next three fiscal years revenue is expected to land within a €16.5 billion-€17.5 billion range.

3.4. Information about major customers

No external customer represents individually 10% or more of the Group's consolidated sales.

D. OTHER INCOME STATEMENT

NOTE 4 • RESEARCH AND DEVELOPMENT EXPENDITURE

Research expenditure is expensed as incurred. Development costs are expensed as incurred unless the project they relate to meets the criteria for capitalisation (see Note 11). Research and Development costs cover also product sustainability costs booked when incurred.

	Year ended	
(in € million)	**31 March 2019**	**31 March 2018(*)**
Research and development gross cost	(380)	(345)
Funding received	75	58
Research and development spending, net	**(305)**	**(287)**
Development costs capitalised during the period	68	90
Amortisation expense of capitalised development costs	(54)	(55)
RESEARCH AND DEVELOPMENT EXPENSES	**(291)**	**(252)**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

During the fiscal year ended 31 March 2019, research and development expenses amount to €291 million, notably related to the following projects:

- the "Very high-speed train" Avelia™, for which SNCF ordered 100 trains in July 2018;
- the zero-emission train Coradia iLint™, with a commercial passenger service starting in September 2018 in Germany;
- the 100% electric bus, Aptis™: a dedicated entity was created in June 2018 for production and selling and for which a first order has been awarded in March 2019 by Strasbourg for 12 bus;
- the extension of Citadis™ light rail vehicle range with steel case, for which the first order was notified by Frankfurt in June 2018;
- the new multimodal traffic solution Mastria™ which has been communicated widely on Innotrans of September 2018;
- the official launch of Station One™ the new digital platform of ALSTOM in March 2019.

NOTE 5 • SELLING AND ADMINISTRATIVE EXPENSES

Selling Costs are expenses incurred in the marketing and selling of a product or a service. Selling Costs typically include expenditure in the following departments: Market & Strategy, Sales & Business Development and Communication as well as the direct labour costs of operational population such as engineering working on the tendering phase.

Administrative Costs are structure and operational support costs. Administrative Costs include mostly expenditure of Headquarter and site functions having a transverse role, in particular Finance, Human Resources, Legal and Information Systems Departments.

Selling and administrative expenses are recognized in charges as incurred.

Effective control of the cost structure has contributed to constraint selling and administrative expenses in an increasing environment.

NOTE 6 • OTHER INCOME AND OTHER EXPENSES

Other income and expenses are representative of items which are inherently difficult to predict due to their unusual, irregular or non-recurring nature.

Other income may include capital gains on disposal of investments or activities and capital gains on disposal of tangible and intangible assets arising from activities disposed or facing restructuring plans, any income associated to past disposals as well as a portion of post-employment and other long-term defined employee benefits (plan amendments, impact of curtailments and settlements and actuarial gains on long-term benefits other than post-employment benefits).

Other expenses include capital losses on disposal of investments or activities and capital losses on disposal of tangible and intangible assets relating to activities facing restructuring plans as well as any costs associated to past disposals, restructuring costs, rationalisation costs, significant impairment losses on assets, costs incurred to realize business combinations and amortisation expense of assets exclusively acquired in the context of business combinations (technology, customer relationship, margin in backlog, margin on inventory), litigation costs that have arisen outside the ordinary course of business and a portion of post-employment and other long-term defined benefit expense.

	Year ended	
(in € million)	**31 March 2019**	**31 March 2018**
Capital gains/(losses) on disposal of business	60	3
Restructuring and rationalisation costs	(65)	(47)
Impairment loss and other	(158)	(89)
OTHER INCOME/(EXPENSE)	**(163)**	**(133)**

As at 31 March 2019, capital gains on disposal of assets mainly reflect the impact of:

- the change of consolidation method from equity to full consolidation of EKZ for €33 million (see Note 1.2);
- the gain on TMH dilution for €25 million (see Note 13.2).

As of 31 March 2019, restructuring and rationalisation costs are mainly related to the adaptation of the means of production in certain countries, notably in UK, Germany and Brazil.

As of March 2019, Impairment loss and other represent mainly:

- €(15) million of amortisation of intangible assets and integration costs related to business combinations, such as GE signalling, SSL and Nomad;
- €(74) million of transaction costs related to Siemens combination project (see Note 1.1);
- €(69) million of net costs related to some legal proceedings (see Note 33) and other risks, arisen outside of the ordinary course of business.

NOTE 7 • FINANCIAL INCOME (EXPENSE)

Financial income and expense include:

- interest income representing the remuneration of the cash position;
- interest expense related to the financial debt (financial debt consists of bonds, other borrowings and lease-financing liabilities);
- other expenses paid to financial institutions for financing operations;
- cost of commercial and financial foreign exchange hedging (forward points);
- the financial component of the employee defined benefits expense (net interest income (expenses) and administration costs);
- the significant financing component under IFRS 15.

	Year ended	
(in € million)	**31 March 2019**	**31 March 2018(*)**
Interest income	3	7
Interest expense on borrowings	(55)	(64)
NET FINANCIAL INCOME/(EXPENSES) ON DEBT	**(52)**	**(57)**
Net cost of foreign exchange hedging	(25)	(27)
Net financial expense from employee defined benefit plans	(10)	(13)
Financial component on contracts	6	4
Other financial income/(expense)	(7)	(6)
NET FINANCIAL INCOME/(EXPENSES)	**(88)**	**(99)**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Net financial income/(expenses) on debt represent the cost of borrowings net of income from cash and cash equivalents. As at 31 March 2019, interest income totals €3 million, representing the remuneration of the Group's cash positions over the period, while interest expenses total €(55) million which correspond to cost of the external gross financial debt of the Group.

The net cost of foreign exchange hedging of €(25) million includes primarily the amortised cost of carry (forward points) of foreign exchange hedging implemented to hedge the exposures in foreign currency arising from commercial contracts and from hedging of intercompany financial positions.

The net financial expense from employee defined benefit plans of €(10) million represents the interest costs on obligations net of interest income from fund assets calculated using the same discount rate.

The financial component of €6 million is the recognition of financial revenue under IFRS 15 for a specific project.

Other net financial income/expenses of €(7) million include mainly bank fees and commitment fees paid on bonds and guarantees facilities, syndicated loans and revolving facilities.

NOTE 8 • TAXATION

The Group computes taxes in accordance with prevailing tax legislation in the countries where income is taxable.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Temporary differences arising between the carrying amount and the tax base of assets and liabilities, unused tax losses and unused tax credits are identified for each taxable entity (or each tax group when applicable). Corresponding deferred taxes are calculated at the enacted or substantively enacted tax rates that are expected to apply in the period when the asset is realised or the liability settled.

Deferred tax assets are recognised for all deductible temporary differences, unused tax losses and unused tax credits to the extent that it is probable that taxable profits will be available in the future against which the deductible differences, unused tax losses and unused tax credits can be utilised. The carrying amount of deferred tax assets is reviewed at each balance sheet date.

Deferred tax liabilities are recognised for all taxable temporary differences, with the exception of certain taxable temporary differences between the Group's share in the net assets in subsidiaries, joint arrangements and associates and their tax bases. The most common situation when such exception applies relates to undistributed profits of subsidiaries where distribution to the shareholders would trigger a tax liability: when the Group has determined that profits retained by the subsidiary will not be distributed in the foreseeable future, no deferred tax liability is recognised. Nevertheless, the exception is no more applicable to investments/subsidiaries being disposed since it becomes probable that the temporary difference will reverse in the foreseeable future with the sale of the subsidiaries. Therefore, in this specific case, deferred tax liabilities are recognised.

Deferred tax assets and liabilities are offset when both of the following conditions are met:

- the Group has a legally enforceable right to set off current tax assets against current tax liabilities, and
- the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority.

Deferred tax is charged or credited to net income, except when it relates to items charged or credited directly to other comprehensive income, in which case the deferred tax is classified in other comprehensive income.

8.1. Analysis of income tax charge

The following table summarises the components of income tax charge:

	Year ended	
(in € million)	**31 March 2019**	**31 March 2018(*)**
Current income tax charge	(60)	(125)
Deferred income tax charge	(10)	66
INCOME TAX CHARGE	**(70)**	**(59)**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The following table provides reconciliation from the income tax charge valued at the French statutory rate to the actual income tax charge, free of the temporary additional contributions:

	Year ended	
(in € million)	31 March 2019	31 March 2018(*)
Pre-tax income	**320**	**165**
Statutory income tax rate of the parent company	34.43%	34.43%
Expected tax charge	**(110)**	**(57)**
Impact of:		
• difference between normal tax rate applicable in France and normal tax rate in force in jurisdictions outside France	21	21
• changes in unrecognised deferred tax assets	22	32
• changes in tax rates	1	(6)
• additional tax expenses (withholding tax, CVAE in France and IRAP in Italy)	(31)	(41)
• permanent differences and other	27	(8)
INCOME TAX CHARGE	**(70)**	**(59)**
Effective tax rate	22%	36%

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

8.2. Deferred tax assets and liabilities

	Year ended	
(in € million)	31 March 2019	31 March 2018(*)
Deferred tax assets	299	305
Deferred tax liabilities	(21)	(22)
DEFERRED TAX ASSETS, NET	**278**	**283**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The following table summarises the significant components of the Group's net deferred tax assets:

(in € million)	At 31 March 2018(*)	Change in P&L	Change in equity	Translation adjustments and other changes	At 31 March 2019
Differences between carrying amount and tax basis of tangible and intangible assets	(2)	51	-	(10)	39
Accruals for employee benefit costs not yet deductible	16	2	5	-	23
Provisions and other accruals not yet deductible	95	(19)	-	(1)	75
Differences in recognition of margin on "construction contracts"	38	(39)	-	4	3
Tax loss carry forwards	145	(3)	-	2	144
Other	(9)	(2)	2	3	(6)
NET DEFERRED TAXES ASSET/(LIABILITY)	**283**	**(10)**	**7**	**(2)**	**278**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

(in € million)	31 March 2017(*)	Change in P&L	Change in equity	Translation adjustments and other changes	At 31 March 2018(*)
Differences between carrying amount and tax basis of tangible and intangible assets	(46)	47	-	(3)	(2)
Accruals for employee benefit costs not yet deductible	44	(17)	(8)	(3)	16
Provisions and other accruals not yet deductible	91	6	-	(2)	95
Differences in recognition of margin on "construction contracts"	15	6	-	17	38
Tax loss carry forwards	132	28	-	(15)	145
Other	(3)	(4)	-	(2)	(9)
NET DEFERRED TAXES ASSET/(LIABILITY)	**233**	**66**	**(8)**	**(8)**	**283**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The assessment of the ability to recover net deferred tax assets is based on an extrapolation of the latest three-year business plan and a strategy of five years maximum recovery of tax losses in each country, and leads to the recognition of a net deferred tax for €278 million at 31 March 2019, thanks to strong perspectives.

Unrecognised deferred tax assets amounts to €1,151 million at 31 March 2019 (€1,218 million at 31 March 2018). Most of these unrecognised deferred taxes are originated from tax losses carried forward (€750 million at 31 March 2019 and €647 million at 31 March 2018), out of which €598 million are not subject to expiry at 31 March 2019 (€511 million at 31 March 2018).

NOTE 9 • FINANCIAL STATEMENTS OF DISCONTINUED OPERATIONS

A discontinued operation is a component of an entity 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.

The results and cash flows of discontinued operations are presented on a separate line in the consolidated income statement and statement of cash flows for each period. The Group decides whether a discontinued operation represents a major line of business or geographical area of operations based on both qualitative criteria (technology, market, products, geographic region) and quantitative criteria (revenue, earnings, cash flows, assets). If the assets held by a discontinued operation are classified as held for sale they are measured at the lower of their carrying amount and fair value less costs to sell.

In compliance with IFRS 5, the Group applies the following specific measurements which impact the consolidated financial statements:

- discontinued operations (including non-current assets, current assets and the related liabilities classified as held for sale), as a whole, are measured at the lower of their carrying amount and fair value less costs to sell;
- consequently, goodwill, tangible and intangible assets are no longer reviewed for impairment;
- the exception of IAS 12 consisting in not recognising mechanical deferred taxes resulting from the difference between tax and consolidated values of the investments/subsidiaries being disposed is no more applicable since it becomes probable that the temporary difference will reverse in the foreseeable future with the sale of the subsidiaries. Thus, deferred tax liabilities are recognised with an income statement impact presented within the "Net profit from discontinued operations";
- amortisation on non-current assets classified as "assets held for sale" ceases at the date of IFRS 5 application;
- costs specifically incurred in the context of the deal are presented in the P&L within the "Net profit from discontinued operations";
- all intercompany balance-sheet and income statement positions are eliminated.

As at 31 March 2018, the Group decided to exercise its put options on Alliances. Then, the Alliances Renewable and Grid and the related options have been reclassified as Assets Held For Sale for an amount of €2.382 billion. As a consequence, following agreements signed between both parties, and particularly the one signed in May 2018, General Electric exercised, over the period 2018/19, its call option on the Nuclear Alliance.

On 2 October 2018, the Group has completed the transfer of all its interests in the three Energy Alliances (Renewables, Grid and Nuclear) to General Electric and received a total cash payment of €2.594 billion.

At 31 March 2019, Assets Held For Sale (and related liabilities) comprise delayed transferred assets for a net amount of €1 million: only one Chinese entity remains accounted for as Asset Held For Sale.

The line "Net profit from discontinued operations", recognized in the Consolidated Income Statement, includes the reassessment of liabilities related to the disposal of activities. Over the fiscal year ended 31 March 2019, Alstom recognized a profit for €248 million.

Alstom's Consolidated Statement of Cash Flows takes into account the cash flows of staggered and delayed transferred assets, until their effective transfer to General Electric, and costs directly related to the sale of Energy activities. Cash flows arising from discontinued operations for the fiscal year amount to €(16) million.

In the context of the General Electric transaction, the release of some conditional and unconditional parent company guarantees formerly issued, mainly by Alstom Holdings SA, to cover obligations of the former Energy affiliates amounts to €5.8 billion. The Group benefits from a general indemnification from General Electric in these matters.

NOTE 10 • EARNINGS PER SHARE

Basic earnings per share are computed by dividing the period net profit (loss) before the financial cost (net of tax) of bonds reimbursable with shares, by the weighted average number of outstanding shares during the period increased by the weighted average number of shares to be issued on reimbursement of bonds reimbursable with shares ("ORA").

Diluted earnings per share are computed by dividing the period net profit (loss) before the financial cost (net of tax) of bonds redeemable into shares, by the weighted average number of outstanding shares during the period adjusted in order to take into consideration all dilutive instruments (ORA, stock options, free shares).

10.1. Earnings

	Year ended	
(in € million)	**31 March 2019**	31 March 2018(*)
Net Profit attributable to equity holders of the parent:		
• From continuing operations	433	313
• From discontinued operations	248	52
EARNINGS ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT	**681**	**365**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

10.2. Number of shares

	Year ended	
(in number of shares)	**31 March 2019**	31 March 2018
Weighted average number of ordinary shares used to calculate basic earnings per share	**222,916,803**	**221,097,018**
Effect of dilutive instruments other than bonds reimbursable with shares:		
• Stock options and performance shares (LTI plan)(*)	2,069,903	1,900,901
WEIGHTED AVERAGE NUMBER OF ORDINARY SHARES USED TO CALCULATE DILUTED EARNINGS PER SHARES	**224,986,706**	**222,997,919**

(*) At 31 March 2018, the number of stock options and performance shares has been restated, without any significant impact on diluted earnings per share.

10.3. Earnings per share

	Year ended	
(in €)	**31 March 2019**	31 March 2018(*)
Basic earnings per share	3.05	1.65
Diluted earnings per share	3.03	1.64
Basic earnings per share from continuing operations	1.94	1.42
Diluted earnings per share from continuing operations	1.93	1.41
Basic earnings per share from discontinued operations	1.11	0.23
Diluted earnings per share from discontinued operations	1.10	0.23

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

E. NON-CURRENT ASSETS

NOTE 11 · GOODWILL AND INTANGIBLE ASSETS

Goodwill and intangible assets with indefinite useful lives are reviewed for impairment at least annually and whenever events or circumstances indicate that they might be impaired. Such events or circumstances are related to significant, unfavourable changes that are of a lasting nature and affect either the economic environment or the assumptions or the targets adopted as of the acquisition date. An impairment loss is recognised when the recoverable value of the assets tested becomes durably lower than their carrying value.

In the Group, goodwill cannot be allocated on a non-arbitrary basis to individual cash-generating units, but only to groups of cash-generating units. As a result, the lowest level within the entity at which the goodwill is monitored for internal management purposes comprises a number of cash-generating units to which the goodwill relates, but to which it cannot be allocated.

Due to the organization and the increasing number of integrated services leading to complete and global turnkey solutions, financial information issued is presented through various axes of analysis (regions, sites, contracts, functions, products). Free Cash Flow, basis of the impairment tests of goodwill is only relevant at Group level.

Therefore, goodwill acquired in case of business combinations is only monitored and ultimately tested at Group level.

11.1. Goodwill

(in € million)	At 31 March 2018	Acquisitions and adjustments on preliminary goodwill	Disposals	Translation adjustments and other changes	At 31 March 2019
GOODWILL	**1,422**	**107**	**-**	**45**	**1,574**
Of which:					
Gross value	1,422	107	-	45	1,574
Impairment	-	-	-	-	-

Movements between 31 March 2018 and 31 March 2019 mainly arose from the purchase price allocation of:

- EKZ for an amount of €97 million (see Note 1), as at 31 March 2019, the goodwill remains provisional;
- 21net for an amount of €10 million, as at 31 March 2019, the goodwill is final.

Goodwill impairment test

As of 31 March 2019, Alstom tested the value of goodwill applying valuation methods consistent with previous years. Alstom ensured that the recoverable amount exceeded its carrying value (including goodwill).

Presentation of key assumptions used for the determination of recoverable amounts

The value in use is determined as the discounted value of future cash flows by using cash flow projections for the next three years consistent with the Group's internal business plan, the extrapolation of the two following years and the most recent forecasts prepared by the Group.

The value in use is mainly driven by the terminal value which is particularly sensitive to changes in the assumptions on the discount rate after tax, the long-term growth rate and the terminal value Adjusted EBIT margin (corresponding to the ratio "aEBIT" over Sales).

The indicator "aEBIT" corresponds to Earning Before Interests and Tax adjusted with the following elements:

- net restructuring expenses (including rationalization costs);
- tangibles and intangibles impairment;
- capital gains or loss/revaluation on investments disposals or controls changes of an entity;
- and any other non-recurring items, such as some costs incurred to realize business combinations and amortisation of an asset exclusively valued in the context of business combination as well as litigation costs that have arisen outside the ordinary course of business.

The main assumptions used to assess the recoverable amounts of goodwill are as follows:

Net carrying amount of goodwill at 31 March 2019 *(in € million)*	1,574
Value elected as representative of the recoverable value	value in use
Number of years over which cash flow estimates are available	3 years
Extrapolation period of cash flow estimates	2 years
Long-term growth rate at 31 March 2019	**1.5%**
Long-term growth rate at 31 March 2018	1.5%
After tax discount rate at 31 March 2019(*)	**8.5%**
After tax discount rate at 31 March 2018(*)	8.5%

(*) The application of pre-tax discount rates to pre-tax cash flows leads to the same valuation of Cash Generating Units.

Discount rate is based on weighted average cost of capital (WACC) which is calculated for the Group based on a risk-free rate and a market risk premium. The current market assessment of the risks specific to Group activity is reflected by taking into account specific peer group information on industry beta, leverage and cost of debt. The parameters for calculating the discount rate are based on external sources of information.

Sensitivity of the values in use to key assumptions can be presented as follows:

(in € million)		
aEBIT Margin	-25 bp	+25 bp
	(167)	167
After tax discount rate	-25 bp	+25 bp
	272	(253)
Long-term growth rate	-10 bp	+10 bp
	(82)	85

As of 31 March 2019, the recoverable amount exceeded its carrying value and the sensitivity of the values in use to key assumptions supports the Group's opinion that goodwill is not impaired.

11.2. Intangible assets

Intangible assets include acquired intangible assets (such as technology and licensing agreements) and internally generated intangible assets (mainly development costs).

Acquired intangible assets

Acquired intangible assets are initially measured at cost and amortised on a straight-line basis over their estimated useful lives. Useful lives can extend to twenty years due to the long-term nature of the underlying contracts and activities. The amortisation expense of assets acquired through ordinary transactions is recorded in cost of sales, research and development expenditure, selling or administrative expenses, based on the function of the underlying assets. The amortisation expense of assets exclusively acquired in the context of a business combination (technology, backlog product and project, customer relationship) is recognised as other expenses.

Internally generated intangible assets

Development costs are capitalised if and only if the project they relate to meet the following criteria:

- the project is clearly defined and its related costs are separately identified and reliably measured;
- the technical feasibility of the project is demonstrated;
- the intention exists to complete the project and to use or sell it;
- adequate technical and financial resources are available to complete the project;
- it is probable that the future economic benefits attributable to the project will flow to the Group.

Capitalised development costs are costs incurred directly attributable to the project (materials, services, fees…), including an appropriate portion of relevant overheads.

Capitalised development costs are amortised on a straight-line basis over the estimated useful life of the asset. The amortisation charge is reported in research and development expenses.

(in € million)	At 31 March 2018(*)	Additions/disposals/ amortisation/ impairment	Other changes including CTA & scope	At 31 March 2019
Development costs	1,201	68	14	1,283
Other intangible assets	384	25	48	457
Gross value	**1,585**	**93**	**62**	**1,740**
Development costs	(936)	(63)	(1)	(1,000)
Other intangible assets	(233)	(26)	(11)	(270)
Amortisation and impairment	**(1,169)**	**(89)**	**(12)**	**(1,270)**
Development costs	265	5	13	283
Other intangible assets	151	(1)	37	187
NET VALUE	**416**	**4**	**50**	**470**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

(in € million)	At 31 March 2017(*)	Additions/disposals/ amortisation/ impairment	Other changes including CTA & scope	At 31 March 2018(*)
Development costs	1,173	90	(62)	1,201
Other intangible assets	378	10	(4)	384
Gross value	**1,551**	**100**	**(66)**	**1,585**
Development costs	(941)	(55)	60	(936)
Other intangible assets	(212)	(23)	2	(233)
Amortisation and impairment	**(1,153)**	**(78)**	**62**	**(1,169)**
Development costs	232	35	(2)	265
Other intangible assets	166	(13)	(2)	151
NET VALUE	**398**	**22**	**(4)**	**416**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

NOTE 12 • PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are stated at cost less accumulated depreciation and any accumulated impairment loss. When an item of property, plant and equipment is made up of components with different useful lives, the total cost is allocated between the various components. Components are then separately depreciated.

Depreciation is computed using the straight-line method over the estimated useful lives of each component. The useful lives most commonly used are the following:

	Estimated useful life *(in years)*
Buildings	7-40
Machinery and equipment	3-25
Tools, furniture, fixtures and others	1-10

Useful lives are reviewed on a regular basis and changes in estimates, when relevant, are accounted for on a prospective basis. The depreciation expense is recorded in cost of sales, selling expenses or administrative expenses, based on the function of the underlying assets.

Borrowing costs that are attributable to an asset whose construction period exceeds one year are capitalised as part of the costs of the asset until the asset is substantially ready for use or sale.

Property, plant and equipment acquired through finance lease arrangements or long-term rental arrangements that transfer substantially all the risks and rewards incidental to ownership are capitalised. They are recognised at their fair value at the inception of the lease, or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a financing obligation. Lease payments are apportioned between finance charges and repayment of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability.

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets or the term of the relevant lease, when shorter.

Leases that do not transfer substantially all risks and rewards incidental to ownership are classified as operating leases. Rentals payable are charged to profit or loss on a straight-line basis over the term of the relevant lease. Benefits received and receivable as an incentive to enter into an operating lease are recognised on a straight-line basis over the lease term.

(in € million)	At 31 March 2018(*)	Additions/ amortisation/ impairment	Disposals	Other changes of which translation adjustments and scope	At 31 March 2019
Land	90	-	-	2	92
Buildings	866	19	(9)	74	950
Machinery and equipment	808	39	(12)	17	852
Constructions in progress	98	122	-	(71)	149
Tools, furniture, fixtures and other	213	13	(14)	5	217
Gross value	**2,075**	**193**	**(35)**	**27**	**2,260**
Land	(9)	-	-	-	(9)
Buildings	(457)	(41)	9	(5)	(494)
Machinery and equipment	(583)	(46)	10	(16)	(635)
Constructions in progress	(13)	-	-	10	(3)
Tools, furniture, fixtures and other	(159)	(13)	13	(7)	(166)
Amortisation and impairment	**(1,221)**	**(100)**	**32**	**(18)**	**(1,307)**
Land	81	-	-	2	83
Buildings	409	(22)	-	69	456
Machinery and equipment	225	(7)	(2)	1	217
Constructions in progress	85	122	-	(61)	146
Tools, furniture, fixtures and other	54	-	(1)	(2)	51
NET VALUE	**854**	**93**	**(3)**	**9**	**953**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The Group continues to adapt and modernize its organization around the world, notably with the construction or renovation of manufacturing sites in India, in the USA and in South Africa.

This mainly contributes to the commitments of fixed assets amounting to €101 million at 31 March 2019 (€68 million at 31 March 2018).

(in € million)	At 31 March 2017(*)	Additions/ amortisation/ impairment	Disposals	Other changes of which translation adjustments and scope	At 31 March 2018(*)
Land	88	-	-	2	90
Buildings	751	37	(10)	88	866
Machinery and equipment	786	33	(21)	10	808
Constructions in progress	117	101	-	(120)	98
Tools, furniture, fixtures and other	243	12	(15)	(27)	213
Gross value	**1,985**	**183**	**(46)**	**(47)**	**2,075**
Land	(9)	-	-	-	(9)
Buildings	(433)	(34)	9	1	(457)
Machinery and equipment	(573)	(33)	19	4	(583)
Constructions in progress	(14)	-	-	1	(13)
Tools, furniture, fixtures and other	(174)	(15)	14	16	(159)
Amortisation and impairment	**(1,203)**	**(82)**	**42**	**22**	**(1,221)**
Land	79	-	-	2	81
Buildings	318	3	(1)	89	409
Machinery and equipment	213	-	(2)	14	225
Constructions in progress	103	101	-	(119)	85
Tools, furniture, fixtures and other	69	(3)	(1)	(11)	54
NET VALUE	**782**	**101**	**(4)**	**(25)**	**854**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The net value of tangible assets held under finance leases and included in the above data is as follows:

(in € million)	At 31 March 2019	At 31 March 2018
Buildings	12	13
Machinery and equipment	-	2
Tools, furniture, fixtures and other	1	1
NET VALUE OF TANGIBLE ASSETS HELD UNDER FINANCE LEASES	**13**	**16**

NOTE 13 • INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

FINANCIAL INFORMATION

	Share in equity		Share of net income	
(in € million)	At 31 March 2019	At 31 March 2018	Year ended 31 March 2019	Year ended 31 March 2018
Energy Alliances	-	113	106	165
TMH Limited	538	260	66	23
Other Associates	114	100	34	31
Associates	**652**	**473**	**206**	**219**
SpeedInnov JV	59	60	(1)	-
Other Joint ventures	-	-	(10)	(3)
Joint ventures	**59**	**60**	**(11)**	**(3)**
TOTAL	**711**	**533**	**195**	**216**

At 31 March 2019, the main variations are as follows:

- Energy Alliances (see Note 9 & Note 13.1): on 2 October 2018, Alstom interests in the three Energy Alliances (Renewables, Grid and Nuclear) have been transferred to General Electric;
- TMH Limited (see Note 1.2 & Note 13.2): TMH Limited is the new holding of The Breakers Investment B.V and Locotech Services.

MOVEMENTS DURING THE PERIOD

(in € million)	At 31 March 2019	At 31 March 2018
Opening balance	**533**	**2,755**
Share in net income of equity-accounted investments	195	216
Dividends	(52)	(18)
Acquisitions (1)	117	-
Transfer to assets held for sale	-	(2,382)
Disposals (2)	(219)	-
Translation adjustments and other (3)	137	(38)
CLOSING BALANCE	**711**	**533**

(1) Related to the acquisition of TMH additional shares (see Note 13.2).
(2) Related to Alliance Nuclear disposal (see Note 13.1).
(3) Mainly related to remeasurement of Locotech and TMH dilution profit (see Note 13.2).

13.1. The three Energy Alliances

In the framework of the acquisition of Energy activities by General Electric, in November 2015, three alliances have been created, consisting of respectively:

- combination of Alstom Grid and General Electric Digital Energy businesses ("Grid Alliance");
- Alstom's hydro, offshore wind and tidal businesses ("Renewable Alliance");
- Global Nuclear & French Steam production assets for servicing of the "Arabelle" steam turbine equipment for nuclear power plants worldwide and servicing for applications in France ("Nuclear Alliance").

The investments in Energy alliances included liquidity rights through put options on its shares to General Electric with a minimum guaranteed exit price.

As at 31 March 2018, because of the Group decision to exercise its put options, the Alliances Renewable and Grid and the related options have been reclassified as Assets Held For Sale for an amount of €2,382 million. As a consequence, following agreements signed between both parties, and particularly the one signed in May 2018, General Electric exercised, over the period 2018/19, its call option on the Alliance Nuclear.

On 2 October 2018, Alstom has completed the transfer of all its interests in the three Energy Alliances (Renewables, Grid and Nuclear) to General Electric and received a total cash payment of €2,594 million.

The capital gain arising from the disposal price evaluation as well as the amortization of the time value recognized over the holding period of the shares amount to €106 million, including the recycling of the put options fair value, recognized in Cash Flow Hedge Reserve as at 31 March 2018 for €7 million.

13.2. TMH Limited (new holding of the Breakers Investments B.V and Locotech Services)

Since 29 December 2015, Alstom owned 33% of The Breakers Investments B.V., the 100% holding company of Transmashholding ("TMH"), the leading Russian railway equipment manufacturer that operates in Russia and in the other countries of the Commonwealth of Independent States (CIS).

In June 2018, TMH and Locotech Services agreed to combine under a new holding TMH Limited. Following the transaction, the contribution of Alstom has been diluted. In the meantime, additional shares of TMH Limited have been bought by the Group from the other shareholders to increase its ownership up to 20% for €117 million (including capitalised acquisition costs for €2 million). From now on, in addition to the three seats on TMH's Board of Directors, Alstom also holds one seat on the TMH Limited Board of Directors and two seats on the Locotech Services Board of Directors. Therefore, the Group retains a significant influence.

The allocation of the price and the determination of the goodwill will be finalized within twelve months from the date of acquisition.

The net dilutive impact of the combined operation booked in the profit and loss over the period amounts to €25 million, including the recycling of the currency translation reserve for €(61) million (see Note 6).

Before the combined operation, the fair value of Locotech Services investment, directly held by TMH, has been remeasured through OCI for an amount of €53 million.

Other variations are mainly due to the result for the period for €66 million, to the dividend for €(31) million (of which €(6) million paid in March 2019) and the currency translation effect for €(4) million.

For practical reason, to be able to get timely and accurate information, data as of 31 December are retained and booked within Alstom 31 March accounts. The length of the reporting periods and the difference between the ends of the reporting periods remain the same from period to period to allow comparability and consistency.

The summarized financial information (at 100%) presented below are the figures disclosed in the financial statements of TMH Limited at 31 December 2018 and are established in accordance with IFRS. These financial statements, established in Rubles, were converted to euros based on the rates used by the Group at 31 March 2019.

BALANCE SHEET AND RECONCILIATION ON CARRYING VALUE

(in € million)	TMH Limited At 31 December 2018	TMH At 31 December 2017
Non-current assets	3,911	818
Current assets	1,908	1,107
TOTAL ASSETS	**5,819**	**1,925**
Equity-attributable to the owners of the parent company	3,049	772
Equity-attributable to non-controlling interests	222	125
Non current liabilities	858	238
Current liabilities	1,690	790
TOTAL EQUITY AND LIABILITIES	**5,819**	**1,925**
Equity interest held by the Group	20%	33%
NET ASSET	**610**	**257**
Goodwill	44	73
Impairment of share in net asset of equity investments	(36)	(62)
Paid dividends	(6)	-
Other(*)	(74)	(8)
SHARE IN THE CARRYING VALUE OF THE GROUP'S INTERESTS	**538**	**260**

(*) Corresponds to the restatements to TMH historical value before the combined operation, as at 31 March 2019.

INCOME STATEMENT

(in € million)	TMH Limited (1) Six months 1 July 2018 to 31 December 2018	TMH Six months 1 January 2018 to 30 June 2018	TMH Twelve months 1 January 2017 to 31 December 2017
Sales	2,294	1,452	2,300
Net income from continuing operations	82	172	40
Share of non-controlling interests	(10)	(25)	8
Net income attributable to the owners of the parent company	**72**	**147**	**48**
Equity interest held by the Group	20%	33%	33%
SHARE IN THE NET INCOME	**14**	**49**	**16**
Total share in the net income	**63**		
Other items (2)	3		7
GROUP'S SHARE IN THE NET INCOME	**66**		**23**

(1) From 1 July 2018, TMH limited includes both TMH business and Locotech business.
(2) Corresponds to the restatements to TMH historical value before the combined operation, as at 31 March 2019.

13.3. Other associates

The Group's investment in other associates comprises investment in Casco, held by the Group at 49%, for €108 million (of which €36 million of net profit) as well as other associates which are not significant on an individual basis. On aggregate, the net carrying value of Alstom's Investment represents €114 million as of 31 March 2019 (€100 million as of 31 March 2018).

EKZ

As at 22 December 2017, Alstom signed an agreement with the Kazakh national railway company (KTZ) to acquire their 25% stake in the EKZ Joint Venture (JV) for €21 million. As at 25 February 2019, all the suspensive conditions have been reached and Alstom owns 75% of the share with a full control over the Kazakh locomotive company. Accordingly, the consolidation method has been changed from equity to full consolidation. The gain related to the equity disposal amounts to €33 million (see Note 6).

NOTE 14 • NON-CONSOLIDATED INVESTMENTS

Entities over which the Group has no significant influence or when the value is not material are not consolidated. The Group has expressed intention and ability to hold these Investments on a long term perspective and therefore these investments are considered as non-trading investments. The Group has elected for the portfolio of non-consolidated investments to record the change in fair value on these investments through Other Comprehensive Income with no subsequent recycling in income statement. They are initially measured at their fair value, plus directly attributable transaction costs and subsequently re-measured at fair value.

The fair value of listed securities is the market value at the closing date. A valuation model is used in case of unlisted securities. Changes in fair value are then directly recognised in other comprehensive income with no subsequent recycling in income statement. When the fair value cannot be determined reliably, investments in non-consolidated companies are measured at cost.

Besides, the Group has expressed intention and ability to hold all debt securities to maturity to collect the corresponding contractual cash flows. They are in that purpose measured at amortised cost using the effective interest rate method, less any impairment loss recognised to reflect amounts expected not to be recoverable. An impairment loss is recognised in profit or loss when there is objective evidence that the asset should be impaired and is measured as the difference between the investment's carrying value and the present value of the estimated future cash flows discounted at the effective interest rate computed at initial recognition. Impairment losses may be reversed through profit and loss in subsequent periods.

Finally, marketable securities are assets held for trading which cannot be considered as cash and cash equivalents. They are designated as financial assets at fair value through profit or loss. Changes in fair value are reported as financial income or expense.

MOVEMENTS DURING THE PERIOD

(in € million)	At 31 March 2019	At 31 March 2018
Opening balance	**58**	**55**
Change in fair value	2	-
Acquisitions/disposals	2	3
Translation adjustments and other	2	-
CLOSING BALANCE	**64**	**58**

The Group's equity investment in other investments is not significant on an individual basis and notably comprises investments in companies that hold PPPs (public-private partnerships) agreements or have entered into concession agreements, typically for an ownership lower than 20%.

NOTE 15 • OTHER NON-CURRENT ASSETS

Loans are initially measured at their fair value, plus directly attributable transaction costs and are subsequently measured at amortised cost using the effective interest rate method. Deposits are reported as other non-current assets when their initial maturity is more than three months and as cash and cash equivalents in case of demand deposits or when the initial maturity is less than three months.

If there is any indication that those assets may be impaired, they are reviewed for impairment. Any difference between the carrying value and the impaired value (net realisable value) is recorded as a financial expense. The impairment loss can be reversed if the value is recovered in the future. In that case, the reversal of the impairment loss is reported as a financial income.

(in € million)	At 31 March 2019	At 31 March 2018
Financial non-current assets associated to financial debt(*)	201	213
Long-term loans, deposits and other	41	64
OTHER NON-CURRENT ASSETS	**242**	**277**

(*) These non-current assets relate to a long-term rental of trains and associated equipment to a London metro operator (see Notes 27 and 34).

Movements over the period ended 31 March 2019 mainly arise from the decrease of €(16) million of obligations, €(21) million related to the change of consolidation method of EKZ (see Note 1.2) and from foreign exchange translation impacts of €5 million.

F. WORKING CAPITAL

NOTE 16 • WORKING CAPITAL ANALYSIS

(in € million)	At 31 March 2019	At 31 March 2018(*)	Variation
Inventories	1,533	1,440	93
Contract assets	1,448	1,212	236
Trade receivables	1,661	1,772	(111)
Other current operating assets/(liabilities)	(422)	(425)	3
Contract liabilities	(3,001)	(3,157)	156
Provisions	(1,193)	(1,356)	163
Trade payables	(1,751)	(1,346)	(405)
WORKING CAPITAL	**(1,725)**	**(1,860)**	**135**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

(in € million)	For the year ended 31 March 2019
Working capital at the beginning of the period (1)	**(1,860)**
Changes in working capital resulting from operating activities (2)	290
Changes in working capital resulting from investing activities	1
Translation adjustments and other changes	(156)
Total changes in working capital	**135**
WORKING CAPITAL AT THE END OF THE PERIOD	**(1,725)**

(1) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).
(2) Including €248 million related to discontinued activities.

NOTE 17 • INVENTORIES

Raw materials and supplies, work in progress and finished products are stated at the lower of cost, using the weighted average cost method, or net realisable value.

Inventory cost includes direct material and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their existing location and condition.

Work in progress refers to costs incurred on product contracts or short term service contracts whose execution will be finalised during a next period. It refers also to costs incurred on “construction contracts” not yet allocated to projects at end of the closing period but transferred to project costs in subsequent periods when the asset becomes sufficiently customized and cannot be readily directed for another use.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

(in € million)	At 31 March 2019	At 31 March 2018(*)
Raw materials and supplies	881	818
Work in progress	711	646
Finished products	150	138
Inventories, gross	**1,742**	**1,602**
Raw materials and supplies	(128)	(103)
Work in progress	(72)	(49)
Finished products	(9)	(10)
Write-down	**(209)**	**(162)**
INVENTORIES, NET	**1,533**	**1,440**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

NOTE 18 • NET CONTRACT ASSETS/LIABILITIES

Aggregates called "contract assets" and "contract liabilities" are disclosed for "construction contracts" and long term service agreements in progress and are determined on a contract-by-contract basis. The aggregate "contract assets" corresponds to the unbilled part of revenues recognized to date net of the advance payments received from customers. Unbilled part of revenue corresponds to revenue recognized to date in excess of progress billings. On the contrary, when progress billings are in excess of revenue recognized to date, the net amount is accounted for as deferred income and aggregated with the related advance payments received from customers under the caption "contract liabilities".

Some costs incurred in fulfilling a contract that are not falling under the scope of the standards dealing with intangible and tangible assets as well as inventories, should be accounted for under a new caption called "costs to fulfil a contract" when eligible to capitalization.

IFRS 9 acknowledges the recognition of the credit risk related to financial assets and especially trade receivables, based on the expected loss approach. The recognition model retained for contract assets is the general model that allows to estimate the risk within one year, as long as there is no sign of significant degradation of customer credit risk.

(in € million)	At 31 March 2019	At 31 March 2018(*)	Variation
Cost to fulfil a contract	24	30	(7)
Contract assets	1,424	1,182	242
Total contract assets	**1,448**	**1,212**	**236**
Contract liabilities	(3,001)	(3,157)	156
NET CONTRACT ASSETS/(LIABILITIES)	**(1,553)**	**(1,945)**	**392**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Net contract Assets/(Liabilities) include down payments for €2,263 million at 31 March 2019 and €2,196 million at 31 March 2018.

NOTE 19 • TRADE RECEIVABLES

A receivable is an entity's right to consideration that is unconditional. A right to consideration is unconditional if only the passage of time is required before payment of that consideration is due. Receivables are initially recognised at fair value, which in most cases approximates the nominal value. If there is any subsequent indication that those assets may be impaired, they are reviewed for impairment. Any difference between the carrying value and the impaired value (net realisable value) is recorded within Earnings Before Interests and Taxes. The impairment loss can be reversed if the value is recovered in the future. In that case, the reversal of the impairment loss is also reported within Earnings Before Interests and Taxes.

IFRS 9 acknowledges the recognition of the credit risk related to financial assets and especially trade receivables, based on the expected loss approach. The recognition model retained for trade receivables is the Simplified Approach "Lifetime Expected Credit Losses", as long as there is no sign of significant degradation of customer credit risk.

Indeed, due to the type of business operated by the Group, past due receivables are frequently representative of outstanding amounts confirmed by customers but whose payment is subject to clearance of items raised during inspection of works. Such receivables do remain fully recoverable; costs to be incurred for the clearance of pending items are included in the determination of the margin at completion of the related contracts.

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire or when it transfers the contractual rights in a transaction under which substantially all the risks and rewards of the financial assets are transferred.

			Past due on the closing date		
(in € million)	Total	No past due on the closing date	Less than 60 days	Between 60 and 180 days	More than 180 days
AT 31 MARCH 2019	**1,661**	**1,260**	**159**	**54**	**188**
• o/w gross	1,700	1,287	160	54	199
• o/w impairment	(39)	(27)	(1)	-	(11)
AT 31 MARCH 2018(*)	**1,772**	**1,321**	**142**	**48**	**261**
• o/w gross	1,834	1,354	161	49	270
• o/w impairment	(62)	(33)	(19)	(1)	(9)

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

NOTE 20 • OTHER CURRENT OPERATING ASSETS

(in € million)	At 31 March 2019	At 31 March 2018
Down payments made to suppliers	86	154
Corporate income tax	84	59
Other taxes	258	242
Prepaid expenses	55	80
Other receivables	218	286
Derivatives relating to operating activities	159	298
Remeasurement of hedged firm commitments in foreign currency	146	209
OTHER CURRENT OPERATING ASSETS	**1,006**	**1,328**

Over the period ended 31 March 2019, the Group entered into an agreement of assignment of receivables that leads to the derecognition of tax receivables for an amount of €81 million in accordance with IFRS 9 criteria. The total disposed amount outstanding at 31 March 2019 is €142 million.

NOTE 21 • OTHER CURRENT OPERATING LIABILITIES

(in € million)	At 31 March 2019	At 31 March 2018(*)
Staff and associated liabilities	520	483
Corporate income tax	17	48
Other taxes	70	89
Deferred income	6	4
Other payables	515	613
Derivatives relating to operating activities	202	253
Remeasurement of hedged firm commitments in foreign currency	98	263
OTHER CURRENT OPERATING LIABILITIES	**1,428**	**1,753**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

NOTE 22 • PROVISIONS

As long as a "construction contracts" or a long-term service agreement is in progress, obligations attributable to such a contract are taken into account in the assessment of the margin to be recognised.

Upon completion of the contract, such obligations are recognised as distinct liabilities when they satisfy the following criteria:

- the Group has a present legal or constructive obligation as a result of a past event;
- it is probable that an outflow of economic resources will be required to settle the obligation; and
- such outflow can be reliably estimated.

These liabilities are presented as provisions when they are of uncertain timing or amount. When this uncertainty is dispelled, they are presented as trade payables or other current liabilities.

One exception is, in accordance with IAS 37 "Provisions, Contingent Liabilities and Contingent Assets", the provisions on onerous contracts that are reported in current provisions, as soon as identified. The unavoidable costs to fulfil a contract considered in assessing whether a contract is onerous are all the costs that directly relate to that contract.

Obligations resulting from transactions other than "construction contracts" and long-term service agreements are directly recognised as provisions as soon as the above-mentioned criteria are met. Where the effect of the time value of money is material, provisions are measured at their present value.

Restructuring provisions are made when plans to reduce or close facilities, or to reduce the workforce have been finalised and approved by the Group management and have been announced before the closing date, resulting in an obligation of the Group to third parties. Restructuring costs include employees' severance and termination benefits and estimated facility closing costs. In addition to such provisions, restructuring costs may include asset write-off relating to the restructured activities

(in € million)	At 31 March 2018(*)	Additions	Releases	Applications	Translation adjustments and other	At 31 March 2019
Warranties	201	110	(35)	(52)	3	227
Risks on contracts	625	230	(140)	(113)	18	620
Current provisions	**826**	**340**	**(175)**	**(165)**	**21**	**847**
Tax risks & litigations	148	64	(46)	(3)	2	165
Restructuring	27	45	(7)	(23)	1	43
Other non-current provisions	355	41	(254)	(4)	-	138
Non-current provisions	**530**	**150**	**(307)**	**(30)**	**3**	**346**
TOTAL PROVISIONS	**1,356**	**490**	**(482)**	**(195)**	**24**	**1,193**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

(in € million)	At 31 March 2017(*)	Additions	Releases	Applications	Translation adjustments and other	At 31 March 2018(*)
Warranties	209	57	(21)	(45)	1	201
Risks on contracts	623	97	(62)	(39)	6	625
Current provisions	**832**	**154**	**(83)**	**(84)**	**7**	**826**
Tax risks & litigations	216	27	(92)	(7)	4	148
Restructuring	25	38	(5)	(23)	(8)	27
Other non-current provisions	374	6	(3)	(5)	(17)	355
Non-current provisions	**615**	**71**	**(100)**	**(35)**	**(21)**	**530**
TOTAL PROVISIONS	**1,447**	**225**	**(183)**	**(119)**	**(14)**	**1,356**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Provisions for warranties relate to estimated costs to be incurred over the residual contractual warranty period on completed contracts.

Provisions for risks on contracts relate to provisions on contract losses and to commercial disputes and operating risks.

In relation to tax risks, the Group tax filings are subject to audit by tax authorities in most jurisdictions in which the Group operates. These audits may result in assessment of additional taxes that are subsequently resolved with the authorities or potentially through the courts. The Group believes that it has strong arguments against the questions being raised, that it will pursue all legal remedies to avoid an unfavourable outcome and that it has adequately provided for any risk that could result from those proceedings where it is probable that it will pay some amounts.

Restructuring provisions mainly derive from the adaptation of the means of production in certain countries, as the UK, Germany and Brazil.

Other non-current provisions mainly relate to guarantees delivered or risks in connection with disposals, employee litigations, commercial disputes and environmental obligations.

The management identifies and analyses on a regular basis current litigations and other risks, using its best estimate to assess, when necessary, provisions. These estimates take into account information available and different possible outcomes. Main disputes are described in Note 33.

G. EQUITY AND DIVIDENDS

NOTE 23 • EQUITY

When managing capital, objectives of the Group are to safeguard its ability to continue as a going concern so that it can provide returns to shareholders, bring benefits to its other partners and optimise the structure of the capital in order to reduce its cost.

To achieve this, the Group may choose to:

- adjust the amount of dividends paid to the shareholders;
- reimburse a portion of capital to the shareholders;
- issue new shares; or,
- sell assets in order to scale back its debt.

23.1. Movements in share capital

At 31 March 2019, the share capital of Alstom amounted to €1,565,006,191 consisting of 223,572,313 ordinary shares with a par value of €7 each. For the year ended 31 March 2019, the weighted average number of outstanding ordinary shares amounted to 222,916,803, after the dilutive effect of bonds reimbursable in shares "Obligations Remboursables en Actions" and to 224,986,706 after the effect of all dilutive instruments.

During the year ended 31 March 2019:

- 1,040 bonds reimbursable in shares "Obligations Remboursables en Actions" were converted into 65 shares at a par value of €7. The 73,338 bonds reimbursable with shares outstanding at 31 March 2019 represent 4,606 shares to be issued;
- 638,610 of ordinary shares were issued under long term incentive plans;
- 723,167 of ordinary shares were issued under equity settled share based payments.

23.2. Currency translation adjustment in shareholders' equity

At 31 March 2019, the currency translation reserve amounts to €(460) million.

The currency translation adjustment, presented within the consolidated statement of comprehensive income for €33 million, primarily reflects the effect of variations of the US Dollar (€53 million), Brazilian Real (€(15) million) and South African Rand (€(9) million) against the Euro for the year ended 31 March 2019.

NOTE 24 • DISTRIBUTION OF DIVIDENDS

The Shareholders' Meeting of Alstom held on 17 July 2018 decided to distribute for the financial year ended 31 March 2018, a dividend in cash for €0.35 by share. Dividends have been fully paid on 24 July 2018 for a total amount of €78 million.

At 31 March 2019, €6 million of dividends granted to non-controlling interests have been paid (of which €2 million approved last year).

H. FINANCING AND FINANCIAL RISK MANAGEMENT

NOTE 25 • OTHER CURRENT FINANCIAL ASSETS

As at 31 March 2019, other current financial assets comprise the positive market value of derivatives instruments hedging loans, deposits and Group cash pooling positions.

(in € million)	At 31 March 2019	At 31 March 2018
Derivatives related to financing activities and others	10	8
OTHER CURRENT FINANCIAL ASSETS	**10**	**8**

NOTE 26 • CASH AND CASH EQUIVALENTS

Cash equivalents are held to meet short-term cash commitments. In order to be considered as cash equivalent, an investment must be convertible to a known amount of cash within the coming three months and subject to a negligible risk of change in value, thereby satisfying the requirements of IAS 7.

Cash and cash equivalents include all cash balances, certain term deposit accounts, negotiable debt instruments and monetary UCITS.

Bank overdrafts are shown within borrowings in current liabilities on the balance sheet.

(in € million)	At 31 March 2019	At 31 March 2018
Cash	595	409
Cash equivalents	2,837	822
CASH AND CASH EQUIVALENT	**3,432**	**1,231**

In addition to bank open deposits classified as cash for €595 million (€409 million at 31 March 2018), the Group invests in cash equivalents:

- Euro money market funds in an amount of €2,415 million (€465 million at 31 March 2018), qualified as "monetary" or "monetary short term" under the French AMF classification;
- Bank term deposits that can be terminated at any time with less than three months notification period in an amount of €422 million (€357 million at 31 March 2018).

As of March 2019, the large amount of cash & cash equivalent arises essentially from the cash payment of €2,594 million received on 2 October 2018 upon the transfer to General Electric of all Alstom interests in the three Energy Alliances (Renewables, Grid and Nuclear) (see Note 13.1).

NOTE 27 • FINANCIAL DEBT

Bonds and interest-bearing bank loans are initially recognised at fair value, less any transaction costs directly attributable to the issuance of the liability. These financial liabilities are subsequently measured at amortised cost, using the effective interest rate method.

		Cash movements	Non-cash movements		
(in € million)	At 31 March 2018	Net cash variation	Change in scope	Translation adjustments and other	At 31 March 2019
Bonds	1,248	(371)	-	1	878
Other borrowing facilities	163	14	13	6	196
Put options and earn-out on acquired entities	37	(20)	-	(17)	-
Derivatives relating to financing activities	13	-	-	8	21
Accrued interests [(1)]	16	(62)	-	53	7
Borrowings	**1,477**	**(439)**	**13**	**51**	**1,102**
Obligations under finance leases	17	(1)	-	(1)	15
Other obligations under long-term rental [(2)]	213	(16)	-	4	201
Obligations under finance leases	**230**	**(17)**	**-**	**3**	**216**
TOTAL FINANCIAL DEBT	**1,707**	**(456)**	**13**	**54**	**1,318**

(1) Paid interests are disclosed in the net cash provided by operating activities part in the cash flow statement. Net interests paid and received amount to €(62) million.
(2) The other obligations under long-term rental represent liabilities related to lease obligations on trains and associated equipment (see Note 15).

The financial debt's variation over the period is mainly due to bonds reimbursement amounting to €371 million.

The following table summarizes the significant components of the Group's bonds:

	Initial Nominal value *(in € million)*	Maturity date *(dd/mm/yy)*	Nominal interest rate	Effective interest rate	Accounting value at 31 March 2019	Market value at 31 March 2019
Alstom July 2019	500	08/07/2019	3.00%	3.18%	282	284
Alstom March 2020	750	18/03/2020	4.50%	4.58%	596	622
TOTAL AND WEIGHTED AVERAGE RATE			**4.02%**	**4.13%**	**878**	**906**

Other borrowings consist in banking facilities drawn by affiliates.

The value of the external financial debt split by currency is as follows:

(in € million)	At 31 March 2019	At 31 March 2018
Euro	920	1,300
British Pound	201	213
Indian Rupee	115	77
Algerian Dinar	39	39
US Dollar	5	47
Other currencies	38	31
FINANCIAL DEBT IN NOMINAL VALUE	**1,318**	**1,707**

The external debt in GBP for €201 million essentially originates from a long-term lease scheme of trains, involving London Underground. The equivalent debt denominated in GBP is counter-balanced by long-term receivables having the same maturity and also denominated in GBP that are recognised as non-current assets (see Notes 15, 27 and 34).

NOTE 28 • FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT

28.1. Financial instruments reported in the financial statements

The Group's financial liabilities encompass borrowings, trade and other payables.

The Group's financial assets include loans, trade and other receivables, other current assets and cash and cash equivalents.

The Group is exposed to volatility risk in currency and interest rate, to credit risk and liquidity risk.

The main valuation methods applied are as follows:

- borrowings, when unhedged, are stated at amortised cost, determined by the effective interest rate method;
- the fair value of the financial debt is estimated based on either quoted market prices for traded instruments or current rates offered to the Group for debt of the same maturity;
- the fair value of cash, cash equivalents, trade receivables and trade payables is considered as being equivalent to carrying value, due to their short maturities, or their market value in the case of money market funds;
- the fair value of FX derivative instruments is calculated primarily on the basis of foreign exchange spot and forward rates at "mid-market" at closing date or alternatively on the basis of relevant yield curves per currency.

IFRS 13 application for "Fair Value Measurement", which requires counterparty risk to be taken into account in measuring derivative instruments, does not have a material impact on the Group's financial statements.

Year ended 31 March 2019

Balance sheet positions at 31 March 2019

			Carrying amount of financial instruments by categories(*)					Fair value of items classified as financial instruments			
At 31 March 2019 *(in € million)*	Balance sheet carrying amount	Carrying amount not defined as financial instruments	FV P/L	FV OCI	LRL at amortised cost	DER	Total	Listed prices	Internal model based on observable factors	Internal model not based on observable factors	Total
Non consolidated investments	64	-	-	64	-	-	64	-	20	44	64
Other non-current assets	242	-	-	-	242	-	242	-	41	201	242
Trade receivables	1,661	-	-	-	1,661	-	1,661	-	1,661	-	1,661
Other current operating assets	1,006	483	146	-	218	159	523	-	523	-	523
Other current financial assets	10	-	(2)	-	-	12	10	-	10	-	10
Cash and cash equivalents	3,432	-	2,415	-	1,017	-	3,432	2,415	1,017	-	3,432
ASSETS	**6,415**	**483**	**2,559**	**64**	**3,138**	**171**	**5,932**	**2,415**	**3,272**	**245**	**5,932**
Non-current borrowings	89	-	-	-	89	-	89	-	89	-	89
Non-current obligations under finance leases	197	-	-	-	197	-	197	-	197	-	197
Current borrowings	1,013	-	-	-	992	21	1,013	906	126	-	1,032
Current obligations under finance leases	19	-	-	-	19	-	19	-	19	-	19
Trade payables	1,751	-	-	-	1,751	-	1,751	-	1,751	-	1,751
Other current liabilities	1,428	613	98	-	515	202	815	-	815	-	815
LIABILITIES	**4,497**	**613**	**98**	**-**	**3,563**	**223**	**3,884**	**906**	**2,997**	**-**	**3,903**

(*) FV P/L stands for Fair Value through Profit and Loss; FV OCI stands for Fair Value through Other Comprehensive Income; LRL stands for Loans, Receivables and Liabilities and DER stands for Derivative instruments.

As mentioned in Note 13.1, there is a financial instrument (put) presented together with alliances in investments in associate's disclosure.

Financial income and expense arising from financial instruments for the year ended 31 March 2019

(in € million)	FV P/L	FV OCI	LRL at amortised cost & DER	Total
Interests	(1)	-	(51)	(52)
Interest income	*(1)*	-	*4*	*3*
Interest expense	-	-	*(55)*	*(55)*
Foreign currency and other	-	-	(32)	(32)
NET INCOME/EXPENSE FOR THE YEAR ENDED 31 MARCH 2019	**(1)**	**-**	**(83)**	**(84)**

Year ended 31 March 2018

Balance sheet positions at 31 March 2018

At 31 March 2018 (2) *(in € million)*	Balance sheet carrying amount	Carrying amount not defined as financial instruments	Carrying amount of financial instruments by categories (1) FV P/L	FV OCI	LRL at amortised cost	DER	Total	Fair value of items classified as financial instruments Listed prices	Internal model based on observable factors	Internal model not based on observable factors	Total
Non consolidated investments	58	-	-	36	22	-	58	-	22	36	58
Other non-current assets	277	-	-	-	277	-	277	-	64	213	277
Trade receivables	1 772	-	-	-	1 772	-	1 772	-	1 772	-	1 772
Other current operating assets	1 328	535	209	-	286	298	793	-	793	-	793
Other current financial assets	8	-	-	-	-	8	8	-	8	-	8
Cash and cash equivalents	1 231	-	465	-	766	-	1 231	465	766	-	1 231
ASSETS	**4 674**	**535**	**674**	**36**	**3 123**	**306**	**4 139**	**465**	**3 425**	**249**	**4 139**
Non-current borrowings	952	-	-	-	952	-	952	944	75	-	1 019
Non-current obligations under finance leases	212	-	-	-	212	-	212	-	212	-	212
Current borrowings	525	-	-	-	512	13	525	378	154	-	532
Current obligations under finance leases	18	-	-	-	18	-	18	-	18	-	18
Trade payables	1 346	-	-	-	1 346	-	1 346	-	1 346	-	1 346
Other current liabilities	1 753	624	263	-	613	253	1 129	-	1 129	-	1 129
LIABILITIES	**4 806**	**624**	**263**	**-**	**3 653**	**266**	**4 182**	**1 322**	**2 934**	**-**	**4 256**

(1) FV P/L stands for Fair Value through Profit and Loss; FV OCI stands for Fair Value Through Other Comprehensive Income; LRL stands for Loans, Receivables and Liabilities and DER stands for Derivative instruments.
(2) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Financial income and expense arising from financial instruments for the year ended 31 March 2018

(in € million)	FV P/L	FV OCI	LRL at amortised cost & DER	Total
Interests	-	-	(57)	(57)
Interest income	-	-	*7*	*7*
Interest expense	-	-	*(64)*	*(64)*
Foreign currency and other	-	-	(33)	(33)
NET INCOME/EXPENSE FOR THE YEAR ENDED 31 MARCH 2018	**-**	**-**	**(90)**	**(90)**

28.2. Currency risk management

Foreign currency transactions are initially recognised by applying to the foreign currency amount the spot exchange rate between the functional currency of the reporting unit and the foreign currency at the date of the transaction. Currency units held assets to be received and liabilities to be paid resulting from those transactions are re-measured at closing exchange rates at the end of each reporting period. Realised exchange gains or losses at date of payment as well as unrealised gains or losses deriving from re-measurement are recorded in the income statement.

Since the Group is exposed to foreign currency volatility, the Group puts in place a significant volume of hedges to cover this exposure. These derivatives are recognised on the balance sheet at their fair value at the closing date. Provided that the relationships between the foreign currency exposure and the related derivatives are qualifying relationships, the Group uses the specific accounting treatments designated as hedge accounting. A relationship qualifies for hedge accounting if, at the inception of the hedge, it is formally designated and documented and if it proves to be highly effective throughout the financial reporting periods for which the hedge was designated.

Hedging relationships are mainly corresponding to fair value hedge in case of hedge of the exposure attributable to recognised assets, liabilities or firm commitments.

Derivative are recognised and re-measured at fair value

Fair value hedge

When fair value hedge accounting applies, changes in the fair value of derivatives and changes in the fair value of hedged items are both recognised in the income statement and offset each other up to the gain or loss on the effective portion on the hedging instrument.

Whatever the type of hedge, both the effective and ineffective portion on the hedging instrument are recognised in the income statement as well as realised and unrealised exchange gains and losses on hedged items and hedging instruments.

As the effective portion on the hedging instrument offsets the difference between the spot rate at inception of the hedge and the effective spot rate at the outcome of the hedge, sales and costs resulting from commercial contracts are recognised at the spot rate at inception of the hedge throughout the life of the related commercial contracts, provided that the corresponding hedging relationships keep on qualifying for hedge accounting. For a large Transport project located in South Africa, the hedged firm commitments resulting from the commercial contract are recognised on a forward rate basis. Provided that the corresponding hedging relationship qualifies for hedge accounting, the change in fair value of the hedged items recorded at the project forward rate at inception offsets the change in fair value of the derivatives.

The Group uses export insurance policies to hedge its currency exposure on certain contracts during the open bid period. When commercial contracts are awarded, insurance instruments are settled and forward contracts are put in place and recorded according to the fair value hedge accounting as described above.

Derivatives relating to financing activity

Whenever possible, Alstom Holdings acts as an in-house bank for its affiliates through cash-pooling and loans/deposits agreements. The intercompany positions so generated are hedged through foreign exchange swaps, the cost of which is included in net cost of foreign exchange (see Note 7).

At 31 March 2019, net derivatives positions amount to a net liability of €(9) million and comprise mainly forward sale contracts of British Pound, US Dollar and Polish Zloty, but also, forward purchase contracts of United Arab Emirates Dirham and Australian Dollar.

(in € million)	Net derivatives positions		2020		2021		2022-2024		2025 and thereafter	
Currency 1/Currency 2(*)	**Net notional**	**Fair value**	**Interests**	**Repayment**	**Interests**	**Repayment**	**Interests**	**Repayment**	**Interests**	**Repayment**
EUR/GBP	(134)	(11)	-	23	-	(157)	-	-	-	-
EUR/USD	(210)	(4)	-	(210)	-	-	-	-	-	-
EUR/AED	207	4	-	207	-	-	-	-	-	-
EUR/PLN	(220)	(1)	-	(220)	-	-	-	-	-	-
EUR/AUD	130	1	-	130	-	-	-	-	-	-
Other		2								
NET DERIVATIVES RELATED TO FINANCING ACTIVITIES		**(9)**								

(*) Positive amount: the currency 2 is bought forward against currency 1. Negative amount: the currency 2 is sold forward against currency 1.

Derivatives hedging commercial activity

In the course of its operations, the Group is exposed to currency risk arising from tenders submitted in foreign currency, awarded contracts and any future cash out transactions denominated in foreign currency. The main currency triggering a significant exposure as of 31 March 2019 is the US Dollar and Polish Zloty.

During the tender period, depending on the probability to obtain the project and on market conditions, the Group may hedge in some cases a portion of its tenders using options or export insurance policies. Once the contract is in force, forward exchange contracts are used to hedge the actual exposure during the life of the contract.

Forward currency contracts are denominated in the same currency than the hedged item. Generally, the tenor of hedging derivatives matches with the tenor of the hedged items. However, the Group may decide depending on market conditions to enter into derivatives in shorter tenors and to roll them subsequently. Finally, in some cases, the Group can waive to be hedged because of the cost of the hedge or absence of efficient market.

The portfolio of operating of foreign exchange forward contracts has a weighted maturity below 1 year and 6 months. However some forward contracts may mature beyond five years to reflect the long term nature of some of the hedged contracts. The Group hedges about forty different currencies with a multitude of crosses depending on which entity of the Group is exposed to the currency. Change in foreign exchange rate is compensated by the reevaluation through Income Statement at fair market value on derivatives.

At 31 March 2019, net derivatives positions amount to a net liability of €(43) million. They are summarized as follows:

(in € million)	Net derivatives positions		2020		2021		2022-2024		2025 and thereafter	
Currency 1/Currency 2(*)	**Net notional**	**Fair value**	**Interests**	**Repayment**	**Interests**	**Repayment**	**Interests**	**Repayment**	**Interests**	**Repayment**
EUR/USD	(767)	(28)	-	(653)	-	(102)	-	(16)	-	4
EUR/CAD	(362)	(21)	-	(120)	-	(74)	-	(168)	-	-
EUR/ZAR	(120)	(12)	-	(120)	-	-	-	-	-	-
EUR/INR	(40)	(30)	-	23	-	(99)	-	32	-	4
EUR/BRL	91	17	-	37	-	22	-	32	-	-
EUR/PLN	787	26	-	324	-	201	-	262	-	-
Other		5								
NET DERIVATIVES RELATED TO OPERATING ACTIVITIES		**(43)**								

(*) Positive amount: the currency 2 is bought forward against currency 1. Negative amount: the currency 2 is sold forward against currency 1.

Most of the hedging instruments are negotiated by Alstom Holdings and are mirrored by hedging agreements between Alstom Holdings and the exposed subsidiaries. Whenever local regulations prohibit this intercompany hedging, instruments are negotiated directly by affiliates with local banks under the supervision of central Treasury.

Overall derivatives positions

Derivative instruments hedging foreign currency risk are recognised at their fair value on the balance sheet as follows:

	At 31 March 2019		At 31 March 2018(*)	
(in € million)	**Assets**	**Liabilities**	**Assets**	**Liabilities**
Derivatives qualifying for fair value hedge	171	223	306	266
Of which derivatives relating to financing activities	*12*	*21*	*8*	*13*
Of which derivatives relating to operating activities	*159*	*202*	*298*	*253*

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Since derivatives have been set up, the change in foreign exchange spot rates, and to a lesser extend the relative change in interest rate curves relating to the hedged currencies, during the periods ended 31 March 2018 and 31 March 2019 explains the amount of fair value of derivative instruments (either positive or negative). For instruments that qualify for fair value hedge accounting, change in fair value arising from spot rates is mostly offset by the re-measurement of the underlying exposure (either on balance sheet or off-balance sheet).

The sensitivity of the Group's pre-tax income to a change in currencies arising from derivative instruments not qualifying for hedge accounting is not significant.

Alstom enters with its banking counterparties in bilateral standard derivatives agreements that generally do not provide a collateralization of derivatives market value.

These agreements generally require the offsetting of receivable and payable amounts in case of default of one of the contracting parties. These derivatives fall within the scope of disclosures under IFRS 7 on compensation and are presented in the tables below:

At 31 March 2019 *(in € million)*	Gross amounts of recognized financial assets/ liabilities	Gross amounts of recognized financial assets/ liabilities set off in the balance sheet	Net amount of financial assets/ liabilities presented in the balance sheet	Related amount not set off in the balance sheet		Net amount
				Financial instruments	Cash collateral received	
Derivatives liabilities	(223)	-	(223)	(142)	-	(81)
Derivatives assets	171	-	171	142	-	29

At 31 March 2018 *(in € million)*	Gross amounts of recognized financial assets/ liabilities	Gross amounts of recognized financial assets/ liabilities set off in the balance sheet	Net amount of financial assets/ liabilities presented in the balance sheet	Related amount not set off in the balance sheet		Net amount
				Financial instruments	Cash collateral received	
Derivatives liabilities	306	-	306	(180)	-	126
Derivatives assets	(266)	-	(266)	180	-	(86)

28.3. Interest rate risk management

The Group may enter into hedges for the purpose of managing its exposure to movements in interest rates. Derivatives are recognised on the balance sheet at fair value at the closing date. Providing that the relationships between the interest rate exposure and the related derivatives are qualifying relationships, the Group uses the specific accounting treatments designated as hedge accounting. Fair value hedge accounting and cash flow hedge accounting are applied to fixed and floating rate borrowings, respectively.

In the case of fair value hedge relationships, the re-measurement of the fixed rate borrowing is offset in the income statement by the movement in the fair value of the derivative up to the effective portion of hedged risk. In the case of cash flow hedging relationships, the change in fair value of the derivative is recognised directly in other comprehensive income. Amounts previously recognised directly in other comprehensive income are reclassified to the income statement, when the hedged risk impacts the income statement.

As at 31 March 2019, the Group keeps short dated floating rate financial assets on its balance sheet, while its debt is merely made of fixed rate bonds.

The Group has not implemented an active interest rate risk management policy. However under the supervision of the Executive Committee, it may enter into transactions in order to hedge its interest rate risk on a case-by-case basis according to market opportunities.

At 31 March 2019

(in € million)	Fixed rate	Floating rate	Total
Financial assets	201	3,473	3,674
Financial debt bearing interests	(1,122)	(196)	(1,318)
TOTAL POSITION BEFORE HEDGING	**(921)**	**3,277**	**2,356**
Hedging position	-	-	-
TOTAL POSITION AFTER HEDGING	**(921)**	**3,277**	**2,356**

At 31 March 2018

(in € million)	Fixed rate	Floating rate	Total
Financial assets	213	1,294	1,507
Financial debt bearing interests	(1,567)	(140)	(1,707)
TOTAL POSITION BEFORE HEDGING	**(1,354)**	**1,154**	**(200)**
Hedging position	-	-	-
TOTAL POSITION AFTER HEDGING	**(1,354)**	**1,154**	**(200)**

Sensitivity is analysed based on the Group's net cash position at 31 March 2019, assuming that it remains constant over one year.

In absence of interest rate derivatives, the effects of increases or decreases in market rates are symmetrical: a rise of 0.1% would increase the net interest income by €3 million while a fall of 0.1% would decrease it by €3 million.

28.4. Credit risk management

Credit risk is the risk that counterparty will not meet its payment obligations under financial instrument or customer contract, leading to a loss. The Group is exposed to credit risk on its operating activities (primarily for trade receivables and for contracts asset) and on its financing activities, including deposits, foreign currency hedging instruments and other financial instruments with banks and financial institutions.

Risk related to customers

The financial assets that are falling under the scope of IFRS 9 "Customer credit risk" are mainly concerning trade receivables (which are at short maturity) as well as contract assets under IFRS 15 (that have potentially longer maturities). The recognition model of the Expected Credit Losses (ECL) retained on these exposures is respectively the Simplified Approach "Lifetime Expected Credit Losses" for trade receivables and the general model that allows to estimate the risk within one year for contract assets, as long as there is no sign of significant degradation of customer credit risk. The Group believes that the risk of a counterpart failing to perform as contracted, which could have a significant impact on the Group's financial statements or results of operations, is limited because the Group seeks to ensure that customers generally have strong credit profiles or adequate dedicated financing to meet their project obligations, or can also be the subject of insurance policies taken out by the Group (see also Note 19). However, this mechanism of protection may become incomplete, uncertain or ineffective because of the duration of the Group's contract in a changing environment, particularly in emerging countries, leading to impairment losses determined considering a risk of non-recovery assessed on a case-by case basis.

Risk related to other financial assets

In addition to the recovery of assets held for sale, the Group's exposure to credit risk related to other financial assets, especially derivatives, arises from default of the counterpart, with a maximum exposure equal to the carrying amount of those instruments. The financial instruments are taken out with more than 30 different counterparties and the risk is therefore highly diluted, the largest exposure with one single counterparty (rated A2) being limited to €17 million.

28.5. Liquidity risk management

In addition to its available cash and cash equivalents, amounting to €3,432 million at 31 March 2019, the Group can access a €400 million revolving credit facility, maturing in June 2022, which is fully undrawn at March 2019.

This facility is subject to the ratio of total net debt to EBITDA:

- total net debt is defined as the total financial debt except finance lease obligations covered by financial assets directly associated to such obligations less cash and cash equivalents;
- the EBITDA is defined as earnings before financing expense, financing income, income taxes, amortisation and impairment charges on tangible and intangible assets less capital gain on disposal of investments.

This ratio should not exceed 2.5.

The financial covenant calculation is detailed below:

(in € million)	For the year ended 31 March 2019	For the year ended 31 March 2018(*)
EBITDA	542	435
Total net debt	(2,351)	232
TOTAL NET DEBT LEVERAGE	**(4.3)**	**0.5**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

The GAAP measure EBIT reconciles with non-GAAP measure EBITDA indicator, as follows:

(in € million)	At 31 March 2019	At 31 March 2018(*)
Earnings Before Interests and Taxes	**408**	**264**
Amortisation, Depreciation & Impairment	194	168
Capital G/L on Disposal of Investment	(60)	3
EBITDA	**542**	**435**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

Treasury Centralization

Credit risk from balances with banks and financial institutions is managed by Group treasury in accordance with the Group's policy.

The Group diversifies its cash investments in order to limit its counterparty risk. In addition to short term deposits with tier-one banks, the Group invested in euro money market funds qualified as "monetary" or "monetary short term" under the AMF classification. Cash investments are reviewed on a regular basis in accordance with Group procedures and in strict compliance with the eligibility criteria set out in IAS 7 and the AMF's recommendations.

The Group's parent company has access to some cash held by wholly-owned subsidiaries through the payment of dividends or pursuant to intercompany loan arrangements. However local constraints can delay or restrict this access. Furthermore, while the Group's parent company has the power to control decisions of subsidiaries of which it is the majority owner, its subsidiaries are distinct legal entities and their payment of dividends and granting of loans, advances and other payments to the parent company may be subject to legal or contractual restrictions, be contingent upon their earnings or be subject to business or other constraints. These limitations include local financial assistance rules and corporate benefit laws.

The Group's policy is to centralise liquidity of subsidiaries at the parent company's level when possible. Cash available in subsidiaries located in countries with local constraints delaying or restricting the Group's access to this cash was €72 million at 31 March 2019 and €88 million at 31 March 2018.

Future Cash Flow

The Group's objective is to maintain a strong liquidity, commensurate with the changes in working capital triggered by its long term activity.

The following tables show the remaining maturities of all financial assets and liabilities held at 31 March 2019 and 31 March 2018.

Planning data for future new assets and liabilities are not reported. Amounts in foreign currency are translated at the closing rate. The variable interest payments are calculated using the last interest rates available at the closing date. Assets and liabilities that can be repaid at any time are always assigned to the earliest possible time period.

Financial instruments held at 31 March 2019

Cash flow arising from instruments included in net cash/(debt) at 31 March 2019

	Carrying	2020		2021		2022-2024		2025 and thereafter	
(in € million)	amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
Other non-current assets	201	14	18	13	19	29	66	13	98
Other current financial assets	10	-	10	-	-	-	-	-	-
Cash and cash equivalents	3,432	(1)	3,432	-	-	-	-	-	-
Assets	**3,643**	**13**	**3,460**	**13**	**19**	**29**	**66**	**13**	**98**
Non-current borrowings	(89)	(9)	-	(8)	(2)	(12)	(27)	(4)	(60)
Non-current obligations under finance leases	(197)	-	-	-	(21)	-	(46)	-	(130)
Current borrowings	(1,013)	(38)	(1,013)	-	-	-	-	-	-
Current obligations under finance leases	(19)	-	(19)	-	-	-	-	-	-
Liabilities	**(1,318)**	**(47)**	**(1,032)**	**(8)**	**(23)**	**(12)**	**(73)**	**(4)**	**(190)**
NET CASH/(DEBT)	**2,325**	**(34)**	**2,428**	**5**	**(4)**	**17**	**(7)**	**9**	**(92)**

Cash flow arising from operating derivatives at 31 March 2019

	Carrying	2020		2021		2022-2024		2025 and thereafter	
(in € million)	amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
Other current operating assets	159	-	62	-	41	-	54	-	2
Assets	**159**	**-**	**62**	**-**	**41**	**-**	**54**	**-**	**2**
Other current operating liabilities	(202)	-	(90)	-	(56)	-	(51)	-	(5)
Liabilities	**(202)**	**-**	**(90)**	**-**	**(56)**	**-**	**(51)**	**-**	**(5)**
DERIVATIVES	**(43)**	**-**	**(28)**	**-**	**(15)**	**-**	**3**	**-**	**(3)**

Cash flow arising from instruments included in other financial assets and liabilities at 31 March 2019

(in € million)	Carrying amount	2020 Interests	2020 Repayment	2021 Interests	2021 Repayment	2022-2024 Interests	2022-2024 Repayment	2025 and thereafter Interests	2025 and thereafter Repayment
Non consolidated investments	64	-	-	-	-	-	-	-	64
Other non-current assets	41	-	-	-	-	-	-	-	41
Trade receivables	1,661	-	1,661	-	-	-	-	-	-
Other current operating assets	364	-	364	-	-	-	-	-	-
Assets	**2,130**	**-**	**2,025**	**-**	**-**	**-**	**-**	**-**	**105**
Trade payables	(1,751)	-	(1,751)	-	-	-	-	-	-
Other current operating liabilities	(613)	-	(613)	-	-	-	-	-	-
Liabilities	**(2,364)**	**-**	**(2,364)**	**-**	**-**	**-**	**-**	**-**	**-**
OTHER FINANCIAL ASSETS AND LIABILITIES	**(234)**	**-**	**(339)**	**-**	**-**	**-**	**-**	**-**	**105**

Financial instruments held at 31 March 2018

Cash flow arising from instruments included in net cash/(debt) at 31 March 2018

(in € million)	Carrying amount	2019 Interests	2019 Repayment	2020 Interests	2020 Repayment	2021-2023 Interests	2021-2023 Repayment	2024 and thereafter Interests	2024 and thereafter Repayment
Other non-current assets	213	77	17	14	17	33	59	22	120
Other current financial assets	8	-	8	-	-	-	-	-	-
Cash and cash equivalents	1,231	(2)	1,231	-	-	-	-	-	-
Assets	**1,452**	**75**	**1,256**	**14**	**17**	**33**	**59**	**22**	**120**
Non-current borrowings	(952)	(36)	-	(64)	(915)	(28)	(36)	-	-
Non-current obligations under finance leases	(212)	-	-	-	(19)	-	(21)	-	(172)
Current borrowings	(525)	(30)	(525)	-	-	-	-	-	-
Current obligations under finance leases	(18)	-	(18)	-	-	-	-	-	-
Liabilities	**(1,707)**	**(66)**	**(543)**	**(64)**	**(934)**	**(28)**	**(57)**	**-**	**(172)**
NET CASH/(DEBT)	**(255)**	**9**	**713**	**(50)**	**(917)**	**5**	**2**	**22**	**(52)**

Cash flow arising from operating derivatives at 31 March 2018

(in € million)	Carrying amount	2019 Interests	2019 Repayment	2020 Interests	2020 Repayment	2021-2023 Interests	2021-2023 Repayment	2024 and thereafter Interests	2024 and thereafter Repayment
Other current operating assets	298	-	166	-	63	-	66	-	3
Assets	**298**	**-**	**166**	**-**	**63**	**-**	**66**	**-**	**3**
Other current operating liabilities	(253)	-	(143)	-	(54)	-	(55)	-	(1)
Liabilities	**(253)**	**-**	**(143)**	**-**	**(54)**	**-**	**(55)**	**-**	**(1)**
DERIVATIVES	**45**	**-**	**23**	**-**	**9**	**-**	**11**	**-**	**2**

Cash flow arising from instruments included in other financial assets and liabilities at 31 March 2018

(in € million)	Carrying amount	2019 Interests	2019 Repayment	2020 Interests	2020 Repayment	2021-2023 Interests	2021-2023 Repayment	2024 and thereafter Interests	2024 and thereafter Repayment
Non consolidated investments	58	-	-	-	17	-	-	-	41
Other non-current assets	64	-	-	-	-	-	-	-	64
Trade receivables	1,772	-	1,772	-	-	-	-	-	-
Other current operating assets	495	-	495	-	-	-	-	-	-
Assets	**2,389**	**-**	**2,267**	**-**	**17**	**-**	**-**	**-**	**105**
Trade payables	(1,346)	-	(1,346)	-	-	-	-	-	-
Other current operating liabilities	(878)	-	(878)	-	-	-	-	-	-
Liabilities	**(2,224)**	**-**	**(2,224)**	**-**	**-**	**-**	**-**	**-**	**-**
OTHER FINANCIAL ASSETS AND LIABILITIES(*)	**165**	**-**	**43**	**-**	**17**	**-**	**-**	**-**	**105**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards (Note 2).

28.6. Commodity risk management

Most of commodities bought by the Group are quickly transformed and included into work-in-progress. As much as possible, the Group includes into customer contracts a customer price adjustment clause, so that the Group has a limited exposure to the variation of commodity prices.

Occasionally, the Group can hedge its exposure with commodity derivatives (copper, aluminum) of which the notional and the market values are not significant at 31 March 2019.

I. POST-EMPLOYMENT AND OTHER LONG-TERM DEFINED EMPLOYEE BENEFITS AND SHARE-BASED PAYMENTS

NOTE 29 • POST-EMPLOYMENT AND OTHER LONG-TERM DEFINED EMPLOYEE BENEFITS

The Group provides its employees with various types of post-employment benefits, such as pensions, retirement bonuses and medical care, and other long-term benefits, such as jubilee awards and deferred compensation schemes. The type of benefits offered to individual employees is related to local legal requirements as well as practices of the specific subsidiaries.

The Group's health care plans are generally contributory with participants' contributions adjusted annually.

Post-employment defined benefit plans

For single employer defined benefit plans, the Group uses the Projected Unit Credit Method to determine the present value of its obligations and the related current and past service costs/profits. This method considers the actuarial assumptions' best estimates (for example, the expected turnover, the expected future salary increase and the expected mortality).

Most defined benefit pension liabilities are funded through pension funds legally distinct from the entities constituting the Group. Plan assets related to funded plans are invested mainly in equity and debt securities. Other supplemental pension plans sponsored by the Group for certain employees are directly paid by the employer as they become due. Post-employment medical benefit plans are predominantly unfunded.

The Group periodically reviews plan assets and obligations. The effects of any change in actuarial assumptions together with the differences between forecast and actual experience are assessed. The Group recognises in other comprehensive income the full amount of any actuarial gains and losses as well as the effect of any asset ceiling.

The estimated cost of providing defined benefits to employees is accrued during the years in which the employees render services. In the income statement, the service cost is included in Earnings Before Interests and Taxes. The past service cost/profit and specific events impacts (*e.g.* curtailments and settlements) are recognised in other expense/income. Net interest on the net defined benefit liability (asset) and administration costs are included in financial income (expenses).

Post-employment defined contribution plans

For defined contribution plans, the Group pays contributions to independently administered funds at a fixed percentage of employees' pay. These contributions are recorded as operating expenses.

Other long-term employee benefits

The accounting method used when recognising obligations arising from other long-term employee benefits is similar to the method used for post-employment defined benefits, except that actuarial gains/losses are immediately recognised in full in "Other income/expenses" in the income statement.

The defined benefit obligation amounting to €1,044 million as at 31 March 2019 (see Note 29.2) is analysed as follows:

- several pension plans for €837 million;
- other post-employment benefits for €164 million which include mainly end-of-service benefits in France and Italy; and
- other long-term defined benefits for €43 million which mainly correspond to jubilees in France and Germany.

The reconciliation of funded status of the plans with assets and liabilities recognised in the balance sheet is as follows:

(in € million)	At 31 March 2019	At 31 March 2018
Defined benefit obligations	**(1,044)**	**(950)**
Fair value of plan assets	511	482
Unfunded status of the plans	**(533)**	**(468)**
Impact of asset ceiling	-	-
NET OF ACCRUED AND PREPAID BENEFIT COSTS AFTER ASSET CEILING	**(533)**	**(468)**
Of which:		
Accrued pension and other employee benefit costs	*(533)*	*(468)*

As detailed in this note, net provisions for post-employment benefits total €533 million, as at 31 March 2019, compared with €468 million, as at 31 March 2018. Movements over the period ended 31 March 2019 mainly arose from United Kingdom, Germany, Switzerland, the United States of America and France.

29.1. Description of the plans

Post-employment benefits are paid under defined contribution and defined benefit plans. The Group's only obligation under defined contribution plans is to pay fixed contributions into the funding vehicle. The payments are recognised when incurred in the income statement.

Defined benefit plans primarily relate to United Kingdom, Germany, and France. The specific characteristics (benefit formulas, funding policies and types of assets held) of the plans vary according to the regulations and laws in the country where the employees are located.

In the United Kingdom, there are three defined benefit pension plans covering different populations. Each of these are sections of the large UK Railways Pension Scheme and provide a pension in the form of an indexed annuity. Two of these plans are historical and were closed to new members as of 1 July 2013 and the third was closed to new members on 1 April 2016. New hires are ordinarily offered the opportunity to participate in a defined contribution Group pension plan ("GPP"), a group life insurance plan and an income replacement scheme.

In Germany, the plans provide coverage for pension, death and disability. In the past, the pension was accrued in the form of an annuity. The plans were deeply modified for future accruals in 2010 for the employees to remove most, particularly the higher risk, defined benefit pension plans. The plans continue to be accounted for as defined benefit plans under IAS 19R but with much lower risks for the company. With respect to employee contributions, these are remitted into defined contributions plans.

In France, defined benefit pension plans are mainly end-of-service benefits provided for under the terms of collective bargaining agreements and Group agreements.

In some countries, these commitments are covered in whole or in part by insurance contracts or pension funds. In this case, the commitments and assets are measured independently.

The fair value of plan assets is deducted from the Group's defined benefit obligation, as estimated using the projected unit credit method, in order to calculate the unfunded obligation to be covered by a provision, or the overfunded right to be recognized as an asset under specific requirements.

In the following tables, the "Other" zone represents mainly the United States of America, Sweden and Switzerland.

29.2. Defined benefit obligations

(in € million)	At 31 March 2019	United Kingdom	Euro zone	Other
Defined benefit obligations at beginning of year	**(950)**	**(426)**	**(431)**	**(93)**
Service cost	(33)	(9)	(14)	(10)
Plan participant contributions	(3)	(3)	-	-
Interest cost	(21)	(11)	(6)	(4)
Curtailments	(1)	(2)	1	-
Settlements	(1)	-	-	(1)
Actuarial gains (losses) – due to experience	(19)	(5)	(11)	(3)
Actuarial gains (losses) – due to changes in demographic assumptions	(2)	-	(2)	-
Actuarial gains (losses) – due to changes in financial assumptions	(43)	(21)	(19)	(3)
Benefits paid	46	15	26	5
Foreign currency translation and others	(17)	(9)	(1)	(7)
DEFINED BENEFIT OBLIGATIONS AT END OF YEAR	**(1,044)**	**(471)**	**(457)**	**(116)**
Of which:				
Funded schemes	*(816)*	*(471)*	*(270)*	*(75)*
Unfunded schemes	*(228)*	-	*(187)*	*(41)*

(in € million)	At 31 March 2018	United Kingdom	Euro zone	Other
Defined benefit obligations at beginning of year	**(995)**	**(453)**	**(449)**	**(93)**
Service cost	(39)	(14)	(16)	(9)
Plan participant contributions	(3)	(3)	-	-
Interest cost	(21)	(11)	(7)	(3)
Curtailments	1	1	-	-
Actuarial gains (losses) – due to experience	(12)	(8)	(1)	(3)
Actuarial gains (losses) – due to changes in demographic assumptions	14	13	-	1
Actuarial gains (losses) – due to changes in financial assumptions	44	28	16	-
Benefits paid	42	12	25	5
Foreign currency translation and others	19	9	1	9
DEFINED BENEFIT OBLIGATIONS AT END OF YEAR	**(950)**	**(426)**	**(431)**	**(93)**
Of which:				
Funded schemes	*(733)*	*(426)*	*(249)*	*(58)*
Unfunded schemes	*(217)*	-	*(182)*	*(35)*

29.3. Plan assets

As indicated in Note 29.1, for defined benefit plans, plan assets have been progressively built up by contributions from the employer and the employees, primarily in the United Kingdom, Germany, Switzerland and the United States of America.

(in € million)	At 31 March 2019	United Kingdom	Euro zone	Other
Fair value of plan assets at beginning of year	**482**	**363**	**72**	**47**
Interest income	11	9	1	1
Actuarial gains (losses) on assets due to experience	13	11	3	(1)
Company contributions	12	7	-	5
Plan participant contributions	3	3	-	-
Benefits paid from plan assets	(18)	(15)	-	(3)
Foreign currency translation and others	8	7	-	1
FAIR VALUE OF PLAN ASSETS AT END OF YEAR	**511**	**385**	**76**	**50**

(in € million)	At 31 March 2018	United Kingdom	Euro zone	Other
Fair value of plan assets at beginning of year	**469**	**351**	**72**	**46**
Interest income	11	9	1	1
Actuarial gains (losses) on assets due to experience	16	13	(1)	4
Company contributions	10	5	-	5
Plan participant contributions	3	3	-	-
Benefits paid from plan assets	(16)	(12)	-	(4)
Foreign currency translation and others	(11)	(6)	-	(5)
FAIR VALUE OF PLAN ASSETS AT END OF YEAR	**482**	**363**	**72**	**47**

29.4. Components of plan assets

(in € million)	At 31 March 2019	%	United Kingdom	Euro zone	Other
Equities	309	60.5%	70%	29%	34%
Bonds	181	35.4%	30%	65%	33%
Insurance contracts	4	0.8%	-	3%	4%
Other	17	3.3%	-	3%	29%
TOTAL	**511**	**100%**	**100%**	**100%**	**100%**

(in € million)	At 31 March 2018	%	United Kingdom	Euro zone	Other
Equities	291	60.5%	71%	28%	29%
Bonds	170	35.3%	29%	66%	38%
Insurance contracts	4	0.9%	-	3%	4%
Other	17	3.3%	-	3%	29%
TOTAL	**482**	**100%**	**100%**	**100%**	**100%**

An active market price exists for all plan assets except properties. Assets of each funded plan are managed by a dedicated investment committee in accordance with the scheme rules and local regulation. The Group has representatives on these committees and promotes simple and diversified investment strategies.

The aim is to limit investment risks to those necessary to fulfil the benefit commitment (asset and liability management). As a result, strategic allocation favours liquid assets and especially long bonds. As at 31 March 2019, plan assets do not include securities issued by the Group.

29.5. Assumptions (weighted average rates)

Actuarial valuations of the Group's benefit obligation have been made as at 31 March 2019 and 31 March 2018.

These valuations include:

- assumptions on staff turnover, mortality and salary increases;
- assumptions on retirement ages varying from 60 to 65 depending on the country and the applicable laws;
- discount rates used to determine the actuarial present value of the projected benefit obligations.

Actuarial assumptions used vary by type of plan and by country.

(in %)	At 31 March 2019	United Kingdom	Euro zone	Other
Discount rate	1.96	2.45	1.33	2.91
Rate of compensation increase	2.85	3.55	2.25	2.69

(in %)	At 31 March 2018	United Kingdom	Euro zone	Other
Discount rate	2.30	2.80	1.68	2.86
Rate of compensation increase	3.15	3.60	2.75	2.41

As of 31 March 2019, the weighted average durations of the defined benefit obligations are the following:

(in years)	At 31 March 2019	United Kingdom	Euro zone	Other
Weighted average duration	15	18	13	14

Discount rate

In accordance with IAS 19R principles, discount rates are set each year by reference to the market yields on high quality corporate bonds denominated in the relevant currency. In countries where there is no deep market in such bonds, discount rates are set by reference to the yields on government bonds. The required information is sourced from the Company's actuarial advisors and from market quotations and indices.

Rate of compensation increase

Compensation increase assumptions are determined at country level and reviewed centrally.

Assumptions related to the post-employment healthcare obligation

The healthcare trend rate is assumed to be 7.72% in the year ended 31 March 2019 and reduces thereafter to an ultimate rate of 4.49%.

Sensitivity analysis

A 25 bp increase or decrease in the main assumptions would have the following impacts on the defined benefit obligation:

(in € million)	At 31 March 2019
Impact of a 25 bp increase or decrease in the discount rate	(38)/+40
Impact of a 25 bp increase or decrease in the rate of compensation increase	+9/(8)

29.6. Analysis of post-employment and other long-term defined benefit expense

As at 31 March 2019, the benefit expense for the whole Group is the following:

(in € million)	Year ended 31 March 2019	United Kingdom	Euro zone	Other
Service cost	**(33)**	**(9)**	**(14)**	**(10)**
Defined contribution plans	(67)	(7)	(48)	(12)
Curtailments/settlements	(1)	(2)	1	-
EBIT impact	**(101)**	**(18)**	**(61)**	**(22)**
Financial income (expense)	**(10)**	**(2)**	**(5)**	**(3)**
TOTAL BENEFIT EXPENSE	**(111)**	**(20)**	**(66)**	**(25)**

(in € million)	Year ended 31 March 2018	United Kingdom	Euro zone	Other
Service cost	**(39)**	**(14)**	**(16)**	**(9)**
Defined contribution plans	(62)	(5)	(47)	(10)
Curtailments/settlements	1	1	-	-
EBIT impact	**(100)**	**(18)**	**(63)**	**(19)**
Financial income (expense)	**(13)**	**(4)**	**(6)**	**(3)**
TOTAL BENEFIT EXPENSE	**(113)**	**(22)**	**(69)**	**(22)**

29.7. Cash flows

In accordance with local practice and regulations, the Company pays contributions to the funded schemes it sponsors and benefits to the members of unfunded plans.

Total cash spent for defined benefit plans in the year ended 31 March 2019 amounted to €27 million and covers both regular contributions for accruing service and recovery contributions in case of funding shortfall.

For defined benefit plans, the expected cash outflows are the following:

- €26 million in the year ending 31 March 2020;
- €25 million in the year ending 31 March 2021;
- €25 million in the year ending 31 March 2022.

Total cash spent for defined contribution plans in the year ended 31 March 2019 amounted to €67 million.

For defined contribution plans, according to the Company's best estimate, payments should remain stable over the next years, at constant scope and exchange rates.

NOTE 30 • SHARE-BASED PAYMENTS

The Group issues equity-settled and cash-settled share-based payments to certain employees.

Equity-settled share-based payments

Equity-settled share-based payments are measured at fair value at the grant date (excluding the effect of non-market-based conditions) using the Black-Scholes model for plans issued from 2009 and the Monte Carlo model for plans issued from 2016. The cumulative recognised expense is based on the fair value at grant date and on the estimated number of shares that will eventually vest (including the effect of non-market-based vesting conditions). It is recorded in Earnings Before Interests and Taxes throughout the vesting period with a counterpart in equity.

At the end of each reporting period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting conditions. It recognises the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity.

Cash-settled share-based payments

For cash-settled share-based payments, a liability equal to the portion of the goods or services rendered is recognised at the current fair value. The fair value is remeasured at each balance-sheet date and at the date of settlement, with any changes recognised in the income statement.

The Group may also provide employees with the ability to purchase the Group's ordinary shares at a discounted price compared to that of the current market value. In that case, the Group records an expense based on the discount given and its estimate of the shares expected to vest.

30.1. Stock options and performance shares

KEY CHARACTERISTICS

	Plans issued by Shareholders Meeting on 22 June 2010							
	Plan n°13	Plan n°13	Plan n°14	Plan n°14	Plan n°15	Plan n°15	Plan n°16	Plan n°16
	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares
Grant date	13/12/2010	13/12/2010	04/10/2011	04/10/2011	10/12/2012	10/12/2012	01/10/2013	01/10/2013
Exercise period	13/12/2013 12/12/2018	N/A	04/10/2014 03/10/2019	N/A	10/12/2015 09/12/2020	N/A	03/10/2016 30/09/2021	N/A
Number of beneficiaries	528	1,716	514	1,832	538	1,763	292	1,814
Adjusted number granted (1)	1,419,767	740,860	1,573,723	804,040	1,508,777	883,140	771,997	1,130,791
Adjusted number exercised since the origin	840,501	506,330	784,119	478,149	529,278	391,458	519,353	1,022,311
Adjusted number cancelled since the origin	579,266	234,530	638,291	325,891	806,630	491,682	72,625	108,480
Adjusted number outstanding at 31 March 2019	-	-	151,313	-	172,869	-	180,019	-
inc. to the present members of the Executive Committee	-	-	3,702	-	27,781	-	38,503	-
Adjusted exercise price (2) *(in €)*	28.83	N/A	22.96	N/A	24.10	N/A	23.44	N/A
Fair value at grant date *(in €)*	7.59	31.35	3.14	19.77	5.80	26.70	3.84	22.62

(1) The number of options and performance shares and the exercise price of options have been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.
(2) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day on which the options were granted by the Board (neither discount nor surcharge) and adjusted where necessary due to share buy back operation.

	Plans issued by Shareholders Meeting on 18 December 2015				Plan issued by Shareholders Meeting on 17 July 2018
	PSP 2016	We are Alstom	PSP 2017	PSP 2018	PSP 2019
	Performance shares	Free shares	Performance shares	Performance shares	Performance shares
Grant date	17/03/2016	23/09/2016	17/03/2017	13/03/2018	12/03/2019
Exercise period	N/A	N/A	N/A	N/A	N/A
Number of beneficiaries	737	27,480	755	732	820
Adjusted number granted (1)	957,975	824,400	1,022,400	1,016,025	1,080,150
Adjusted number exercised since the origin	1,050	638,640	-	-	-
Adjusted number cancelled since the origin	201,942	185,760	110,495	25,875	4,500
Adjusted number outstanding at 31 March 2019	754,983	-	911,905	990,150	1,075,650
inc. to the present members of the Executive Committee	130,500	-	183,000	205,125	205,500
Adjusted exercise price (2) *(in €)*	N/A	N/A	N/A	N/A	N/A
Fair value at grant date *(in €)*	17.17	23.39	21.74	25.59	28.92

(1) The number of options and performance shares and the exercise price of options have been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.
(2) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day on which the options were granted by the Board (neither discount nor surcharge) and adjusted where necessary due to share buy back operation.

At 31 March 2019, stock options granted by plans 13, 14, 15 and 16 are fully vested. For plans 13, 14, 15 and 16, options expire five years after the end of the vesting period. For plan 13, the exercise period expired in December 2018.

The long term incentive plans set up since 2007 combine the allocation of stock options with the allocation of performance shares, except the latter since 2016 that allocate only performance shares.

The grant of these instruments is conditioned by the satisfaction of performance indicators.

LTI plan 15 granted on 10 December 2012

The total number of options exercisable and performance shares delivered was depending on the Group's operating margin and the free cash flow for the fiscal years ended 31 March 2013, 31 March 2014 and 31 March 2015.

Based on consolidated financial statements for the fiscal years ended 31 March 2013 and 31 March 2014, the performance conditions were achieved for 30% of the initial grant of the LTIP15 options and performance shares.

In the context of the sale of the Energy activities, the Board of Directors considered that the performance conditions set for fiscal year ended 31 March 2015, weighting 20% of the initial grant, were deemed fully satisfied subject to and upon the completion of the transaction. As a result, 50% of the options were exercisable under this plan and 50% of performance shares have been delivered. 50% of options and performance shares have been cancelled.

LTI plan 16 granted on 1 October 2013

In the context of Energy transaction, the Board of Directors has considered that the performance conditions set for fiscal years ended 31 March 2015 and 31 March 2016 were deemed fully satisfied subject to and upon the completion of the transaction.

As a consequence, all options will be exercisable under this plan and all performance shares have been delivered on 2 October 2017.

In addition, for both plans 15 & 16, the presence condition has been waived for the beneficiaries having left the Group as part of the Energy transaction on the condition they are employees of Alstom Group as at the date of the closing of the transaction. This triggered the stock option and performance plans expense acceleration recorded in Income statement of discontinued operations.

PSP 2016 granted on 17 March 2016

This plan has been approved by the Board of Directors of 17 March 2016. It allocates 957,975 performance shares to 737 beneficiaries.

The final allocation depends on two internal performance conditions based on Group adjusted EBIT margin and Free Cash Flow for fiscal years ended 31 March 2017, 31 March 2018, and 31 March 2019, and one external condition linked to the performance of the Company's share. The final delivery will take place five days after the publication of the 31 March 2019 results. Based on the performance conditions of the years ended 31 March 2017 and 31 March 2018, 34.40% of the initial grant is achieved and 10.60% of the performance shares have been cancelled.

2016 free share plan

On 23 September 2016, the Board of Directors approved the grant of a worldwide free share Plan named "We are Alstom". The 30-shares-award concerns all employees within Alstom on 30 June 2016, on the condition they are still employees of Alstom Group at the end of a 2-years-vesting period, representing a maximum of 824,400 new shares of €7 of nominal value each to be issued in favor of a maximum of 27,480 beneficiaries.

It was also decided that in the countries where, for tax and/or legal purpose, the granting of free shares would be difficult or not possible, a cash equivalent bonus will be granted to employees.

On 25 September 2018, 638,610 free shares have been delivered to 21,287 employees in sixteen countries. In the other countries the cash equivalent bonus has been paid based on the value of the shares at the delivery date.

PSP 2017 granted on 17 March 2017

This plan has been agreed by the Board of Directors of 17 March 2017. It allocates 1,022,400 performance shares to 755 beneficiaries.

The final allocation depends on two internal performance conditions based on Group adjusted EBIT margin and Free Cash Flow for fiscal years ended 31 March 2018, 31 March 2019, and 31 March 2020, and one external condition linked to the performance of the Company's share.

The final delivery will take place five days after the communication of the 31 March 2020 results. Based on the performance conditions of the year ended 31 March 2018, 17.13% of the initial grant is achieved and 2.87% of the performance shares have been cancelled.

PSP 2018 granted on 13 March 2018

This plan has been agreed by the Board of Directors of 13 March 2018. It allocates 1,016,025 performance shares to 732 beneficiaries.

The final allocation depends on one internal performance condition based on Group adjusted EBIT margin for fiscal years ended 31 March 2021, and one external condition linked to the performance of the Company's share. The final delivery will take place five days after the publication of the 31 March 2021 results.

PSP 2019 granted on 12 March 2019

This plan has been agreed by the Board of Directors of 12 March 2019. It allocates 1,080,150 performance shares to 820 beneficiaries.

The final allocation depends on two internal performance condition based on Group adjusted EBIT margin and cash conversion rate for fiscal years ended 31 March 2022, and one external condition linked to the performance of the Company's share. The final delivery will take place at the latest twenty days after the publication of the 31 March 2022 results.

The number of Performance Shares will be determined as follows:

	Adjusted Ebit Margin 2021/22		
Percentage of granted shares subject to this condition	40%		
% of granted shares to be delivered upon objectives realisation	≤ 7%	= 7.9%	≥ 8.5%
	0%	66.67%	100%
	Linear from 0% up to 100%		

	Measured Cash Conversion ratio/Budget Cash Conversion ratio for FY 2021/22					
Percentage of granted shares subject to this condition	20%					
% of granted shares to be delivered upon objectives realisation	Actual conversion ratio < Budget -13.5 points (B-13.5)	(B-13.5) ≤ Actual Conversion ratio < (B-12)	(…)	(B-1.5) ≤ Actual Conversion ratio < Budget	Actual conversion ratio = Budget	Actual conversion ratio ≥ Budget +15 points (B+15)
	0%	6.67%		60%	66.67%	100%
	Acquisition by thresholds from 0% up to 66.67% and by linear interpolation from 66.67% up to 100%					

	TSR Alstom/TSR Index						
Percentage of granted shares subject to this condition	40%						
% of granted shares to be delivered upon objectives realisation	TSR Alstom < 96% TSR Index	96% ≤ TSR Alstom < 97% TSR Index	97% ≤ TSR Alstom < 98% TSR Index	98% ≤ TSR Alstom < 99% TSR Index	99% ≤ TSR Alstom < 100% TSR Index	TSR Alstom = TSR Index	TSR Alstom ≥ 120% TSR Index
	0%	13.33%	26.67%	40%	53.33%	66.67%	100%
	Acquisition by thresholds from 0% up to 66.67% and by linear interpolation from 66.67% up to 100%						

Movements

	Number of options	Weighted average exercise price per share *(in €)*	Number of performance shares
Outstanding at 31 March 2017	**4,757,401**	**37.90**	**3,774,378**
Granted (1)	-	0.00	1,016,025
Exercised	(1,460,920)	25.08	(1,020,164)
Cancelled	(1,958,010)	55.94	(126,292)
Outstanding at 31 March 2018	**1,338,471**	**25.52**	**3,643,947**
Granted (2)	-	0.00	1,080,150
Exercised	(723,167)	26.46	(638,610)
Cancelled	(111,103)	28.83	(352,799)
OUTSTANDING AT 31 MARCH 2019	**504,201**	**23.52**	**3,732,688**
of which exercisable	*504,201*		*N/A*

(1) Includes 1,016,025 free shares granted through PSP 2018.
(2) Includes 1,080,150 free shares granted through PSP 2019.

Valuation

	Plan n°13	Plan n°13	Plan n°14	Plan n°14	Plan n°15	Plan n°15	Plan n°16	Plan n°16
	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares
Grant date	13/12/2010	13/12/2010	04/10/2011	04/10/2011	10/12/2012	10/12/2012	01/10/2013	01/10/2013
Expected life *(in years)*	3.5	2.5 or 4.0	4.0	2.5 or 4.0	4.0	2.5 or 4.0	3.0	4.0
End of vesting period	12/12/2013	31/05/2013 or 12/12/2014	03/10/2014	31/05/2014 or 03/10/2015	09/12/2015	31/05/2015 or 09/12/2016	30/09/2016	30/09/2017
Adjusted exercise price(*) *(in €)*	28.83	N/A	22.96	N/A	24.10	N/A	23.44	N/A
Share price at grant date *(in €)*	35.40	35.40	23.82	23.82	29.77	29.77	26.33	26.33
Volatility	31%	N/A	31%	N/A	30%	N/A	28%	N/A
Risk free interest rate	1.8%	2.0%	1.5%	1.5%	0.5%	0.5%	0.9%	0.9%
Dividend yield	3.1%	3.1%	5.0%	5.0%	3.4%	3.4%	3.8%	3.8%

(*) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day of which the options were granted by the Board (no discount or surcharge) and adjusted, where necessary, due to share buyback operation.

	PSP 2016	We are Alstom	PSP 2017	PSP 2018	PSP 2019
	Performance shares	Free shares	Performance shares	Performance shares	Performance shares
Grant date	17/03/2016	23/09/2016	17/03/2017	13/03/2018	12/03/2019
Expected life *(in years)*	3.2	2.0	3.2	3.2	3.2
End of vesting period	17/05/2019	23/09/2018	17/05/2020	13/05/2021	12/05/2021
Adjusted exercise price(*) *(in €)*	N/A	N/A	N/A	N/A	N/A
Share price at grant date *(in €)*	21.84	24.00	26.56	34.19	37.75
Volatility	23%	N/A	22%	20%	19%
Risk free interest rate	(0.3)%	(0.6)%	(0.1)%	(0.2)%	(0.3)%
Dividend yield	3.8%	1.3%	1.5%	1.5%	1.5%

(*) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day of which the options were granted by the Board (no discount or surcharge) and adjusted, where necessary, due to share buyback operation.

The option valuation method follows a Black & Scholes model for plans, 13, 14, 15, 16, and the plan "We are Alstom" as well as Monte Carlo model for PSP 2016, PSP 2017, PSP 2018, and PSP 2019, with exercise of the options anticipated and spread over the exercise period on a straight-line basis.

The volatility factor applied is an average of CAC 40 comparable companies' volatility at the grant date for plans 13 to 16, and Alstom's volatility for the plans since PSP 2016.

The Group booked a total expense of €22 million, of which €2 million cash settled, for the year ended 31 March 2019 (to be compared to €20 million for the year ended 31 March 2018).

The Board of Directors is committed, in the event of a major change in the Group's strategy or structure, or at the time of implementing new accounting standards to adapting these performance conditions to new issues highlighted for the coming years, both in their nature and in the levels of results to be achieved, while maintaining a high level of demand.

NOTE 31. EMPLOYEE BENEFIT EXPENSE AND HEADCOUNT

In the following figures, staff of joint-operations entities are integrated in fully, staff of joint-ventures and associates are not considered.

	Year ended	
(in € million)	31 March 2019	31 March 2018
Wages and salaries	1,979	1,867
Social charges	430	415
Post-employment and other long-term benefit expense (see Note 29)	111	113
Share-based payment expense (see Note 30)	22	20
TOTAL EMPLOYEE BENEFIT EXPENSE	**2,542**	**2,415**

	Year ended	
	31 March 2019	31 March 2018
Staff of consolidated companies at year end		
Managers, engineers and professionals	19,022	17,927
Other employees	17,248	16,539
HEADCOUNT	**36,270**	**34,466**

	Year ended	
	31 March 2019	31 March 2018
Average staff of consolidated companies over the period		
Managers, engineers and professionals	18,475	17,374
Other employees	16,894	16,612
HEADCOUNT	**35,369**	**33,986**

J. CONTINGENT LIABILITIES AND DISPUTES

Commitments arising from execution of operations controlled by the Group

In the ordinary course of business, the Group is committed to fulfil various types of obligations arising from customer contracts (among which full performance and warranty obligations). Obligations may also arise from leases and regulations in respect of tax, custom duties, environment, health and safety. These obligations may or may not be guaranteed by bonds issued by banks or insurance companies.

As the Group is in a position to control the execution of these obligations, a liability only arises if an obligating event (such as a dispute or a late completion) has occurred and makes it likely that an outflow of resources will occur.

When the liability is considered as only possible but not probable or, when probable, cannot be reliably measured, it is disclosed as a contingent liability.

When the liability is considered as probable and can be reliably measured, the impact on the financial statements is the following:

- if the additional liability is directly related to the execution of a customer contract in progress, the estimated gross margin at completion of the contract is reassessed; the cumulated margin recognised to date based on the percentage of completion and the accrual for future contract loss, if any, are adjusted accordingly;
- if the additional liability is not directly related to a contract in progress, a liability is immediately recognised on the balance sheet.

The contractual obligations of subcontractors towards the Group are of the same nature as those of the Group towards its customers. They may be secured by the same type of guarantees as those provided to the Group's customers.

No contingent asset is disclosed when the likelihood of the obligation of the third party remains remote or possible. A contingent asset is disclosed only when the obligation becomes probable. Any additional income resulting from a third party obligation is taken into account only when it becomes virtually certain.

Commitments arising from execution of operations not wholly within the control of the Group

Obligations towards third parties may arise from on-going legal proceedings, credit guarantees covering the financial obligations of third parties in cases where the Group is the vendor, and indemnification guarantees issued in connection with disposals of business entities.

In case of legal proceedings, a contingent liability is disclosed when the liability is considered as only possible but not probable, or, when probable, cannot be reliably measured. In case of commitments arising from guarantees issued, contingent liabilities are disclosed as soon as guarantees have been delivered and as long as they have not matured.

A provision is recorded if the obligation is considered as probable and can be reliably measured. Contingent assets arising from legal proceedings or guarantees delivered by third parties are only disclosed when they become probable.

NOTE 32 • CONTINGENT LIABILITIES

Commercial obligations

Contractual obligations of the Group towards its customers may be guaranteed by bank bonds or insurance bonds. Bank and insurance bonds may guarantee liabilities already recorded on the balance sheet as well as contingent liabilities.

To issue these bonds, the Group relies on both uncommitted bilateral lines in numerous countries and a €3 billion Committed Bilateral Bonding Facility Agreement ("CBBGFA") with five tier one banks allowing issuance until 2 November 2020 of bonds with tenors up to 7 years. This bilateral line contains a change of control clause, which may result in the program being suspended, in the obligation to procure new bonds to replaces outstanding bonds or to provide cash collateral, as well as early reimbursement of the other debts of the Group, as a result of their cross-default or cross-acceleration provisions.

As at 31 March 2019, the total outstanding bonding guarantees related to contracts from continuing operations, issued by banks or insurance companies, amounted to €8.8 billion (€8.5 billion at 31 March 2018).

The available amount under the Committed Bilateral Bonding Guarantee Facility Agreement at 31 March 2019 amounts to €1.2 billion (€1.0 billion at 31 March 2018). The Committed Bilateral Bonding Guarantee Facility Agreement includes a financial covenant (leverage ratio) based on consolidated figures of the Group and consistent with the financial covenant of the revolving credit facility.

The key Group indicators used to calculate the financial covenants are detailed in Note 28.5.

NOTE 33 • DISPUTES

As a preliminary remark, it shall be noted that, by taking over Alstom's Energy Businesses in November 2015, General Electric undertook to assume all risks and liabilities exclusively or predominantly associated with said businesses and in a symmetrical way, Alstom undertook to keep all risks and liabilities associated with the non-transferred business. Cross-indemnification for a duration of 30 years and asset reallocation ("wrong pocket") mechanisms have been established to ensure that, on the one hand, assets and liabilities associated with the Energy businesses being sold are indeed transferred to General Electric and on the other hand, assets and liabilities not associated with such businesses are borne by Alstom. As a result, the consequences of litigation matters that were on-going at the time of the sale and associated with these transferred activities are taken over by General Electric. Indemnity provisions protect Alstom in case of third-party claims directed at Alstom and relating to the transferred activities. For this reason and since Alstom no longer manages these litigation matters, Alstom is ceasing to include them in this section.

Disputes in the Group's ordinary course of business

The Group is engaged in several legal proceedings, mostly contract-related disputes that have arisen in the ordinary course of business. These disputes, often involving claims for contract delays or additional work, are common in the areas in which the Group operates, particularly for large long-term projects. In some cases, the amounts, which may be significant, are claimed against the Group, sometimes jointly with its consortium partners.

In some proceedings the amount claimed is not specified at the beginning of the proceedings. Amounts retained in respect of these litigations are taken into account in the estimate of margin at completion in case of contracts in progress or included in provisions and other current liabilities in case of completed contracts when considered as reliable estimates of probable liabilities. Actual costs incurred may exceed the amount of initial estimates because of a number of factors including the inherent uncertainties of the outcome of litigation.

Other disputes

Asbestos

Some of the Group's subsidiaries are subject to civil proceedings in relation to the use of asbestos in France essentially and in Italy, Spain and the United Kingdom. In France, these proceedings are initiated by certain employees or former employees suffering from an occupational disease in relation to asbestos with the aim of obtaining a court decision allowing them to obtain a supplementary compensation from the French Social Security funds. In addition employees and former employees of the Group not suffering from an asbestos related occupational disease have started lawsuits before the French courts with the aim of obtaining compensation for damages in relation to their alleged exposure to asbestos, including the specific anxiety damage.

The Group believes that the cases where it may be required to bear the financial consequences of such proceedings do not represent a material exposure. While the outcome of the existing asbestos-related cases cannot be predicted with reasonable certainty, the Group believes that these cases would not have any material adverse effect on its financial condition.

Alleged anti-competitive activities

Transportation activities in Brazil

In July 2013, the Brazilian Competition Authority ("CADE") raided a number of companies involved in transportation activities in Brazil, including the subsidiary of Alstom, following allegations of anti-competitive practices and illegal payments. After a preliminary investigation stage, CADE notified in March 2014 the opening of an administrative procedure against several companies, of which the Alstom's subsidiary in Brazil, and certain current and former employees of the Group. Alstom is cooperating with CADE. In case of proven anti-competitive practices, possible sanctions include fines, criminal charges and a temporary exclusion from public contracts. Civil damages are also possible. Following the opening phase, this procedure has continued with the phase of production of evidence. The hearing phase took place from January to March 2016, with the deposition of current and former employees of the Group as well as the questioning of witnesses. CADE has actively asserted its positions in this phase of the proceedings. The final report of the Superintendent General of CADE was issued in December 2018 and recommended the imposition of fines against Alstom's subsidiary in Brazil and several employees, together with other companies and their respective employees. If the CADE tribunal confirms this recommendation as a next procedural step, it will decide on the corresponding fines level. Alstom's subsidiary in Brazil is preparing its defense for this next phase. In parallel to this main case opened by CADE only in relation to entities and individuals formally notified when launching the proceedings in 2014, CADE launched in the Spring of 2018 formal notifications against individuals who had not been notified yet, mainly foreign individuals not residing in Brazil. The proceedings against these individuals are part of a second phase of the case. The CADE tribunal decision is expected in Summer of 2019 and can be subject to appeal. Current and former employees of Alstom are also subject to criminal proceedings initiated by the public prosecutor of the state of Sao Paulo in connection with some of the Transport projects subject to CADE procedure.

In December 2014, the public prosecutor of the state of Sao Paulo also initiated a lawsuit against Alstom's subsidiary in Brazil, along with a number of other companies, related to alleged anti-competitive practices regarding the first phase of a train maintenance project, which is also subject to administrative proceedings since 2013. In the last quarter of 2016, this Alstom subsidiary in Brazil, along with a number of other companies, faced the opening of another lawsuit by the public prosecutor of the state of Sao Paulo related to alleged anti-competitive practices regarding a second phase of the said train maintenance project. In case of proven illicit practices, possible sanctions can include the cancellation of the relevant contracts, the payment of damage compensation, the payment of punitive damages and/or the dissolution of the Brazilian companies involved.

Alleged illegal payments

Certain companies and former employees of the Group are currently being investigated and/or subject to procedures, by judicial or administrative authorities (including in Brazil, in Hungary and in France) or international financial institutions with respect to alleged illegal payments in certain countries.

With respect to these matters, the Group is cooperating with the concerned authorities or institutions. These investigations or procedures may result in criminal sanctions, including fines which may be significant, exclusion of Group subsidiaries from tenders and third-party actions.

The Prosecutor of the State of Sao Paulo launched in May 2014 an action against a Group's subsidiary in Brazil, along with a number of other companies, for a total amount asserted against all companies of BRL2.5 billion (approximately €570 million) excluding interests and possible damages in connection with a transportation project. The Group's subsidiary is actively defending itself against this action.

In the United Kingdom, the Serious Fraud Office (SFO) began investigations in 2010. The SFO opened during fiscal year 2014/15 three criminal prosecutions against entities of the Group and certain current and past employees of the Group in connection with transportation projects located in Poland, Tunisia, India and Hungary, and with an energy project located in Lithuania that is no longer handled by Alstom. In March 2016, the SFO announced that it was pressing charges against a seventh individual in its investigation. Following a shift in the procedural calendar, the trial phase for the project in Hungary took place during the summer of 2017 and could not be concluded. It started again in September 2018 and concluded on 29 November 2018. At the Southwark Crown Court in London, Alstom Network (UK) Ltd was acquitted, by a Jury, of conspiracies to corrupt in Hungary. The trial phase for the other transportation projects took place at the beginning of 2018 and concluded on 10 April 2018. At the Southwark Crown Court in London, Alstom Network (UK) Ltd was acquitted, by a Jury, of conspiracies to corrupt in India and Poland. It was convicted on a single count of a conspiracy to corrupt in Tunisia but has lodged an appeal against this conviction. A financial penalty in relation to Tunisia has not been determined yet. It follows that should the fine be set before the appeal and should the appeal against conviction succeed, the financial penalty will be returned to the company.

Budapest metro

In 2006, Alstom was awarded by BKV a contract for the delivery of metros for two lines in the city of Budapest. During the execution of the project, Alstom experienced delays mostly related to technical change requests from BKV and the refusal by the Hungarian Authority "NKH" to deliver the final train homologation in 2010 (in August 2007, NKH granted a Preliminary Type License). On 19 October 2010 BKV terminated the contract and called the bank guarantees. In July 2011 the parties agreed the re-entry into force of the contract and the suspension of the arbitration procedure initiated by Alstom in January 2011. The final train homologation was obtained in July 2012. The arbitration proceedings resumed on 17 December 2012 and during the phase of assessments of damages by the parties, an expert was appointed by the arbitral tribunal. The expert issued preliminary findings in 2017 and the parties have submitted their responses to these findings for further consideration by the expert. An additional expert report was produced in September 2018, which was further commented by the parties. The parties have exchanged in February and March 2019 their final summary memorials. Following a final hearing held on 18 April 2019, the arbitral tribunal has indicated that it expects to render an award within 30 days. Earlier in April 2019, Alstom was informed that in connection with a local investigation relayed by the Hungarian press about alleged bribery relating to the same project as the one subject to the arbitration proceedings, four individuals including two former Alstom managers were indicted by the Central Chief Prosecution Office.

CR-1 Marmaray railway infrastructure – Turkey

In March 2007, the Turkish Ministry of Transport (DLH) awarded the contract to upgrade approximately 75 km of railway infrastructure in the Istanbul region, known as the "Marmaray Commuter Rail Project (CR-1)" to the consortium Alstom Dogus Marubeni (AMD), of which Alstom Transport's main French subsidiary is a member. This project, which included works on the transcontinental railway tunnel under the Bosphorus, has undergone significant delays mainly due to difficulties for the DLH to make the construction site available. Thus, the AMD consortium terminated the contract in 2010. This termination was challenged by DLH, who thereafter called the bank guarantees issued by the consortium up to an amount of approximately €80 million. Following injunctions, the payment of such bank guarantees was forbidden and the AMD consortium immediately initiated an arbitration procedure to resolve the substantive issues. The arbitral tribunal has decided in December 2014 that the contract stands as terminated by virtue of Turkish law and has authorised the parties to submit their claims for compensation of the damages arising from such termination. Following this decision on the merits, DLH made renewed attempts in 2015 to obtain payment of the bank guarantees but defense proceedings by the AMD consortium have enabled so far to reject these payment requests.

In the arbitration procedure, the phase of assessment of damages is over. Hearings took place in October 2017 and post-hearing submissions were exchanged in February 2018. In May 2018, the arbitral tribunal requested further submissions from the parties to clarify certain claims and the parties exchanged their submissions until July 2018. Given the complexity of the case, the finalization of the partial final award on quantum has been delayed and is now expected during the second quarter of 2019, with a decision on auxiliary topics such as legal costs or interests being part of a subsequent final award. The main next step will therefore be the issuance of the arbitral award on the quantum.

Also, through arbitration request notified on 29 September 2015, Marubeni Corporation launched proceedings against Alstom Transport SA taken as consortium leader in order to be compensated for the consequences of the termination of the contract with AMD. In a similar fashion, through arbitration request issued on 15 March 2016, the other consortium member Dogus launched proceedings against Alstom Transport SA with similar demands and a request to have the disputes between consortium members consolidated in a single case. Alstom Transport SA is rejecting these compensation requests and is defending itself in these proceedings between consortium members which, while having gone through a consolidation in a single case, have however been suspended by the arbitral tribunal pending the outcome of the main arbitral proceedings between AMD and DLH. In October 2018, Dogus applied for interim measures to clarify certain aspects of the consortium agreement and this request was rejected by the arbitral tribunal.

Regional Minuetto trains & high-speed Pendolino trains – Italy

Alstom Transport's subsidiary in Italy is involved in two litigation proceedings with the Italian railway company Trenitalia. One is related to a supply contract of regional Minuetto trains awarded in 2001 (the "Minuetto case"), and the other to a supply contract of high-speed Pendolino trains awarded in 2004 (the "Pendolino case"). Each of these contracts has undergone technical issues and delays leading the Trenitalia company to apply delay and technical penalties and, consequently, to withhold payments. Since the parties dispute certain technical matters as well as the causes and responsibilities of the delays, the matter was brought before Italian courts in 2010 and 2011 respectively. In the Minuetto case, the technical expertise report has been released and Alstom has challenged its contents with amendment requests. The technical expert submitted his final report in April 2017 and certain amendment requests were taken into account. The parties have exchanged the final summary memorials, and the next step is now the decision of the tribunal. In the Pendolino case, the technical expertise report was released and Alstom has obtained certain corrections following its challenge on some of the conclusions of the report. After the closing of the expertise phase the proceedings had continued their path on the legal aspects of the dispute. The tribunal rendered in March 2019 a decision acknowledging that a significant part of the delays was not attributable to Alstom and therefore reduced a large portion of Trenitalia's delay damage claims. The tribunal also rejected the reliability penalties claimed by Trenitalia while accepting certain of its residual damage compensation requests. Finally, the tribunal accepted Alstom's claims linked to contract price adjustment formula while rejecting some of its other cost compensation claims. If there is no appeal, the decision will become final upon expiry of the appeal period, which ends on 7 October 2019.

Saturno

Following a dispute within a consortium involving Alstom's subsidiary in Italy and three other Italian companies, the arbitral tribunal constituted to resolve the matter has rendered in August 2016 a decision against Alstom by awarding €22 million of damage compensation to the other consortium members. Alstom's subsidiary strongly contests this decision and considers that it should be able to avoid its enforcement and thus prevent any damage compensation payment. On 30 November 2016, Alstom's subsidiary filed a motion in the Court of Appeals of Milan to obtain the cancellation of the arbitral award. On 1 December 2016, Alstom's subsidiary filed an *ex parte* motion for injunctive relief to obtain the suspension of the arbitral award pending the outcome of the appeal proceedings, which was temporarily accepted by the Court. After a phase of hearings in contradictory proceedings on the request for suspension of the arbitral award, the Court of Appeals of Milan decided on 3 March 2017 in favor of Alstom's subsidiary by confirming definitively the suspension of this arbitral decision pending the outcome of the proceedings relating to the cancellation of such decision. The Court of Appeals of Milan ruled on the merits in March 2019 in favour of the Alstom's subsidiary and cancelled the arbitral award of August 2016 including the €22 million of damage compensation. If there is no appeal, the decision of the Court of Appeals of Milan will become final after the expiry of the appeal period, which ends on 22 October 2019.

Jerusalem LRT

On the Jerusalem light rail tramway project, a dispute started in 2009 between the Concessionaire CityPass and the State of Israel to ascertain responsibilities for certain project delays and extra costs. Alstom's subsidiary in charge of the project is involved in the dispute in its capacity as EPC Contractor. The resolution of this dispute was initially handled through some form of dispute review board with two arbitrators reviewing claims and counterclaims produced by the parties and giving instructions to delay and quantum experts. In the past months, the matter has been evolving towards full-fledged arbitration proceedings with the parties being in the process of appointing a new panel of three arbitrators who will have to decide on the resolution of the dispute. Once this arbitral tribunal is constituted, its main tasks will be to review the financial compensation claimed by the Concessionaire and Alstom for the project prolongation, and to decide on the admissibility of the counterclaims raised by the State of Israel. In the past months though, the parties decided to postpone further developments in the arbitral proceedings in order to launch a mediation process, which started in May 2018 and is presently on-going.

There are no other governmental, legal or arbitration procedures, including proceedings of which the Group is aware and which are pending or threatening, which might have, or have had during the last twelve months, a significant impact on the financial situation or profitability of the Group.

K. OTHER NOTES

NOTE 34. LEASE OBLIGATIONS

(in € million)	Total	Within one year	1 to 5 years	Over 5 years
Long term rental(*)	270	32	127	111
Finance leases	19	2	9	8
Operating leases	415	68	160	187
TOTAL AT 31 MARCH 2019	**704**	**102**	**296**	**306**
Long term rental(*)	296	31	125	140
Finance leases	20	3	9	8
Operating leases	378	56	148	174
TOTAL AT 31 MARCH 2018	**694**	**90**	**282**	**322**

(*) Obligations related to a long-term rental of trains and associated equipment to a London metro operator (see Note 27) including interests to be paid.

NOTE 35 • INDEPENDENT AUDITORS' FEES

Fees due to Auditors and members of their networks in respect of years ended 31 March 2019 and 31 March 2018 were as follows:

	Year ended 31 March 2019				Year ended 31 March 2018			
	Mazars		PricewaterhouseCoopers		Mazars		PricewaterhouseCoopers	
(in € million)	Amount	%	Amount	%	Amount	%	Amount	%
Independent Auditors' diligence, certification, review of individual and consolidated accounts	**3.6**	**68%**	**3.2**	**62%**	**3.5**	**67%**	**3.1**	**65%**
ALSTOM SA	*0.5*	*10%*	*0.6*	*12%*	*0.6*	*12%*	*0.7*	*15%*
Controlled entities	*3.1*	*58%*	*2.6*	*50%*	*2.9*	*55%*	*2.4*	*50%*
Non audit services	**1.7**	**32%**	**2.0**	**38%**	**1.8**	**33%**	**1.7**	**35%**
TOTAL	**5.3**	**100%**	**5.2**	**100%**	**5.3**	**100%**	**4.8**	**100%**

Other services mainly include services rendered in connection with the combination project of Alstom and Siemens Mobility (agreed upon procedures, information document to be published by Alstom, etc.), agreed-upon procedures, acquisition due diligences, technical consultations on accounting, tax and regulatory matters.

NOTE 36 • RELATED PARTIES

The Group has identified the following related parties:

- shareholders of the Group;
- state & publicly owned companies;
- associates & joint ventures;
- key management personnel.

36.1. Shareholders of the Group

Bouygues, a French company listed on Paris stock market, is the main shareholder of the Group, holding 27.94% of Alstom's share capital.

36.2. Related-party disclosures

Bouygues and Alstom are involved in various contracts which are part of the ordinary course of business (*e.g.* phone contracts, "construction contracts"). These relations are subject to normal market terms and conditions. Those operating flows are not material at Group's level.

Moreover, related party transactions are also transactions with companies over which Alstom exercises significant influence or joint ventures over which Alstom exercises joint control. Those transactions with related parties are undertaken at market prices and represent less than 1% of the sales and trade receivable.

36.3. Key management personnel

The Group considers that key management personnel as defined by IAS 24 are the members of the Executive Committee.

	Year ended	
(in € thousand)	**31 March 2019**	**31 March 2018**
Short-term benefits	**11,111**	**8,710**
Fixed gross salaries	4,314	4,319
Variable gross salaries	3,400	3,368
Exceptional amounts (1)	3,397	1,023
Post-employment benefits	**1,054**	**1,177**
Post-employment defined benefit plans	-	91
Post-employment defined contribution plans	979	1,023
Other post-employment benefits	75	63
Other benefits	**3,856**	**3,394**
Non monetary benefits	1,101	882
Employer social contributions	2,755	2,512
Share-based payments (2)	**3,512**	**1,996**
TOTAL	**19,533**	**15,277**

(1) Accrued provision for the dedicated retention plan linked to the Siemens project.
(2) Mechanical increase of IFRS 2 charge due to the integration of a third non vested Performance Share Plan *versus* 2017/18, the increased value of Alstom share on the Stock market and an additional member to the Executive Committee.

NOTE 37 • SUBSEQUENT EVENTS

The Group has not identified any subsequent event to be reported other than the items already described above or in the previous notes.

NOTE 38 • SCOPE OF CONSOLIDATION

PARENT COMPANY	Country	Ownership *(in %)*	Consolidation Method
ALSTOM SA	France	-	Parent Company
COMPANIES			
ALSTOM Algérie "Société par Actions"	Algeria	100	Full consolidation
ALSTOM Grid Algérie SPA	Algeria	100	Full consolidation
ALSTOM Argentina S.A.	Argentina	100	Full consolidation
ALSTOM Transport Australia Pty Limited	Australia	100	Full consolidation
NOMAD DIGITAL PTY LTD	Australia	100	Full consolidation
ALSTOM Transport Azerbaijan LLC	Azerbaijan	100	Full consolidation
ALSTOM Belgium SA	Belgium	100	Full consolidation
CABLIANCE BELGIUM	Belgium	100	Full consolidation
21NET BELGIUM	Belgium	100	Full consolidation
ALSTOM Brasil Energia e Transporte Ltda	Brazil	100	Full consolidation
ETE – EQUIPAMENTOS DE TRACAO ELETRICA LTDA	Brazil	100	Full consolidation
ALSTOM Transport Canada Inc.	Canada	100	Full consolidation
ALSTOM Chile S.A.	Chile	100	Full consolidation
ALSTOM (Guangdong) High Voltage Electric Co. Ltd	China	51	Full consolidation
ALSTOM Hong Kong Ltd	China	100	Full consolidation
ALSTOM Investment Company Limited	China	100	Full consolidation
ALSTOM Qingdao Railway Equipment Co Ltd	China	51	Full consolidation
SHANGHAI ALSTOM Transport Electrical Equipment Company Ltd	China	60	Full consolidation
Chengdu ALSTOM Transport Electrical Equipment Co., Ltd.	China	60	Full consolidation
TRANSLOHR INDUSTRIAL (TIANJIN) CO. LTD	China	100	Full consolidation
XI'AN ALSTOM YONGJI ELECTRIC EQUIPMENT CO., LTD	China	51	Full consolidation
ALSTOM Transport Danmark A/S	Denmark	100	Full consolidation
NOMAD DIGITAL APS	Denmark	100	Full consolidation
NOMAD DIGITAL (DENMARK) APS	Denmark	100	Full consolidation
ALSTOM Egypt for Transport Projects SAE	Egypt	99	Full consolidation
AREVA INTERNATIONAL EGYPT FOR ELECTRICITY TRANSMISSION & DISTRIBUTION	Egypt	100	Full consolidation
ALSTOM Transport Finland Oy	Finland	100	Full consolidation
21NET France	France	100	Full consolidation
ALSTOM APTIS	France	100	Full consolidation
ALSTOM Executive Management	France	100	Full consolidation
ALSTOM Holdings	France	100	Full consolidation
ALSTOM Kleber Sixteen	France	100	Full consolidation
ALSTOM Leroux Naval	France	100	Full consolidation
ALSTOM Network Transport	France	100	Full consolidation
ALSTOM Omega 1	France	100	Full consolidation
ALSTOM SHIPWORKS	France	100	Full consolidation
ALSTOM Transport SA	France	100	Full consolidation
ALSTOM Transport Technologies	France	100	Full consolidation
CENTRE D'ESSAIS FERROVIAIRES	France	92	Full consolidation
ÉTOILE KLEBER	France	100	Full consolidation
INTERINFRA (COMPAGNIE INTERNATIONALE POUR LE DÉVELOPPEMENT D'INFRASTRUCTURES)	France	50	Full consolidation
LORELEC	France	100	Full consolidation

Companies	Country	Ownership (in %)	Consolidation Method
NEWTL	France	100	Full consolidation
NTL HOLDING	France	100	Full consolidation
StationOne	France	100	Full consolidation
TRANSLOHR SAS	France	100	Full consolidation
ALSTOM Lokomotiven Service GmbH	Germany	100	Full consolidation
ALSTOM Transport Deutschland GmbH	Germany	100	Full consolidation
NOMAD DIGITAL GMBH	Germany	100	Full consolidation
VGT VORBEREITUNGSGESELLSCHAFT TRANSPORTTECHNIK GMBH	Germany	100	Full consolidation
ALSTOM Network UK Ltd	Great Britain	100	Full consolidation
ALSTOM NL Service Provision Limited	Great Britain	100	Full consolidation
ALSTOM Academy for rail	Great Britain	100	Full consolidation
ALSTOM Transport	Great Britain	100	Full consolidation
ALSTOM Transport Service Ltd	Great Britain	100	Full consolidation
ALSTOM Transport UK (Holdings) Ltd	Great Britain	100	Full consolidation
ALSTOM Transport UK Limited	Great Britain	100	Full consolidation
NOMAD DIGITAL (INDIA) LIMITED	Great Britain	70	Full consolidation
NOMAD DIGITAL LIMITED	Great Britain	100	Full consolidation
NOMAD HOLDINGS LIMITED	Great Britain	100	Full consolidation
NOMAD SOLUTIONS UK LIMITED	Great Britain	100	Full consolidation
NOMAD SPECTRUM LIMITED	Great Britain	100	Full consolidation
SIGNALLING SOLUTIONS LIMITED	Great Britain	100	Full consolidation
WASHWOOD HEATH TRAINS LTD	Great Britain	100	Full consolidation
WEST COAST SERVICE PROVISION LIMITED	Great Britain	100	Full consolidation
WEST COAST TRAINCARE LIMITED	Great Britain	100	Full consolidation
21NET LTD	Great Britain	100	Full consolidation
J&P AVAX SA – ETETH SA – ALSTOM TRANSPORT SA	Greece	34	Full consolidation
ALSTOM Transport Hungary Zrt.	Hungary	100	Full consolidation
ALSTOM Manufacturing India Private Limited	India	100	Full consolidation
ALSTOM Systems India Private Limited	India	95	Full consolidation
ALSTOM Transport India Limited	India	100	Full consolidation
MADHEPURA ELECTRIC LOCOMOTIVE PRIVATE LIMITED	India	74	Full consolidation
NOMAD DIGITAL (INDIA) PRIVATE LIMITED	India	70	Full consolidation
TWENTY ONE NET PRIVATE LTD	India	100	Full consolidation
PT ALSTOM Transport Indonesia	Indonesia	67	Full consolidation
ALSTOM Khadamat S.A.	Iran	100	Full consolidation
ALSTOM Transport Ireland Ltd	Ireland	100	Full consolidation
CITADIS ISRAEL LTD	Israel	100	Full consolidation
ALSTOM Ferroviaria S.p.A.	Italy	100	Full consolidation
ALSTOM Services Italia S.p.A.	Italy	100	Full consolidation
ALSTOM S.p.A.	Italy	100	Full consolidation
21NET ITALIA S.R.L	Italy	100	Full consolidation
ALSTOM Kazakhstan LLP	Kazakhstan	100	Full consolidation
ELECTROVOZ KURASTYRU ZAUYTY LLP	Kazakhstan	75	Full consolidation
ALSTOM Transport (Malaysia) Sdn Bhd	Malaysia	100	Full consolidation
ALSTOM Transport Mexico, S.A. de C.V.	Mexico	100	Full consolidation
ALSTOM CABLIANCE	Morocco	100	Full consolidation

Companies	Country	Ownership (in %)	Consolidation Method
ALSTOM Transport Maroc SA	Morocco	100	Full consolidation
ALSTOM Transport BV	Netherlands	100	Full consolidation
ALSTOM Transport Holdings B.V.	Netherlands	100	Full consolidation
New ALSTOM Holdings B.V.	Netherlands	100	Full consolidation
NOMAD DIGITAL B.V.	Netherlands	100	Full consolidation
AT NIGERIA LIMITED	Nigeria	100	Full consolidation
ALSTOM Transport Norway AS	Norway	100	Full consolidation
ALSTOM Panama, S.A.	Panama	100	Full consolidation
ALSTOM Transport Peru S.A.	Peru	100	Full consolidation
ALSTOM Transport Construction Philippines, Inc	Philippines	100	Full consolidation
ALSTOM Konstal Spolka Akcyjna	Poland	100	Full consolidation
ALSTOM Pyskowice Sp. z o.o.	Poland	100	Full consolidation
ALSTOM Transporte Portugal Unipessoal Lda	Portugal	100	Full consolidation
NOMAD TECH, LDA.	Portugal	51	Full consolidation
ALSTOM Transport SA (Romania)	Romania	93	Full consolidation
ALSTOM Transport Rus LLC	Russian Federation	100	Full consolidation
ALSTOM Saudi Arabia Limited	Saudi Arabia	100	Full consolidation
ALSTOM Transport (S) Pte Ltd	Singapore	100	Full consolidation
ALSTOM Southern Africa Holdings (Pty) Ltd	South Africa	100	Full consolidation
ALSTOM Transport Holdings SA (Pty) Ltd	South Africa	100	Full consolidation
ALSTOM Ubunye (Pty) Ltd	South Africa	51	Full consolidation
GIBELA RAIL TRANSPORT CONSORTIUM (PTY) LTD	South Africa	61	Full consolidation
ALSTOM Korea Transport Ltd	South Korea	100	Full consolidation
ALSTOM Espana IB, S.L.	Spain	100	Full consolidation
ALSTOM Transporte, S.A.	Spain	100	Full consolidation
APLICACIONES TECNICAS INDUSTRIALES, S.A.	Spain	100	Full consolidation
ALSTOM Transport AB	Sweden	100	Full consolidation
ALSTOM Transport Information Systems AB	Sweden	100	Full consolidation
ALSTOM Network Schweiz AG	Switzerland	100	Full consolidation
ALSTOM Schienenfahrzeuge AG	Switzerland	100	Full consolidation
ALSTOM Transport (Thailand) Co., Ltd.	Thailand	100	Full consolidation
ALSTOM T&T Ltd	Trinidad and Tobago	100	Full consolidation
ALSTOM Ulasim Anonim Sirketi	Turkey	100	Full consolidation
ALSKAW LLC	USA	100	Full consolidation
ALSTOM Transport Holding US Inc.	USA	100	Full consolidation
ALSTOM Transportation Inc.	USA	100	Full consolidation
ALSTOM Signaling Inc.	USA	100	Full consolidation
ALSTOM Signaling Operation, LLC	USA	100	Full consolidation
NOMAD DIGITAL, INC	USA	100	Full consolidation
ALSTOM Venezuela, S.A.	Venezuela	100	Full consolidation
ALSTOM Transport Vietnam Ltd	Vietnam	100	Full consolidation
ALSOMA G.E.I.E.	France	55	Joint Operation
METROLAB	France	50	Joint Operation
THE ATC JOINT VENTURE	Great Britain	38	Joint Operation
IRVIA MANTENIMIENTO FERROVIARIO, S.A.	Spain	51	Joint Operation

Companies	Country	Ownership (in %)	Consolidation Method
CITAL	Algeria	49	Equity Method
CASCO SIGNAL LTD	China	49	Equity Method
SHANGHAI ALSTOM Transport Company Limited	China	40	Equity Method
TRANSMASHHOLDING LIMITED	Cyprus	20	Equity Method
SILASIO TRADING LIMITED	Cyprus	20	Equity Method
SPEEDINNOV	France	65	Equity Method
ABC ELECTRIFICATION LTD	Great Britain	33	Equity Method
LLP JV KAZELEKTROPRIVOD	Kazakhstan	50	Equity Method
TMHS	Mongolia	20	Equity Method
RAILCOMP BV	Netherlands	60	Equity Method
THE BREAKERS INVESTMENTS B.V.	Netherlands	20	Equity Method
TMH-ALSTOM BV	Netherlands	60	Equity Method
AM-TEKH	Russian Federation	20	Equity Method
CENTRAL RESEARCH AND DEVELOPMENT INSTITUTE "TransElektroPribor"	Russian Federation	20	Equity Method
CORPORATE UNIVERSITY OF LOCOMOTIVE TECHNOLOGIES	Russian Federation	20	Equity Method
DEMIKHOVSKY MASHINOSTROITELNY ZAVOD OAO	Russian Federation	20	Equity Method
FIRM LOCOTECH	Russian Federation	20	Equity Method
IVSK OOO	Russian Federation	12	Equity Method
KMT LOMONOSOVSKIY OPITNY ZAVOD PF OAO	Russian Federation	6	Equity Method
KMT UPRAVLYAUSHCHAYA KOMPANIYA ZAO	Russian Federation	8	Equity Method
KOLOMENSKY ZAVOD OAO	Russian Federation	17	Equity Method
LOCOTECH GLOBAL TRADING	Russian Federation	20	Equity Method
LOCOTECH FOUNDRY PLANTS	Russian Federation	15	Equity Method
LOCOTECH PROMSERVICE	Russian Federation	20	Equity Method
LOCOTECH LEASING	Russian Federation	15	Equity Method
LOCOTECH SERVICE	Russian Federation	20	Equity Method
MASHCONSULTING ZAO	Russian Federation	20	Equity Method
METROVAGONMASH OAO	Russian Federation	15	Equity Method
OKTYABRSKY ELEKTROVAGONOREMONTNY ZAVOD OAO	Russian Federation	15	Equity Method
OVK TMH ZAO	Russian Federation	20	Equity Method
PENZADIESELMASH OAO	Russian Federation	20	Equity Method
PO BEZHITSKAYA STAL OAO	Russian Federation	12	Equity Method
PROIZVODSTVENNAYA FIRMA KMT LOMONOSOVSKY PILOT PLANT	Russian Federation	2	Equity Method
RAILCOMP LLC	Russian Federation	60	Equity Method
ROSLOKOMOTIV ZAO	Russian Federation	20	Equity Method
RUSTRANSKOMPLEKT ZAO	Russian Federation	15	Equity Method
SAPFIR OOO	Russian Federation	20	Equity Method
TORGOVY DOM TMH ZAO	Russian Federation	20	Equity Method
TRAMRUS LLC	Russian Federation	60	Equity Method
TRANSMASH OAO	Russian Federation	12	Equity Method
TRANSMASHHOLDING ZAO	Russian Federation	20	Equity Method
TRTrans LLC	Russian Federation	60	Equity Method
TVERSKOY VAGONOSTROITELNY ZAVOD INVEST OOO	Russian Federation	5	Equity Method
TVERSKOY VAGONOSTROITELNY ZAVOD OAO	Russian Federation	10	Equity Method
UPRAVLYAUSCHAYA KOMPANIYA BRYANSKY MASHINOSTROITELNY ZAVOD ZAO	Russian Federation	20	Equity Method
VSEROSSIYSKY NAUCHNO-ISSLEDOVATELSKY I PROEKTNO-KONSTRUKTORSKY INSTITUT ELEKTROVOZOSTROENIYA OAO	Russian Federation	13	Equity Method

Companies	Country	Ownership *(in %)*	Consolidation Method
ZAVOD AIT	Russian Federation	10	Equity Method
ZENTROSVARMASH OAO	Russian Federation	20	Equity Method
ZHELDORREMMASH	Russian Federation	15	Equity Method
LUGANSKTEPLOVOZ OAO	Ukraine	15	Equity Method
RTA RAIL TEC ARSENAL FAHRZEUGVERSUCHSANLAGE GMBH	Austria	15	Non consolidated investment
MOBILIEGE	Belgium	15	Non consolidated investment
ISLAND CAPITAL LTD	Bermuda	1	Non consolidated investment
4iTEC 4.0	France	23	Non consolidated investment
AIRE URBAINE INVESTISSEMENT	France	4	Non consolidated investment
CADEMCE SAS	France	16	Non consolidated investment
COMPAGNIE INTERNATIONALE DE MAINTENANCE – C.I.M.	France	1	Non consolidated investment
EASYMILE	France	13	Non consolidated investment
ENTREPRISES-HABITAT IMMOBILIER	France	0	Non consolidated investment
ESPACE DOMICILE SA HABITAT LOYER MODÉRÉ	France	1	Non consolidated investment
FRAMECA – FRANCE MÉTRO CARACAS	France	19	Non consolidated investment
MOBILITÉ AGGLOMÉRATION RÉMOISE SAS	France	17	Non consolidated investment
OC'VIA CONSTRUCTION	France	12	Non consolidated investment
OC'VIA MAINTENANCE	France	12	Non consolidated investment
RESTAURINTER	France	35	Non consolidated investment
SOCIÉTÉ FRANÇAISE D'EXPORTATION DE SYSTÈMES AVANCES	France	1	Non consolidated investment
SOCIÉTÉ IMMOBILIÈRE DE VIERZON	France	1	Non consolidated investment
SUPERGRID INSTITUTE SAS	France	3	Non consolidated investment
IFB INSTITUT FUR BAHNTECHNIK GMBH	Germany	7	Non consolidated investment
TRAMLINK NOTTINGHAM (HOLDINGS) LTD	Great Britain	13	Non consolidated investment
PARS SWITCH	Iran	1	Non consolidated investment
CRIT SRL	Italy	1	Non consolidated investment
CONSORZIO ELIS PER LA FORMAZIONE PROFESSIONALE SUPERIORE	Italy	0	Non consolidated investment
METRO 5 SPA	Italy	9	Non consolidated investment
S.A.T. SISTEMA AUTOMATICO DI TRASPORTO S.R.L.	Italy	20	Non consolidated investment
T.P.B. TRASPORTI PUBBLICI DELLA BRIANZA S.p.A. (in bankruptcy)	Italy	30	Non consolidated investment
TRAM DI FIRENZE S.p.A.	Italy	9	Non consolidated investment
VAL 208 TORINO GEIE	Italy	14	Non consolidated investment
SUBURBANO EXPRESS, S.A. DE C.V.	Mexico	11	Non consolidated investment
IDEON S.A.	Poland	0	Non consolidated investment
INVESTSTAR S.A.	Poland	0	Non consolidated investment
KOLMEX SA	Poland	2	Non consolidated investment
ALBALI SEÑALIZACIÓN, S.A.	Spain	12	Non consolidated investment
TRAMVIA METROPOLITA DEL BESOS SA	Spain	21	Non consolidated investment
TRAMVIA METROPOLITA, S.A.	Spain	24	Non consolidated investment

STATUTORY AUDITOR’S REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

(For the year ended 31 March 2019)

This is a translation into English of the statutory auditors’ report on the consolidated financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This statutory auditors’ report includes information required by European Regulation and French law, such as information about the appointment of the statutory auditors or verification of the information concerning the Group presented in the management report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting of shareholders of Alstom SA

Opinion

In compliance with the engagement entrusted to us by your Annual General Meeting, we have audited the accompanying consolidated financial statements of Alstom SA for the year ended 31 March 2019.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at 31 March 2019 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors’ Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from 1 April 2018 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5 of Regulation (EU) No 537/2014 or in the French Code of ethics (code de déontologie) for statutory auditors.

Emphasis of Matter

We draw attention to the note 2.2 to the consolidated financial statements which sets out the effects of the first application of the standards IFRS 15 “*Revenue from Contracts with Customers*” and IFRS 9 “*Financial instruments*”. Our opinion is not modified in respect of this matter.

Justification of Assessments - Key Audit Matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

Revenue and margin recognition on long-term contracts

(Note 2.1.1 IFRS 15 Revenue from contracts with customers, Note 2.5.6 Sales and costs generated by operating activities and Notes 3, 18 and 32)

Identified risks

As at 31 March 2019, the Group’s revenue and earnings before interests and taxes (EBIT) (respectively 8 072 M€ and 408 M€) mainly derive from construction contracts and long-term service agreements (“the long-term contracts”).

IFRS 15 “Revenue from Contracts with Customers” is applicable by Alstom starting April 1, 2018. Alstom has elected, for the transition, to apply the full retrospective method. Alstom has identified and measured the accounting impacts of IFRS 15 by performing analyses of the contractual and general conditions applicable to its construction contracts as well as long-term service agreements and has updated its accounting principles and policies accordingly.

These differences and the impacts of the restatement on the equity and the balance sheet as of April 1, 2017 and as of March 31, 2018 are presented in the Note 2.2.1 "IFRS 15 Revenue from contracts with customers".

As described in Note 2.5.6 to the Group consolidated financial statements, revenue on long-term contracts is recognized according to IFRS 15 based on the cost to cost percentage of completion method in order to recognize the revenue from contracts for which revenue recognition is qualified as overtime.

At each closing date, estimates and assumptions by management are required in order to assess:

- the revenue at completion, including contract variations (variation orders, claims and contract amendments);
- the revenue of the period recognized in accordance with the cost to cost method;
- the margin at completion on each contract, incorporating appropriate contingencies to cover identified risks (technical, commercial, etc.) related to the project execution;

We consider the revenue and margin recognition on long-term contracts to be a Key Audit Matter, because of the degree of required management's estimates and judgements and the complexity of internal processes to be implemented in order to recognize the revenue and margin relating to these contracts, in particular in the context of the first application of IFRS 15.

Our response

As part of our audit, we obtained an understanding of the Group's internal processes and controls for management and monitoring of long-term contracts, identified the main controls set up by Alstom that are relevant to our audit, particularly those related to IFRS 15 implementation, and then tested their operational effectiveness by sampling;

We have assessed the compliance of the new revenue recognition accounting principles and methods with IFRS 15 and examined the quantified impacts relating to the adoption of this standard on equity, balance-sheet and order backlog as at April 1, 2017 and March 31, 2018 as described in Note 2.2.1 and 2.2.3 to the financial statements.

We also performed a critical review of the systems and controls implemented by the Group relating to the measurement of the revenue and costs at completion and of the stage of completion.

We took into account the high level of integration of the various IT systems involved in revenue recognition by including IT specialists in our audit team and testing the design, implementation and effectiveness of automated system controls affecting revenue recognition.

For a sample of contracts, selected based on their risk profile including their technical or commercial complexity and/or their financial impact, we also:

- examined the terms and conditions of the contracts, including contract amendments and variations;
- obtained an understanding of the performance and stage of completion of the contract through discussion with the project and Group management;
- appreciated for these contracts the analyses of the Group which enabled to conclude on the transfer of progressive control or at completion and, if necessary, the identification of the various performance obligations, variation orders and contract amendments;
- corroborated the main assumptions of revenue and costs at completion with costs incurred to date,
- examined externally available evidence, such as customer correspondence, physical progress or the performance of services provided for in the contract, and for the most significant turnkey contracts performed physical inspection of construction site;
- used our experience gained in previous years on these contracts or on similar contracts; and
- assessed the consistency of the accounting information reflected in the financial statements with the project information obtained.

We verified that Notes 2, 3, 18 and 32 to Group consolidated financial statements contain the appropriate information.

Assessment of disputes and investigations

(Note 22 Provisions and Note 33 Disputes)

Identified risks

As described in Note 22 and Note 33 to Group consolidated financial statements, Alstom's operations lead to the risk of litigation and contractual claims from third parties, moreover, the note 33 to the financial statements describes the on-going investigations and procedures performed by judicial authorities with respect to alleged illegal payments in certain countries.

Alstom assesses the corresponding risk based on assumptions and estimates, to determine whether a provision is recorded or a risk disclosed in the consolidated financial statements. This assessment involves a high level of judgment by Alstom management.

Due to the potential impact on the consolidated financial statements, the degree of management's judgment and the uncertainty around the resolution of those procedures, we consider the assessment of disputes and investigations to be a Key Audit Matter.

Our response

We performed a critical review of the provisions recorded and disclosures provided by in particular:

- examining the procedures implemented by management to identify, assess and account for disputes and investigations;
- inquiring with the in-house legal counsels and analyzing underlying documentation of procedures ongoing;
- obtaining external legal positions if considered as relevant;
- examining legal expenses accounts for any indication of legal matters not yet considered;
- reading minutes of the meetings of the Boards of Directors and of the shareholders' meetings of Alstom's key entities;

- assessing management's judgment through understanding of precedent outcomes in similar cases and external legal positions;
- assessing whether any events subsequent to the reporting date for the year ended March 31, 2019 have been taken into account to estimate provisions and in the information provided in the financial statements;
- verifying that Note 33 to Group consolidated financial statements contains the appropriate disclosures on the status of disputes and related uncertainties.

Verification of the Information Pertaining to the Group Presented in the Management Report

We have also performed, in accordance with professional standards applicable in France, the specific verification required by laws and regulations of the Group information given in the management report of the Board of Directors.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the consolidated non-financial statement required by Article L.225-102-1 of the French Commercial Code (code de commerce) is presented in the Group's management report, it being specified that, in accordance with Article L.823-10 of this Code, we have verified neither the fair presentation nor the consistency with the consolidated financial statements of the information contained therein. This information should be reported on by an independent third party.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We, PricewaterhouseCoopers Audit and Mazars, were appointed as statutory auditors of Alstom SA by the Annual General Meeting held on 23 June 2009.

As at 31 March 2019, PricewaterhouseCoopers Audit and Mazars were in the 10th year of total uninterrupted engagement.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L.823-10-1 of the French Commercial Code (code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements;

- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (code de commerce) and in the French Code of Ethics (code de déontologie) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Neuilly-sur-Seine and Paris La Défense, 7 May 2019

The statutory auditors

PricewaterhouseCoopers Audit	**Mazars**
Edouard Demarcq	Cédric Haaser

STATUTORY FINANCIAL STATEMENTS

as at 31 March 2019

INCOME STATEMENT

		Year ended	
(in € million)	Note	31 March 2019	31 March 2018
Management fees and other operating income		56	54
Administrative costs and other operating expenses		(106)	(40)
Depreciation and amortisation expense or income		-	-
Operating income	**4**	**(50)**	**14**
Financial income		405	302
Interest income		-	-
Interest expenses		(43)	(52)
Depreciation and amortisation expense or income		1,200	-
Bonds issuance costs and premiums recognised as income or expense		(1)	(2)
Change differences		0	-
Financial income	5	1,560	248
Current income		1,510	262
Non recurring result	**6**	**1**	**(2)**
Income tax credit	7	**18**	**22**
NET PROFIT		**1,529**	**282**

BALANCE **SHEET**

Assets

(in € million)	Note	At 31 March 2019	At 31 March 2018
FIXED ASSETS			
Intangible assets		-	-
Investments	8	9,216	8,016
Advances to subsidiary	8	85	81
Total fixed assets		**9,301**	**8,097**
CURRENT ASSETS			
Receivables	9	38	46
Cash		-	-
Deferred charges	10	1	2
Total current assets		**39**	**48**
TOTAL ASSETS		**9,340**	**8,145**

Liabilities

(in € million)	Note	At 31 March 2019	At 31 March 2018
SHAREHOLDERS' EQUITY			
Share capital		1,565	1,555
Additional paid-in capital		931	917
Legal reserve		210	210
Restricted reserve		24	33
General reserve		3,935	3,727
Net profit		1,529	282
Total shareholders' equity	**11**	**8,194**	**6,724**
PROVISIONS FOR RISKS AND CHARGES	**12**	**5**	**7**
LIABILITIES			
Bonds	14	886	1,264
Other borrowings	16	-	-
Borrowings from subsidiary	15, 16	-	-
Trade payables	15, 16	2	18
Other payables	15, 16	252	132
Deferred income		-	-
Total liabilities		**1,141**	**1,414**
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		**9,340**	**8,145**

NOTES TO THE STATUTORY FINANCIAL STATEMENTS

DETAILED SUMMARY OF THE NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 • BASIS OF PREPARATION OF THE STATUTORY FINANCIAL STATEMENTS

The statutory financial statements for the year ended 31 March 2019 are established in compliance with the legal and regulatory rules applicable in France according to the regulation 2014-03 of "l'Autorité des Normes Comptables" of 5 June 2014 as well as subsequent comments and recommendations of "l'Autorité des Normes Comptables".

These accounts have been prepared using the same accounting policies and measurement methods as at 31 March 2018.

NOTE 2 • DESCRIPTION OF ACCOUNTING POLICIES

2.1. Investments

Investments are recorded at acquisition cost, excluding transaction costs.

Investments are measured based on a multi-criteria approach:

- investments are generally measured at their value in use, defined as the enterprise value net of the indebtedness. The enterprise value is the sum of the discounted free cash flows and of the discounted terminal residual value, and represents the ability of the assets to generate profits and cash flows;
- when values in relation with arm's length transactions or any other fair market values exist, these values can also be taken into account in the year-end valuation of the investments.

When this value is less than acquisition cost, a provision for impairment is recorded to cover the difference.

2.2. Share capital

A share capital increase is recorded at the nominal share price. If the issue price is higher than the nominal value, this difference is recorded as a paid-in capital.

Transaction costs on capital increase are offset against paid-in capital. If total transaction costs exceed the paid-in capital, the excess is recorded as intangible assets and amortised over a period of five years.

2.3. Provisions for risks and charges

Provisions for litigations and disputes

The Company identifies and analyses on a regular basis current litigations in which it is engaged. When provisions are deemed necessary, they are measured on the basis of its best estimate of the expenditure required to settle the obligation at the balance-sheet date. These estimates take into account information available and different possible outcomes.

Due to changes in facts and circumstances, costs finally incurred may differ from those estimates.

Provisions for post-employment benefits

The obligation arising from post-employment defined benefits granted to the Chairman and Chief Executive Officer is determined using the projected unit credit method and is wholly recognised as a liability.

2.4. Financial debt

Financial debt (bonds) is recorded at nominal value in the liabilities. Transaction costs and bonds premium are recorded as deferred charges or deferred income and amortised over the duration of the borrowings.

2.5. Tax Group

The Company is the parent company of a French tax group including ALSTOM Holdings and several French subsidiaries of ALSTOM Holdings.

Each company, member of the tax group, determines its income tax charge on the basis of its own pre-tax income for the year, as if it was not included in a tax group. The Company recognises a gain or a loss equal to the difference between the current income tax based on the Group pre-tax income and the sum of tax charges recognised by the entities members of the tax group.

When a subsidiary member of the tax group exits from the said tax group, it is not compensated for the loss of its tax credits, tax losses carried forward and/or long term losses derived during the period of time it belonged to the tax group and which are unused at the exit date.

NOTE 3 • SIGNIFICANT EVENTS

3.1. Combination project of Siemens and Alstom's mobility businesses

The proposed combination of Alstom with Siemens Mobility, including its rail traction drive business, will not proceed following the decision of the European Commission occurred on 6 February 2019 to prohibit the proposed merger.

The project costs have been recognized in the net income.

3.2. Post closing events

The Company has not identified any post closing event that should be mentioned.

NOTE 4 • OPERATING INCOME

At the financial year ended 31 March 2019, operating income is essentially made of €56 million management fees invoiced to the Group's Companies for the use of ALSTOM name.

Administrative costs and other operating expenses include management fees invoiced by ALSTOM Transport, including fees related to the combination project of Siemens and Alstom's mobility business, external operating expenses, the compensation paid to the Chairman and Chief Executive Officer (€2,113,040 paid for the financial year ended 31 March 2019) and directors' fees due for the fiscal year (€959,063 for the same financial year ended).

NOTE 5 • FINANCIAL INCOME

(in € million)	Year ended at 31 March 2019	Year ended at 31 March 2018
Financial income	405	302
Net interest income on advances made to ALSTOM Holdings	-	-
Interest expenses on bonds	(43)	(52)
Interest expenses on borrowings	-	-
Provision	1,200	-
Bonds issuance costs and premiums recognised as income or expense	(1)	(2)
Change differences	0	(0)
TOTAL	**1,560**	**248**

The net financial income amounts to €1,560 million and is mainly made up of the following:

- dividends paid by ALSTOM Holdings to the Company during financial year ended 31 March 2019 for an amount of €400 million;
- the interest expenses on bonds for an amount of €(43) million;
- the release of the provision for impairment of its investment in ALSTOM Holdings for an amount of €1,200 million.

NOTE 6 • NON-RECURRING RESULT

	Year ended at 31 March 2019			Year ended at 31 March 2018
(in € million)	Non-recurring income	Non-recurring expense	Net amount	Net amount
Disposals of fixed assets	-	-	-	-
Addition or release of provisions	1	-	1	(1)
Other	0	(0)	(0)	(1)
NON-RECURRING RESULT	**1**	**(0)**	**1**	**(2)**

NOTE 7 • INCOME TAX

The €18 million Income tax credit is mainly linked to the tax grouping.

In the absence of tax grouping, no income tax charge would have been recorded at 31 March 2019, the Company being loss-making taxwise.

The deferred tax position of the Company at 31 March 2019, amounting to €1,466 million, is mainly composed of tax losses carried forward.

NOTE 8 • FINANCIAL ASSETS

8.1. Investments

(in € million)	At 31 March 2018	Provision	Release	At 31 March 2019
Investments				
• ALSTOM Holdings	9,216	-	-	9,216
• Impairment	(1,200)	-	1,200	-
TOTAL	**8,016**	**-**	**1,200**	**9,216**

ALSTOM Holdings is the Company's sole subsidiary and owns all operating entities of the Alstom Group.

At 31 March 2019, the Company released the provision for impairment of its investment in ALSTOM Holdings, for €1,200 million.

8.2. Advances

(in € million)	At 31 March 2018	Variation	At 31 March 2019
Advances to ALSTOM Holdings			
• Gross value	81	4	85
• Accrued interests	-	-	-
TOTAL	**81**	**4**	**85**

Advances to ALSTOM Holdings can be cancelled by anticipation, which ensures their liquidity.

NOTE 9 • RECEIVABLES

Current receivables can be broken down as follows:

	At 31 March 2019				At 31 March 2018	
(in € million)	Total	Within one year	One to five years	Out of which related parties	Total	Out of which related parties
Current account with ALSTOM Holdings	-	-		-	-	-
Trade receivables	3	3	-	2	1	1
"Research tax credit & others" receivables from the French Tax administration	34	1	33	-	39	-
Receivables on Group companies included in the Tax Group	-	-	-	-	1	1
Other receivables	1	1	-	-	5	-
TOTAL	**38**	**4**	**33**	**2**	**46**	**2**

NOTE 10 • DEFERRED CHARGES

(in € million)	At 31 March 2018	Amount capitalised during the period	Amortisation expense of the period	At 31 March 2019
Bonds issuance costs and premiums	2	-	(1)	1

NOTE 11 • SHAREHOLDERS' EQUITY

11.1. Share capital

As of 31 March 2019, ALSTOM's share capital amounts to €1,565,006,191 consisting of 223,572,313 ordinary shares with a par value of €7 each and fully paid.

The variations of share capital during the period are the following:

	Number of shares
Existing shares at beginning of year	**222,210,471**
Capital increase	-
Reimbursement of bonds	65
Exercise of options	723,167
Subscription of shares under employee sharing program	638,610
Shares buy back	-
EXISTING SHARES AT YEAR END	**223,572,313**

As of 31 March 2018, ALSTOM's share capital amounted to €1,555,473,297 consisting of 222,210,471 ordinary shares with a par value of €7 and fully paid.

11.2. Changes in shareholders' equity

(in € million)	At 31 March 2018	Shareholders' Meeting held 17 July 2018	Other movements	At 31 March 2019
Capital	1,555		10	1,565
Additional paid-in capital	917		14	931
Legal reserve	210		-	210
Restricted reserve	33		(9)	24
General reserve	3,727	282	(73)	3,935
Net profit	282	(282)	1,529	1,530
SHAREHOLDERS' EQUITY	**6,724**	**-**	**1,471**	**8,194**

"Other movements" for the period arise from:

- €19 million cash contribution, resulting from the exercise of options;
- subscriptions of shares under employee sharing programme;
- conversions of convertible bonds;
- €1,529 million net profit of the period.

NOTE 12 • PROVISIONS FOR RISKS AND CHARGES

(in € million)	At 31 March 2018	Additions	Releases	At 31 March 2019
Post-employment defined benefits	6		(1)	5
Others provisions	1	-	(1)	-
PROVISION FOR RISKS AND CHARGES	**7**	**-**	**(2)**	**5**

Provisions for post-employment defined benefits

The Chairman and Chief Executive Officer benefits from an additional pension plan based on three distinct elements that have not been modified during the fiscal year 2018/19.

- a defined contribution pension plan (so-called "Article 83").
  - The contributions of the "Article 83"-type plan are paid annually and correspond to:
    - 1% of the annual compensation as high as four Annual Social Security Ceilings;
    - 4% of the annual compensation between four and eight Annual Social Security Ceilings; and
    - 11% of the annual compensation between eight and twelve Annual Social Security Ceilings.
  - Since 1 July 2014, 95% of the contributions are paid by the Company.
  - The contributions paid as part of the defined contributions plan for the fiscal year 2018/19 are equal to €25,555, of which €24,277 are paid by the Company.
- A defined contribution pension plan (so-called "Article 82").
  - The "Article 82" defined contribution plan was set up in 2016 by the Board of Directors, upon the Nominations and Remuneration Committee's recommendation, in order to replace the "Article 39" defined benefits pension plan, closed in 31 December 2016.
  - As part of this plan, the annual contributions are paid to a third-party entity in charge of the supplemental pension plan. The computation of this contribution is based upon the annual total compensation (annual fixed and variable compensation owed in cash) of the Chairman and Chief Executive Officer as follows:
    - 10% of the fraction of the gross fixed compensation comprised between 8 and 12 Annual Social Security Ceilings and 20% of the fraction of the fixed compensation in excess of 12 Annual Social Security Ceilings; and
    - 20% of his annual variable compensation as defined by the Board of Directors.
  - The baseline compensation (annual fixed and variable owed in cash) for the contribution computation cannot, for any reason, exceed €2,000,000.
  - No contribution is to be paid if the variable compensation is equal to zero. The contributions are paid once a year, after the General Shareholders' Meeting approval of the annual variable compensation's payment of the prior fiscal year.
  - The Chairman and Chief Executive Officer committed, once the fiscal and social obligations linked to these contributions are fulfilled, to keep the paid amount on the dedicated retirement-capital vehicle, at least for the duration of his mandate.
  - The amounts paid in November 2018 under this defined contribution pension plan for the fiscal year 2018/19 is equal to €285,792 and corresponds to the acquisition period from 1 April 2017 to 31 March 2018. The matching accruals accounted for fiscal year 2017/18, amounting to €283,254, have been cancelled.
  - For fiscal year 2018/19 (acquisition period), a provision for expenses was made on the basis of a target variable compensation for a gross amount of €220,140 but no payment was made before the approval by the General Meeting of shareholders of the variable remuneration of the Chairman and Chief Executive Officer for the same financial year.
- A defined benefit pension plan (so-called "Article 39"), of which entitlements have been frozen since 31 December 2016.
  - The rights accrued over the period from 1 January 2004 to 31 December 2016, the date on which they were frozen, amount, as of 31 March 2019, to an annual pension of €176,000 (in constant euros) subject to a condition of presence at the time the Chairman and Chief Executive Officer asserts his rights to retire.
  - Under the defined benefits plan, the amount of the commitments borne by the Company that would have allowed the payment of the previously mentioned pension is equal, as of 31 March 2018, to €5,412,000 in constant euros, including an amount of €1,047,483 of applicable taxes to supplemental pension plans. Changes in the value of these commitments since the end of the fiscal year 2016/17 are due to application of the inflation rate observed by the Group's actuaries over the period and to the evolution of the actuarial hypothesis.
  - No new rights can be acquired as part of this plan.

All three above mentioned pensions plans are collective schemes which benefit ("Article 83" & "Article 82") or benefited ("Article 39") to other Executive managers of the Group.

NOTE 13 • BONDS REIMBURSABLE WITH SHARES

In December 2003, the Company has issued bonds reimbursable with shares maturing in December 2008.

At 31 March 2019, a balance of 73,338 bonds is still outstanding amounting to €0.1 million, in the absence of notification from bondholders regarding the redemption. Those bonds represent 4,606 shares to issue.

NOTE 14 • BONDS

The movements in nominal amount of bonds over the past two years are as follows:

(nominal value in € million)	Total	Maturity date 05/10/2015	02/03/2016	01/02/2017	11/10/2017	05/10/2018	08/07/2019	18/03/2020
Annual nominal interest rate		*2.88%*	*3.88%*	*4.13%*	*2.25%*	*3.63%*	*3.00%*	*4.50%*
Outstanding amount at 31 March 2017	**1,522**	-	-	-	**272**	**371**	**283**	**596**
Bonds issued	-							
Currency adjustments	-							
Repurchase	-			-	-	-	-	-
Bonds reimbursed at maturity date	(272)	-	-		(272)			
Outstanding amount at 31 March 2018	**1,250**			-	-	**371**	**283**	**596**
Bonds issued	-							
Currency adjustments	-							
Repurchase	-							
Bonds reimbursed at maturity date	(371)			-		(371)		
OUTSTANDING AMOUNT AT 31 MARCH 2019	**879**				**-**	**0**	**283**	**596**

During the year, €371 million bonds were reimbursed at maturity in October 2018.

Accrued interests at 31 March 2019 amounting to €7 million are added to the outstanding principal amount in the balance-sheet.

The existing credit facility of €400 million, which came into force on 4 November 2015, has not been used during the year.

This facility is subject to a maximum ratio of Total Net Debt of 2.5, based on consolidated data. This corresponds to Net Debt (*i.e.*, the total debt less marketable securities and cash or cash equivalents) to EBITDA ratio.

Given its debt repayment schedule and the credit facility presented above, and access to its subsidiary ALSTOM Holdings' liquidity, ALSTOM considers that it has sufficient financial flexibility to meet its obligations and financial needs.

As of 31 March 2019, the key Group indicators used to calculate the financial covenants are detailed below:

(in € million)	For the year ended 31 March 2019	For the year ended 31 March 2018(*)
EBITDA	543	562
Total net debt	(2,351)	232
TOTAL NET DEBT LEVERAGE	**(4.3)**	**0.4**

(*) Previous year figures have been restated in accordance with the IFRS 9 and IFRS 15 standards.

NOTE 15 • PAYABLES AND RELATED PARTIES

(in € million)	At 31 March 2019 Total	At 31 March 2019 Out of which related parties	At 31 March 2018 Total	At 31 March 2018 Out of which related parties
Borrowings from subsidiary	-	-	-	-
Trade payables	2	-	18	17
Payables to members of the tax group	147	147	125	125
Payables to members of the VAT group	-	-	1	1
Other tax and social security payables	2	-	2	-
Other liabilities	104	94	4	-
TOTAL	**255**	**241**	**150**	**143**

NOTE 16 • MATURITY OF LIABILITIES

(in € million)	As at 31 March 2019	Within one year	One to five years	More than five years	Out of which related parties
Bonds	886	886	-	-	-
Other borrowings	-	-	-	-	-
Borrowings from subsidiary	-	-	-	-	-
Trade payables	2	2	-	-	-
Other payables	252	148	104	-	241
TOTAL	**1,141**	**1,037**	**104**	**-**	**241**

NOTE 17 • OTHER INFORMATION

17.1. Off Balance-sheet Commitments

Total outstanding guarantees given by the Company amount to €539 million at 31 March 2019, of which:

- €497 million guarantees of commercial obligations contracted by the subsidiaries;
- €42 million in respect of financial commitments given on behalf of subsidiaries.

17.2. Stock-options and performance shares

Key characteristics

	Plans issued by Shareholders Meeting on 22 June 2010							
	Plan n°13	Plan n°13	Plan n°14	Plan n°14	Plan n°15	Plan n°15	Plan n°16	Plan n°16
	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares
Grant date	13/12/2010	13/12/2010	04/10/2011	04/10/2011	10/12/2012	10/12/2012	01/10/2013	01/10/2013
Exercise period	13/12/2013 12/12/2018	N/A	04/10/2014 03/10/2019	N/A	10/12/2015 09/12/2020	N/A	03/10/2016 30/09/2021	N/A
Number of beneficiaries	528	1,716	514	1,832	538	1,763	292	1,814
Adjusted number granted (1)	1,419,767	740,860	1,573,723	804,040	1,508,777	883,140	771,997	1,130,791
Adjusted number exercised since the origin	840,501	506,330	784,119	478,149	529,278	391,458	519,353	1,022,311
Adjusted number cancelled since the origin	579,266	234,530	638,291	325,891	806,630	491,682	72,625	108,480
Adjusted number outstanding at 31 March 2019	-	-	151,313	-	172,869	-	180,019	-
inc. to the present members of the Executive Committee	-	-	3,702	-	27,781	-	38,503	-
Adjusted exercise price (2) *(in €)*	28.83	N/A	22.96	N/A	24.10	N/A	23.44	N/A
Fair value at grant date *(in €)*	7.59	31.35	3.14	19.77	5.80	26.70	3.84	22.62

	Plans issued by Shareholders Meeting on 18 December 2015				Plan issued by Shareholders Meeting on 17 July 2018
	PSP 2016	We are Alstom	PSP 2017	PSP 2018	PSP 2019
	Performance shares	Free shares	Performance shares	Performance shares	Performance shares
Grant date	17/03/2016	23/09/2016	17/03/2017	13/03/2018	12/03/2019
Exercise period	N/A	N/A	N/A	N/A	N/A
Number of beneficiaries	737	27,480	755	732	820
Adjusted number granted (1)	957,975	824,400	1,022,400	1,016,025	1,080,150
Adjusted number exercised since the origin	1,050	638,640	-	-	-
Adjusted number cancelled since the origin	201,942	185,760	110,495	25,875	4,500
Adjusted number outstanding at 31 March 2019	754,983	-	911,905	990,150	1,075,650
inc. to the present members of the Executive Committee	130,500	-	183,000	205,125	205,500
Adjusted exercise price (2) *(in €)*	N/A	N/A	N/A	N/A	N/A
Fair value at grant date *(in €)*	17.17	23.39	21.74	25.59	28.92

(1) The number of options and performance shares and the exercise price of options have been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.
(2) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day on which the options were granted by the Board (neither discount nor surcharge) and adjusted where necessary due to share buy back operation.

At 31 March 2019, stock options granted by plans 13, 14, 15 and 16 are fully vested. For plans 13, 14, 15 and 16, options expire five years after the end of the vesting period. For plan 13, the exercise period expired in December 2018.

The long term incentive plans set up since 2007 combine the allocation of stock options with the allocation of performance shares, except the latter since 2016 that allocate only performance shares.

The grant of these instruments is conditioned by the satisfaction of performance indicators.

LTI plan 15 granted on 10 December 2012

The total number of options exercisable and performance shares delivered was depending on the Group's operating margin and the free cash flow for the fiscal years ended 31 March 2013, 31 March 2014 and 31 March 2015.

Based on consolidated financial statements for the fiscal years ended 31 March 2013 and 31 March 2014, the performance conditions were achieved for 30% of the initial grant of the LTIP15 options and performance shares.

In the context of the sale of the Energy activities, the Board of Directors considered that the performance conditions set for fiscal year ended 31 March 2015, weighting 20% of the initial grant, were deemed fully satisfied subject to and upon the completion of the transaction. As a result, 50% of the options were exercisable under this plan and 50% of performance shares have been delivered. 50% of options and performance shares have been cancelled.

LTI plan 16 granted on 1 October 2013

In the context of Energy transaction, the Board of Directors has considered that the performance conditions set for fiscal years ended 31 March 2015 and 31 March 2016 were deemed fully satisfied subject to and upon the completion of the transaction.

As a consequence, all options will be exercisable under this plan and all performance shares have been delivered on 2 October 2017.

In addition, for both plans 15 & 16, the presence condition has been waived for the beneficiaries having left the Group as part of the Energy transaction on the condition they are employees of Alstom Group as at the date of the closing of the transaction. This triggered the stock option and performance plans expense acceleration recorded in Income statement of discontinued operations.

PSP 2016 granted on 17 March 2016

This plan has been approved by the Board of Directors of 17 March 2016. It allocates 957,975 performance shares to 737 beneficiaries.

The final allocation depends on two internal performance conditions based on Group adjusted EBIT margin and Free Cash Flow for fiscal years ended 31 March 2017, 31 March 2018, and 31 March 2019, and one external condition linked to the performance of the Company's share. The final delivery will take place five days after the publication of the 31 March 2019 results. Based on the performance conditions of the years ended 31 March 2017 and 31 March 2018, 34.40% of the initial grant is achieved and 10.54% of the performance shares have been cancelled.

2016 free share plan

On 23 September 2016, the Board of Directors approved the grant of a worldwide free share Plan named "We are Alstom". The 30-shares-award concerns all employees within Alstom on 30 June 2016, on the condition they are still employees of Alstom Group at the end of a 2-years-vesting period, representing a maximum of 824,400 new shares of €7 of nominal value each to be issued in favor of a maximum of 27,480 beneficiaries.

It was also decided that in the countries where, for tax and/or legal purpose, the granting of free shares would be difficult or not possible, a cash equivalent bonus will be granted to employees.

On 25 September 2018, 638,610 free shares have been delivered to 21,287 employees in sixteen countries. In the other countries the cash equivalent bonus has been paid based on the value of the shares at the delivery date.

PSP 2017 granted on 17 March 2017

This plan has been agreed by the Board of Directors of 17 March 2017. It allocates 1,022,400 performance shares to 755 beneficiaries.

The final allocation depends on two internal performance conditions based on Group adjusted EBIT margin and Free Cash Flow for fiscal years ended 31 March 2018, 31 March 2019, and 31 March 2020, and one external condition linked to the performance of the Company's share.

The final delivery will take place five days after the communication of the 31 March 2020 results. Based on the performance conditions of the year ended 31 March 2018, 17.13% of the initial grant is achieved and 2.87% of the performance shares have been cancelled.

PSP 2018 granted on 13 March 2018

This plan has been agreed by the Board of Directors of 13 March 2018. It allocates 1,016,025 performance shares to 732 beneficiaries.

The final allocation depends on one internal performance condition based on Group adjusted EBIT margin for fiscal years ended 31 March 2021, and one external condition linked to the performance of the Company's share. The final delivery will take place five days after the publication of the 31 March 2021 results.

PSP 2019 granted on 12 March 2019

This plan has been agreed by the Board of Directors of 12 March 2019. It allocates 1,080,150 performance shares to 820 beneficiaries.

The final allocation depends on two internal performance condition based on Group adjusted EBIT margin and cash conversion rate for fiscal years ended 31 March 2022, and one external condition linked to the performance of the Company's share. The final delivery will take place at the latest twenty days after the publication of the 31 March 2022 results.

The number of Performance Shares will be determined as follows:

	Adjusted Ebit Margin 2021/22		
Percentage of granted shares subject to this condition	40%		
% of granted shares to be delivered upon objectives realisation	≤ 7%	= 7.9%	≥ 8.5%
	0%	66.67%	100%
	Linear from 0% up to 100%		

	Measured Cash Conversion ratio/Budget Cash Conversion ratio for FY 2021/22					
Percentage of granted shares subject to this condition	20%					
% of granted shares to be delivered upon objectives realisation	Actual conversion ratio < Budget -13.5 points (B-13.5)	(B-13.5) ≤ Actual Conversion ratio < (B-12)	(…)	(B-1.5) ≤ Actual Conversion ratio < Budget	Actual conversion ratio = Budget	Actual conversion ratio ≥ Budget +15 points (B+15)
	0%	6.67%		60%	66.67%	100%
	Acquisition by thresholds from 0% up to 66.67% and by linear interpolation from 66.67% up to 100%					

	TSR Alstom/TSR Index						
Percentage of granted shares subject to this condition	40%						
% of granted shares to be delivered upon objectives realisation	TSR Alstom < 96% TSR Index	96% ≤ TSR Alstom < 97% TSR Index	97% ≤ TSR Alstom < 98% TSR Index	98% ≤ TSR Alstom < 99% TSR Index	99% ≤ TSR Alstom < 100% TSR Index	TSR Alstom = TSR Index	TSR Alstom ≥ 120% TSR Index
	0%	13.33%	26.67%	40%	53.33%	66.67%	100%
	Acquisition by thresholds from 0% up to 66.67% and by linear interpolation from 66.67% up to 100%						

Movements

	Number of options	Weighted average exercise price per share *(in €)*	Number of performance shares
Outstanding at 31 March 2017	**4,757,401**	**37.90**	**3,774,378**
Granted (1)	-	0.00	1,016,025
Exercised	(1,460,920)	25.08	(1,020,164)
Cancelled	(1,958,010)	55.94	(126,292)
Outstanding at 31 March 2018	**1,338,471**	**25.52**	**3,643,947**
Granted (2)	-	0.00	1,080,150
Exercised	(723,167)	26.46	(638,610)
Cancelled	(111,103)	28.83	(352,799)
OUTSTANDING AT 31 MARCH 2019	**504,201**	**37.90**	**3,732,688**
of which exercisable	*504,201*		*N/A*

(1) Includes 1,016,025 free shares granted through PSP 2018.
(2) Includes 1,080,150 free shares granted through PSP 2019.

17.3. Severance payment and other benefits arising upon the termination of the mandate

The Chairman and Chief Executive Officer does not benefit from any specific measure protecting his accrued rights under the defined benefit pension plan, in the event of departure.

In the event of a forced departure, he will not be able to keep the non-fully vested rights to performance shares awarded under his mandate pursuant to the last two performance shares plans.

Furthermore, the Chairman and Chief Executive Officer would benefit in the event of departure of a severance pay subject to performance conditions. It would be equal to two years of target compensation, fixed and variable, the amount at which would be applied the average rate of achievement of the variable compensation of the last three years prior to departure, capped at 100%. Consequently, the severance pay to which the Chairman and Chief Executive Officer may be entitled shall not exceed two years of target remuneration, fixed and variable, in accordance with the recommendations of the AFEP-MEDEF. It would include the severance pay to which Mr. Henri Poupart-Lafarge would be eligible in the frame of his suspended employment contract.

17.4. Transactions with related parties

The decree n°2009-267 dated 9 March 2009 requires to give information about transactions with related parties contracted at conditions other than normal market conditions.

The Company has not identified any transaction coming into the scope of this requirement.

17.5. List of subsidiaries

ALSTOM Holdings is ALSTOM's sole subsidiary and is 100% owned.

Information on ALSTOM Holdings

Gross value of investment held by the Company	€9,2 billion
Net value of investment held by the Company	€9.2 billion
Gross value of loans and advances granted by the Company	€0.1 billion
Net value of loans and advances granted by the Company	€0.1 billion
Bonds and guarantees granted by the Company outstanding at 31 March 2019	-
Dividends paid by ALSTOM Holdings to the Company during financial year ended at 31 March 2019	€0.4 billion
ALSTOM Holdings shareholders' equity at 31 March 2018	€7.6 billion
ALSTOM Holdings shareholders' equity at 31 March 2019	€7.9 billion

STATUTORY AUDITOR'S REPORT ON THE FINANCIAL STATEMENTS

(For the year ended 31 March 2019)

This is a translation into English of the statutory auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.

This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the management report and other documents provided to shareholders.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting of shareholders of Alstom SA

Opinion

In compliance with the engagement entrusted to us by your General Meeting, we have audited the accompanying financial statements of Alstom SA ("the Company") for the year ended 31 March 2019.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at 31 March 2019 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from 1 April 2018 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014 or in the French Code of ethics (code de déontologie) for statutory auditors.

Justification of Assessments - Key Audit Matters

In accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements.

Valuation of the investment in Alstom Holdings

(Note 2.1 Investments and Note 8 Financial assets)

Identified risks

As at 31 March 2019, the net value of the investment in Alstom Holdings amounts to 9 216 m€ and represents 99% of Alstom's total assets. Alstom Holdings owns directly or indirectly all the entities of the Alstom group.

As described in Note 2.1 to the financial statements, investments are recorded at their acquisition cost. The recoverable value of the investments is assessed based on a multi-criteria approach. Alstom records an impairment if the recoverable value of the investments is lower than their carrying value.

Determining the recoverable value is based on (i) Discounted Cash Flows, and (ii) values in relation with current or contemplated transactions or any other fair market values, if available. This impairment test relies on significant management estimates, such as the group's business plans and terminal growth rate.

Accordingly, we consider the measurement of the recoverable value of the investment in Alstom Holdings to be a key audit matter, due to the amount of the investment recorded in the balance-sheet and the inherent uncertainty of certain inputs, in particular the likelihood of achieving forecast results included in such measurement.

Our response

We performed a critical review of the methodology applied by management to perform the impairment test by:

- understanding process and controls implemented by Alstom SA;
- assessing the consistency of the assumptions used for the impairment test (projected future cash flows, growth rates, discount rates) with the historical and current performance, the existing backlog of contracts and the economic environment in which Alstom SA operates;
- assessing the reasonableness of the assumptions used to determine values in relation with current or considered transactions or any other fair market values, if any;
- reviewing sensitivity analyses to key assumptions.

Specific verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

Information given in the management report and in the other documents with respect to the financial position and the financial statements provided to the Shareholders

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors and in the other documents provided to Shareholders with respect to the financial position and the financial statements.

We attest the fair presentation and the consistency with the financial statements of the information relating to the payment deadlines mentioned in Article D.441-4 of the French Commercial Code (code de commerce).

Report on Corporate Governance

We attest that the Board of Directors' report on corporate governance sets out the information required by Articles L. 225-37-3 and L. 225-37-4 of the French Commercial Code.

Concerning the information given in accordance with the requirements of Article L.225-37-3 of the French Commercial Code (code de commerce) relating to remunerations and benefits received by the directors and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your company from controlling and controlled companies. Based on this work, we attest the accuracy and fair presentation of this information.

With respect to the information relating to items that your company considered likely to have an impact in the event of a takeover or exchange offer, provided pursuant to Article L. 225-37-5 of the French Commercial Code (code de commerce), we have verified their compliance with the source documents communicated to us. Based on our work, we have no observation to make on this information.

Other information

In accordance with French law, we have verified that the required information concerning the identity of the shareholders and holders of the voting rights has been properly disclosed in the management report.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We, PricewaterhouseCoopers Audit and Mazars, were appointed as statutory auditors of Alstom SA by the Annual General Meeting held on 23 June 2009.

As at 31 March 2019, PricewaterhouseCoopers Audit and Mazars were in the 10th year of total uninterrupted engagement.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Financial Statements

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in Article L.823-10-1 of the French Commercial Code (code de commerce), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (code de commerce) and in the French Code of Ethics (code de déontologie) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Neuilly-sur-Seine and Paris La Défense, 7 May 2019

The statutory auditors

PricewaterhouseCoopers Audit	**Mazars**
Edouard Demarcq	Cédric Haaser

OTHER FINANCIAL INFORMATION RELATING TO ALSTOM SA

FIVE-YEAR SUMMARY

Information as per Article L. 232-1 of the French Commercial Code

		Year ended				
		31 March 2015	31 March 2016	31 March 2017	31 March 2018	31 March 2019
1.	**SHARE CAPITAL AT YEAR END**					
a)	Share capital *(in € thousand)*	2,168,547	1,533,889	1,537,983	1,555,473	1,565,006
b)	Number of outstanding issued shares	309,792,497	219,127,044	219,711,830	222,210,471	223,572,313
c)	Par value of shares *(in €)*	7	7	7	7	7
2.	**OPERATIONS AND INCOME FOR THE YEAR** *(in € million)*					
a)	Dividends received	-	-	-	-	-
b)	Income before tax, depreciation, impairment and provisions	28	(782)	(45)	262	311
c)	Income tax credit	39	100	21	22	18
d)	Net income after tax, depreciation, impairment and provisions	(597)	(268)	(23)	282	1,529
e)	Dividends [(1)]	-	-	55	77.8	1,229.6
3.	**EARNINGS PER SHARE** *(in €)*					
a)	Net earning after tax, but before depreciation, impairment and provisions	0.22	(3.11)	(0.11)	1.28	1.47
b)	Net earning after tax, depreciation, impairment and provisions	(1.93)	(1.22)	(0.10)	1.27	6.84
c)	Net dividend per share [(1)]	-	-	0.25	0.35	5.50
4.	**PERSONNEL**					
a)	Average headcount of the year	1	1	1	1	1
b)	Amount of remuneration of the Chairman and Chief Executive Officer *(in € thousand)* [(2)]	1,744	7,823	1,131	1,726	2,113
c)	Amount of social charges and other welfare benefits for the year *(in € thousand)*	464	811	305	718	766

(1) For the last year-end, subject to the approval of the General Shareholders Meeting.
(2) The amount mentionned at 31 March 2016 includes the conditionnal exceptionnal remuneration of Mr. Patrick Kron for €4,449,000.

APPROPRIATION OF THE NET INCOME FOR THE PERIOD ENDED 31 MARCH 2019

Information as per Article 243-bis of the French Tax Code

The result for the year ended 31 March 2019 is a profit of €1,529,438,701.67. It will be proposed at the next meeting of shareholders:

- to distribute a dividend for an amount of €1,229,647,721.50 *i.e.* €5.5 per share, from the result of the fiscal year;
- to allocate the balance of the result not distributed, *i.e.* an amount of €299,790,980.17, to the General Reserve account which would accordingly amount to €4,234,699,137.73.

This dividend distribution will be submitted for approval to the General Meeting of shareholders on 10 July 2019.

For the last three fiscal years the following dividends were paid:

- year ended 31 March 2016: €0;
- year ended 31 March 2017: €55 million;
- year ended 31 March 2018: €78 million.

COMMENTS ON STATUTORY ACCOUNTS

Information requested by the Article L. 225-100 of the French Commercial Code

The Company is the holding company of the Alstom Group. ALSTOM Holdings is Alstom's sole subsidiary. The Company centralises a large part of the external financing of the Group. Fees from its indirect subsidiaries for the use of ALSTOM name are the Company's main source of revenue.

Income statement

The Company net profit amounted to €1,529 million and mainly comprised:

- €(50) million operating expense stemming from the fees for the use of ALSTOM name minus administrative costs and other external costs;
- €1,560 million financial income mainly linked to the release of the provision on the investment in Alstom Holdings for an amount of €1,200 million and dividends received for an amount of €400 million;
- €1 million non-recurring income; and
- €18 million net income tax credit mainly linked to the tax grouping.

Balance sheet

Total of balance sheet amounts to €9,340 million and is mainly made of:

- assets:
  - ALSTOM Holdings investments totalling €9,216 million in net value,
  - advances to ALSTOM Holdings amounting to €85 million;
- shareholders' equity and liabilities:
  - shareholders' equity amounts to €8,194 million and is made of:
    - share capital: €1,565 million,
    - paid-in capital: €931 million,
    - reserves: €4,168 million,
    - net profit of the period: €1,529 million,
  - provisions for risks and charges amounting to €5 million,
  - outstanding bonds amounting to €886 million.

INFORMATION ON TRADE PAYABLES & TRADE RECEIVABLES

In accordance with the Article D.441-4 of the French Commercial Code, it is stated that trade payables and trade receivables recorded on the balance-sheet of the year ended 31 March 2019 are made up as follows:

	Trade payables						Trade receivables					
	Article D.441 I – 1. Invoices received due for payment and remaining unpaid at the closing date						Article D.441 I – 2. Invoices issued due for payment and remaining unpaid at the closing date					
(in € million)	0 day	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total 1 day or more	0 day	1 to 30 days	31 to 60 days	61 to 90 days	91 days or more	Total 1 day or more
(A) Ageing profile of payment arrears												
Number of invoices involved	6					14	-					19
Total amount of invoices involved (excl. VAT)	-	0.11	0.03	-	-	0.14	-	-	-	-	2.48	2.48
Percentage of total purchases for the fiscal year (excl. VAT)	-	0.11%	0.03%	-	-	0.15%						
Percentage of sales for the fiscal year (excl. VAT)							-	-	-	-	4.40%	4.40%
(B) Invoices excluded from (A) related to disputed or unrecorded payables and receivables												
Number of invoices excluded	11						31					
Total amount of invoices excluded (incl. VAT)	0.24						3.17					
Comments	Excluded invoices are related to unrecorded or disputed payables.						Excluded invoices are related to disputed receivables.					
(C) Reference payment terms used (contractual or statutory – Article L. 441-6 or Article L. 443-1 of the French Commercial Code)												
Payment terms used to calculate arrears	Contractual payment terms Statutory payment terms		45 days following the end of the month				Contractual payment terms Statutory payment terms		30 days following the end of the month			

4
RISK FACTORS, INTERNAL CONTROL AND RISK MANAGEMENT

AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram

Risk assessment and management are embedded in the Group's operational and strategic objectives. Alstom regularly reviews the risks it faces within the framework of risk management set forth in section 4 "Risk control environment", allowing to rank them by decreasing order of importance within each risk category. The current document follows the 24 October 2018 guidelines from the AMF regarding the implementation of ruling (EU) 2017/1129 of 14 June 2017 setting forth the description of risk factors in the universal registration document. The risks described below are the ones considered significant for the company, *i.e.* those which could have the greatest negative material impact on activities or results (or the Group's capacity to reach its objectives), and/or a significant probability of occurrence.

Because of its diverse activities, footprint, and development, the Alstom Group is subject to different risk categories. The Group carries out its operations within fast-moving environments which could trigger exogeneous risks to have an impact on the risk profiles monitored by Alstom.

Alstom's assessment of this order of importance can change at any given point in time, in particular should new internal or external facts occur. The risk factors are assessed by Alstom at the date of this document.

The following risks are common between Chapter 4 and Chapter 6: Recruitment and retention, Compliance and Accidents.

OPERATIONAL **AND STRATEGIC RISKS**

CONTRACTS EXECUTION

Risk identified	Monitoring and management of the risk
Alstom's business activities lead the Group to engage in very large complex long-term contracts. These complex long-term contracts may be signed by several players, *via* a consortium or the creation of a project company, particularly in the case of PPP projects (public-private partnerships) or the like, which take on concession and project financing responsibilities. Due to the complexity and the length of the projects in which Alstom participates, the actual costs and productivity could potentially differ from what the Group had initially forecasted. The profit margins generated by Alstom with respect to some of its contracts can, as a result, prove to be lower than those initially forecasted, or even lead to zero profits or losses. The risk is that operational issues and gross margin deterioration occur during execution phase. To characterize this risk in its project portfolio, Alstom categorizes projects along several criteria, grouped by nature: • project economics: selling price, financing schemes and risks, terms and conditions etc.; • project complexity: technical and engineering developments, schedule requirements, duration, certification requirements, etc.; • project organization: localization requirements, resources availability and competences, customer environment, new and emerging countries, share of work split between multiple sites, complex project design organizations and project industrial organization, partnership with civil and/or industrial partners; and • commercial: customer relationship, partnerships through Joint Ventures or consortia. The variation in costs and profitability of certain contracts during their execution can also significantly affect the earnings and cash flows of the Group over a given period. The revenue, cash flow and profitability of a long-term project vary significantly in accordance with the progress of that project and depend on a variety of factors, some of which are beyond the Group's control, such as unanticipated technical problems with equipment being supplied, postponement or delays in contract execution or in contract bidding process, financial difficulties of customers, withholding of payment by customers, and performance defaults by or financial difficulties of suppliers, subcontractors or consortium partners (particularly with civil works companies) with whom Alstom may sometimes be jointly liable.	To anticipate and capture risks on projects, project reviews are organised: • at the headquarters level for projects over €25 million and which are classified internally as having a high level of risk; these reviews are referred to as "Critical Project Reviews"; • at the region level for projects below €25 million or which are classified as non-critical; these reviews are referred to as "Region Project Reviews". All project reviews are documented in formal minutes and are held on a semi-annual basis to assess the impact of the project portfolio as part of the financial closing for the period. The region management teams are closely involved in the preparation of these reviews and oversee: • after the signature of the contract, all material changes after the submission of the offer regarding the terms of the initial offer and the related impact on the risk analysis for the project; • during the performance of the contract, any material change (for example, new risks or opportunities) which could have an impact on the financial performance of the project at termination. Specific major contracts such as PRASA, eLoco Madhepura, Amtrak, Coradia Stream ICNG & POP, Dubai Metro 2020, Ryadh Metro among others are subject to specific focus and risk management due to their size, risk profile, product development nature, or project cycle stage (design, certification, industrialization or ramp up). Alstom also follows an anticipation model targeting key project dimensions, notably: • from a product offering standpoint, favour maximum adherence to standard solutions with standardized solutions and execution footprints;

Risk identified	Monitoring and management of the risk
In addition, Alstom has signed many contracts containing requirements to comply with strict delivery schedules or mandatory performance levels for the equipment it delivers or a rigorous delivery schedule. If the Group were unable to comply with these obligations, Alstom's clients could request the payment of contractual penalties, or terminate the contract in question, or even claim compensation for damages, which could have an adverse impact on the business activities, financial position, results or outlook of Alstom. Furthermore, combining large project size with technical and/or organizational complexity reinforces the risk. Additionally, a project supported by development in R&D or requiring Transfer of Technology, could generate delay and financial exposure. Moreover, although these cases remain rare, Alstom may have to face calls of first demand bank guarantees in relation to its contracts for potentially significant amounts. As of 31 March 2019, the aggregate outstanding amount of guarantees over contract granted by banks and insurance companies totals €8.8 billion (please refer to Note 32 to the consolidated financial statements for the year ended 31 March 2019). Alstom has established strict risk control procedures for performance requirements and technical, financial and contractual risks applying from tendering to contract negotiation and execution and monitoring up to completion of the projects, as described in section "Risk control environment". However, Alstom can give no assurance that these measures enable it to accurately predict the profitability of a new contract, or to avoid or limit the deterioration of the conditions under which a contract is executed. Certain projects are or may be subject to delays, cost overruns, or performance shortfalls which may lead to the payment of penalties or damages. Such difficulties may have a significant adverse impact on the Group business activities, financial position, results or future outlook. In addition, unfavourable geopolitical events in the geographic areas in which Alstom operates can increase difficulties relative to the conditions under which the contracts the Group has signed are executed, extend execution periods, disrupt the supply chain or trigger unexpected legislative or regulatory changes that could significantly increase the costs of execution initially projected by Alstom for these contracts. These negative developments could, for example, result in protectionist legislation which creates barriers to trade or result in mandatory embargos or trade sanctions restricting economic exchanges with certain countries or entities. Legal principles such as *force majeure* or change in laws regarding contracts could allow some mitigation of the impact of these developments but their use could create a litigation risk due to differing interpretations of these legal principles. As a result, these geopolitical events could have an adverse impact on the business activities, financial position, earnings or future outlook of Alstom.	• from an organizational standpoint, to anticipate project staffing needs at pre-Tender and Tender stages with the Regions, the central functions and the HR organization; • from a technical standpoint, to identify and anticipate activities with longer development or validation periods and additional certification tests; • From a supplier performance standpoint, to implement double sourcing strategies for weaker suppliers and Supplier Quality audits. Additionally, Alstom has deployed a number of initiatives aiming at managing risk, including: • increased selectivity at Tender stage based on return on experience processes; • a dedicated "Project Performance" team of experts focusing on a reduced set of projects (150) to provide hands-on support to projects experiencing execution issues, or where execution issues are anticipated; • a continuous challenge and continuous improvement of Project Management capabilities and maturity through the APSYS (Alstom Performance System) actions plans devised during project site audits and assessing the people, process and tools dimensions; • an external certification of skillsets for Bid and Project Managers; • a strong focus during Management reviews on operational aspects such as planning or costing.

TECHNOLOGICAL & PRODUCTS CONCEPTION AND PERFORMANCE, AND CERTIFICATION

Risk identified	Monitoring and management of the risk
The Group designs, manufactures and sells several high-value products and solutions of large individual value that are used particularly in major infrastructure projects. The Group is facing increasingly high expectations in terms of environmental performance. Flexibility requirements are enhanced, resulting in significant evolution of the specifications. Alstom is required to address the evolution of customers' demands for more and more complex tenders with increasing constraints and uncertainties in homologations. The Group is facing the risk relating to a product and/or a technology that may not reach the contractual performance, which implies both technological and contractual aspects: • the technological risk is in particular related to technologies and R&D programs that need to be tailored to specific customer requirements, and to new technologies presenting uncertainties regarding their level of performance and quality, with possible latent defect issues; • more stringent contractual performance clauses which may result into significant warranty claims. Such risk is increased in particular in the following situations: • if the operating conditions is beyond assumptions considered for the validation plan, then comes the risk that part of the operating conditions may not be covered by the validation plan., *e.g.* If the customers use Alstom products at a higher speed than recommended; • in case of delay or failure of a technology or product development, which can induce delay and cost on project; • refurbishment activities, where a challenge can exist on the gathering of sufficient documentation, drawings and procedures regarding the product to be modernized or maintained, especially considering the fact that certain refurbishments activities relate to products developed under previous regulation and standards. During the actual refurbishment, the risk to discover unexpected obsolete components or sub-system is also to be considered and can lead to further costs and delay. Alstom is also required to introduce new, highly sophisticated and technologically complex products on increasingly short time scales. This necessarily limits the time available for testing and increases the risk of product defects and their financial consequences. It is sometimes necessary to fine-tune or modify products during the production cycle or while the client is using them. Because Alstom manufactures some of its products in series, it may then need to make such modifications throughout the production cycle. In addition to the direct cost of such modifications or of managing returned products, Alstom could be found liable for delays and corresponding operational losses suffered by its customers, which could trigger the payment of penalties or damages. The markets in which the Group operates quickly evolve with the development of new technologies, products and services; their transformation is enhanced by newcomers especially from the fields of digital and big data. Alstom has to anticipate these changes and integrate new technological enablers or new solutions into its offering. This requires, on the one hand, significant expenditures and investments of which the future profitability cannot be guaranteed and, on the other hand, a strategy of innovation increasingly developed through partnerships. In addition, Alstom is increasingly using or combining complex technologies that evolve very quickly, or components developed by third parties that integrate such technologies. This evolution requires the implementation of a design and approval process that is more robust in order to shorten the development phase, monitor technological evolution, and comply with product safety requirements. This could trigger additional costs that are more significant than initially anticipated, or cause delays in delivery.	Through its "Design for Quality" process applying to the Technology and Product Development cycles, Alstom ensures strong governance and focus is placed on development maturity and performance of its products. This process includes checklists for each internal validation gate by the relevant departments, mitigation plans, a structured Return of Experience process, and is underpinned by the skills development and training of engineers involved. The Group has also concluded partnerships with external expert on critical technologies, such as: • DLR Germany for fuel cell; • CEA France for battery ageing; • ITE SuperGrid for Silicon Carbide components; and • Airbus for Cybersecurity. The methodology developed to anticipate the certification phase within project management is: • early certification requirements identification and capture; • development of our own testing facilities to better validate and fine tune our Rolling Stock before moving to national networks for certification tests to secure the reliability of our RS beforehand; • develop "cross-acceptance" between European countries, so as to validate tests results from one country to another and allow their acceptance without running again tests and completing new files to bring evidence of compliance to regulation: this will allow a significant cost reduction as well as a better access to European railway market; and Regarding certification, to ensure a proper consideration of the local regulations, a Railway Regulations Register is maintained by the Safety & Regulation (S&R) department. The Railway Regulations Register is updated on a quarterly basis and reviewed by the Country Regulations Officers.

Risk identified	Monitoring and management of the risk
Concerning certification of the Group products, changes in the certification regulation requirements may have an impact on the product conception, organization and financial performance of the projects. The emergence of new markets and of customers with multiple homologation requirements, approaches and regulating bodies generate diverse situations in terms of homologation and certification. The sale of the Alstom's products depends, most notably, on compliance with rail transportation security standards that differ widely at the global level and are governed by many regulatory authorities. This creates a complex environment, especially in Europe, and disrupts the process of securing the homologation of trains. The homologation process may last longer and be costlier than initially anticipated due to the extent of testing and other supporting technical elements required by the authorities. In the past, Alstom has faced difficulties associated with complex homologation procedures, particularly in Germany. In addition, contracts increasingly include language that requires Alstom to bear the risks and obligations associated with the homologation process. The materialization of these risks could trigger cost overruns and the payment of significant penalties or damages, service interruptions affecting the products, or even the risk of cancellation of the contract in extreme cases of prolonged delays. However, the situation varies by country and technology. No guarantee can be given regarding the time frame required for obtaining homologations, and any significant problem in this domain could have an adverse impact on the business activities, financial position, earnings, or future outlook of Alstom.	Alstom Preferred Standards List (APSL) is updated on a monthly basis and an alert is circulated to inform APSL Alert subscribers of changes impacting APSL. Additionally, a Certification Core Competence Network has been set up to animate the community of Country Regulations Officers and all managers in charge of certification on sites where project execution is delivered. This network enables the certification community to regularly meet to share operational experiences and update their knowledge of the various regulations.

SOURCING

Risk identified	Monitoring and management of the risk
Alstom uses raw materials and manufactured goods in amounts which vary according to the project and which may represent a significant part of the contract price signed by Alstom. Given the emergence of trade and customs barriers, difficulties and delays in the delivery of certain manufactured goods and the extreme volatility of the prices of raw materials such as steel, aluminum, stainless steel or copper as well as energy surcharges on specific commodities like castings, forgings, structural steel, piping and tubing, the Group cannot guarantee that corresponding variations in cost will be fully reflected in contract prices, and may be unable to recoup these raw material price increases, which could affect the profitability of such contracts. In addition, the increasing demand to localize the production of Alstom's products in emerging railway markets where the industrial environment is developing but not yet mature for some commodities and in some markets may induce delays and additional costs. Any unexpected unfavorable evolution in this area may create a negative pressure on profit margins and adversely affect the business activities, financial position, the results or the future outlook of the Group. In addition, Alstom could be dependent on certain suppliers that satisfy the criteria set by the Group, notably for certain large suppliers, which are in quasi-monopolistic positions. Alstom is therefore exposed to the risk of excessive dependence on some of its suppliers, which could affect its performance and, hence, its profitability. This excessive dependence may take different forms, for instance in case of criticality in terms of technology, *i.e.* if a supplier found itself in a real single- source situation. In such a case, activating an alternative source in the event of the insolvency of the supplier concerned might affect the Group's performance in terms of costs and deadlines. Certain suppliers or subcontractors could experience financial difficulties or be unable to comply with the quality standards or deadlines set by Alstom or refuse to accept certain key conditions relative to the technical specifications imposed by Alstom's end client. Considering the duration of a railway project, lasting on average three to five years, suppliers could face different phases of instability not necessarily identified in the beginning of Alstom's projects, in terms of business continuity. If one of these suppliers or subcontractors fails to fulfil its obligations, or if contractual relations with one of them are severed, delivery delays, unexpected costs, or reduced technical performance that could lead to the payment of penalties or damages might occur.	Suppliers' evaluation and selection in Alstom relies on complementary activities: • standard checklist to assess capability of suppliers in terms of Engineering, Supply Chain, Quality, Industrial, Finance and organisation; • Supplier Risk Scorecard mapping supplier Solidity and Fluidity; • Supplier Financial risk recommendations available for all buyers, and outsourcing of suppliers rating evaluation to Bureau Van Dijk database, used for all production suppliers; and • Alstom has launched the "RAILSPONSIBLE" initiative in 2015 together with SNCF, DB, NS, SBB, Bombardier, KB, SKF and RFI in order to join resources to mitigate CSR risks along the railway supply chain. If a dependence relationship exists, the components are clearly identified and existing suppliers are subject to action plans for development. Plans aimed at securing a larger number of supply sources are put in place and the option of having the Group manufacture these products can be envisaged. However, Alstom cannot guarantee that these development plans will prove sufficient or ensure a timely availability. All other specific actions are set in the overall Sourcing Action Plan updated each year in the Sourcing Delivery Plan and presented to the CEO.

CONTRACT TERMS & CONDITIONS, LITIGATIONS

Risk identified

Alstom's business activities lead the Group to engage in very large complex long-term contracts. These complex long-term contracts may be signed by several players, *via* a consortium or the creation of a project company, particularly in the case of PPP projects (public-private partnerships) or the like, which take on concession and project financing responsibilities. These long-term contracts are signed with customers that, for the most part, are public entities. Due to the complexity and the length of the projects in which Alstom participates, the actual costs and productivity could potentially differ from what the Group had initially forecasted. These types of customers require that the Group comply with project bidding and open market specificities, which limit its ability to negotiate certain contractual terms and conditions and can force it to accept less favorable conditions than those normally required by the Group (*e.g.* limitations on liability, cash flow principles).

Certain contract clauses (intellectual property, force majeure, jurisdiction, limitation of liability etc...) can trigger risks as unmanageable events may arise in the course of execution of a project, especially when projects are executed with partners. For example, such customers may insist on a payment schedule that reduces or eliminates advance payments or that leads to negative cash-flow during the execution of the project, mandatory technical performance levels or requirements associated with the issuance of parent company guarantees. Indeed, public procurement procedures often take the form of contracts of adhesion that cannot be amended, causing bidders to risk disqualification if they attempt to include special considerations in their offers. These contracts include an increasingly stringent contractual requirements, with a larger variety of penalty clauses (in connection with delay, reliability, availability, maintainability and safety) and strict applications from customers.

These particularities could potentially expose Alstom to significant additional risks or costs that could affect the profitability of its projects and have an adverse impact on its business activities, financial position, earnings, or future outlook. Furthermore, a growing portion of Alstom's order backlog includes significant contracts that can impose localised manufacturing or purchasing requirements in countries in which the project is being executed, particularly in emerging countries such as South Africa, India or Brazil, but also in other countries such as the United States or Russia.

In addition, the structure and duration of Alstom's projects may result in the disbursement of significant sums before the contract begins to generate any cash flow. As a result, Alstom's ability to negotiate and collect customer advances and progress payments is therefore an important element of its working capital management. Unexpected events associated with the execution of the contracts signed by the Group, which are described in the risk factor "Contract Execution" above, increase the scope of this risk. Additional information regarding customer deposits and advances and working capital are given in Notes 18 and 16 to the consolidated financial statements for the fiscal year ended 31 March 2019. Finally, the development of the Group in emerging countries, often through the implementation of partnerships and third-party manufacturing may also generate the risk that working capital needs or investment related to these developments further increase, particularly in the launch phase. Any unexpected discrepancy between the Group's disbursements and amounts received on orders placed, or even any reduction in the overall volume of orders placed or a deterioration of the payment terms on these orders has an automatic adverse impact on the evolution in working capital requirements and, as a result, can have a negative effect on the business activity, financial position, results or future outlook of Alstom and its cash flow needs (please refer to the section "Financial risks").

Similarly, concerning suppliers, purchases constitute a very significant proportion of Alstom's business, with purchases ranging from industrials to services, equipment and sub-systems. Alstom may face difficulties to negotiate terms and conditions with suppliers with high bargaining commercial power or being in a dominant position. Such difficulties can for example limit Alstom's ability to formalize the provisions concerning the variation orders' requests, which are necessary to adapt to the customers' needs and the Group's demand. Alstom can also have difficulties to have back-to-back agreements or undertakings with suppliers and sub-contractors to ensure that the required legal framework (*e.g.*, cybersecurity, trade secrets, export control, duty of vigilance, data-privacy) is implemented. In case of bankruptcy of one or more of its suppliers, the Group may be impacted and not being able to perform its own obligations towards its customers.

Finally, due to the nature of its business activities, Alstom is exposed to the risk of technical and commercial litigation. See Note 33 to the consolidated financial statements at 31 March 2019 for a description of the main disputes of the Group. Alstom considers that it has no other significant litigation than those described in this document.

Monitoring and management of the risk

Risk management of terms and conditions is effective *via* the following actions:

- systematic review of the proposed terms and conditions at tender stage in Request For Proposals by Legal/Finance/Tax, with the support of Tender Control: the Risk Committee meetings organised per tender allow for a sharing of information and capture of the issues;
- return on experience from Contract Managers and Sourcing Contract Managers to be reported at tender stage to anticipate execution risks based on execution of existing or past projects;
- updated Contracts Claims and Insurance Management manual ("CCIM") to manage strengths and weaknesses of contracts signed and to provide rules, guidelines and tools to Project Teams and enhance early identification of risks and opportunities;
- return on experience on lost litigation matters;
- an instruction on contractualisation in legal sourcing for T&Cs with suppliers and subcontractors and improvement of Alstom legal sourcing T&Cs with better protection;
- a single tool is used to capture risks, including the legal and contractual ones, and validation must be performed by the stakeholders for the tender to go ahead;
- improvement of QCD (Quality Costs Delay) on execution to reinforce Customer confidence;
- maintain the traceability culture of events/actions/exchanges etc. inside projects;
- contract Management, and since 2017 Central Claims management, as part of Legal allows a better follow-up/visibility/predictability and management of Contractual/Technical risks and potential claims: regular compilation/updates/review of claims with monthly reviews;
- for targeted complex projects, a dedicated Contract Management cell has been organised to face Employer and Consortium partners.

ACCIDENTS

Risk identified	Monitoring and management of the risk
In the event of a railway accident involving equipment supplied by Alstom, the customer, potential victims, or their insurers could act against Alstom in the context of legal proceedings with respect to damages suffered. Even if the cause of the accident cannot be immediately attributed to the failure of the equipment supplied by Alstom, the simple fact that Alstom supplied equipment involved in a railway accident could suffice to implicate the Group in legal proceedings for as long as the circumstances surrounding the accident have not been clarified. This type of accident may also cause the authority responsible for transportation safety to decide on the temporary suspension of a granted homologation. Furthermore, railway accidents are typically subject to intense media coverage, which could potentially affect Alstom's reputation as well as its public image regarding the reliability of its products. Alstom relies on many internal verification and approval procedures that enable it to control the quality and the safety of its equipment before it is made operational, in order to avoid the risk of an accident and to ensure the safety of passengers. Despite the existence of these procedures, Alstom cannot guarantee that railway safety will be risk-free. The occurrence of a railway accident involving equipment supplied by Alstom could, in the event that equipment failure is found to be the cause of such accident, have an adverse impact on the business activities, financial position, earnings, or future outlook of Alstom, as well as on its reputation and that of its products.	Safety and quality are embedded: • in the complete development/deployment V-cycle of Products, Systems/Platforms and Projects, which are all associated with a Safety Report/Safety Case demonstrating their Safety in compliance with current regulations & legislations; • in services through an adequate safety management of maintenance activities when performed by Alstom; • through a robust Safety escalation procedure which enables Alstom to monitor potential safety issues and to perform in a timely manner the appropriate measures. A Safety Management System (SMS) is part of the Alstom Management System. This SMS defines essential rules for management of railway safety, responsibilities for their implementation, methods to verify implementation and principles of continuous monitoring, development and networking. Key rules are: • compliance with "Local" Regulation, Contract and Code of Practice; • obligation for each Contract to commit on a Safety Plan to provide assurance that safety is implemented, and to issue a Safety Report/Safety Case demonstrating compliance with the Safety objectives for product/system deliveries; • obligation to communicate/transfer any safety relevant information for the integration, use and maintenance of our Products, Systems and Services to Customer. Top Management oversees the definition of the Transport Quality & Safety strategy. Deployment of this strategy is under the responsibility of the involved SVP. Each Project team must: • perform safety analysis and ensure traceability of the safety demonstration (safety and Reliability Availability Maintainability Safety teams); • ensure that a safety assessment is done (done or piloted by Quality); • ensure that the safety is demonstrated at key milestones through DFQ process and issue an authorization endorsed by key positions staff defined by delegation of SVPs. Safety Issues reporting is managed into the Top 10 process, which improves visibility & reactivity of the management of Safety Issues. This data base is used to record all potential incidents which could have led to accidents. It segregates between K1 incidents (potential safety threat) and others Kx Incidents (no impact on safety). This data base is accessible to the Quality organization which is in charge of collecting and posting the incidents. All safety incidents related to maintenance contracts and warranty period are recorded.

HUMAN RESOURCES RISKS

Recruitment and retention

Risk identified	Monitoring and management of the risk
The success of Alstom's development plans depends, in part, on its ability to develop skills, to retain its employees, and to recruit and integrate additional managers and skilled employees. Recruitment and retention stakes are two-fold: • the timing of recruitment regarding key positions at the early stage of projects; • the level of retention often triggered by excess demand for highly qualified managers and specialists including project directors and critical R&D staff. These challenges are closely related to the job market situation and can materialize notably under the following forms: • competition poaching the same pool of niche technical talents who are scarce in the market; • "Time-to-Fill" for key positions, particularly at the early stages of important projects; and • lack of relevant talent and skills in signalling in Europe, including in France and to some extent on markets more recently addressed by Alstom (*e.g.* Asia-Pacific and Middle East). Alstom can give no assurance that it will be successful in recruiting, integrating and retaining such employees as needed to accompany its business development, in particular in emerging countries. Conversely the measures to adapt headcount to the market changes may result in significant social risks which may have an adverse impact on the expected cost reductions and the Group production capacities.	With regards to Time-to-Fill, the following is in place: • a dedicated people forum and expat return forum to address talent gaps and steer careers; • an effective candidate sourcing driven by a dedicated team based in Bangalore, India, a monthly talent forum, interviewing skills, social media, employee referral program and an improved on-boarding & induction process; • job description database: to help support staffing projects with pre-defined job descriptions, competencies and target industries, an internal project was completed early 2019 to revisit and rationalize all job descriptions; and • candidate screening tools, larger pool of trained recruiters and, in specific cases, access to head hunters. With regards to talent and competency gaps: • for open positions in the different Regions, priority is to target local candidates and ensure shortlists with measurable diversity targets; • competencies retention: priority is given to internal opportunities before external recruiting; • People Review process to identify and retain key Talents (individual actions) or some risky professional groups (collective actions). The People Review process is completed by 100% of our Managers and Professionals; • strong involvement of the Executive Committee in the People review; and • international benchmarks on compensations, salary bands and a merit matrix approach allow a good level of risk management. With regards to Employer Branding & Employee Value Proposition: • several initiatives have been launched on social media; • an intense communication internally on open positions; and • regular Employee Opinion Surveys to identify key levers for engaging people and monitor which items need improvement.

MARKET RISKS

Competition

Risk identified	Monitoring and management of the risk
Alstom faces intense competition, both from large historical international competitors and regional players as well as new ones from emerging countries (particularly in Asia), where they benefit from more competitive cost structures. The consolidation initiatives on certain transport market segments that have already occurred, such as the German company Siemens' acquisition of the British company Invensys's signalling business or Hitachi's acquisition of the railway businesses of the Italian company Finmeccanica, or the merger of the Chinese companies CSR and CNR (renamed CRRC), is increasing this competition. This may put pressure on prices and profit margins, and also on payment terms and conditions, the manufacturing time frame, the technologies proposed, and the services provided to the client, which could weaken Alstom's position in certain of its markets and, as a result, have an adverse impact on its business activities, financial position, results or future outlook. In addition, particularly in an unfavourable economic environment, competition could further intensify. Increasing competition from Chinese leaders in European markets represent in particular a threat to European actors such as Alstom and could have an impact on Alstom's business activities, financial position, results or future outlook. Furthermore, although Alstom has developed and continues to develop its presence on many geographic markets, including *via* alliances and partnerships, access to certain markets can prove to be difficult, particularly if there is a local competitor benefiting from a stronghold in its home market. These types of situations could put Alstom in an unfavorable position relative to some of its competitors and slow down its expansion strategy in certain zones. In addition, the initiatives taken by the Group may prove to be insufficient in case of a long-lasting downturn of the world economy, drop in demand and increasing and continued competitive pressures. Any unfavorable development of any of the aforementioned factors may have an adverse impact on Alstom's markets and as a consequence an adverse effect on its business activities, financial position, results or future outlook.	The competition risk is managed *via* a proactive product policy and optimized processes and footprint.

Tendering

Risk identified	Monitoring and management of the risk
A significant proportion of Alstom' business takes the form of long- term projects with customers, which are initiated *via* competitive processes, and for the most part, with public entities. These types of process require that the Group comply with project bidding and open market specificities, which limit its ability to negotiate certain contractual terms and conditions and can force it to accept less favorable conditions than those normally required by the Group (*e.g.*, limitations on liability, cash flow principles). In addition, these projects can be highly complex in terms of technology and must meet operational, regulatory or contractual requirements which are extremely demanding or difficult to achieve and may have to deal with unexpected contingencies during the implementation phase. Their contractual structure (*e.g.*, joint ventures, public-private partnerships, consortia) may also add constraints and complexity. Estimates made at tender stage may be inaccurate, notably if the following causes materialize: • modification at execution phase of the technical definition at tender phase (for instance in case of evolution of product offered, compliant to customer requirements); • lesser experience in some areas where no or few projects have been conducted for a certain period of time; and • complexity of the envisaged organisation (Project Design Organisation, Project Sourcing Organisation, Project Industrial Organisation). In addition, such customers may insist on a payment schedule that reduces or eliminates advance payments or that leads to negative cash-flow during the execution of the project, mandatory technical performance levels or requirements associated with the issuance of parent company guarantees. Indeed, public procurement procedures often take the form of contracts of adhesion that cannot be amended, causing bidders to risk disqualification if they attempt to include special considerations in their offers. These particularities could potentially expose Alstom to significant additional risks or costs that could affect the profitability of its projects and have an adverse impact on its business activities, financial position, earnings, or future outlook. The actual cost of development and manufacture of these projects may significantly exceed the initial cost estimated during the bid phase, which in turn may adversely impact Alstom's results and financial position. In the event of failure to achieve the required performance or meet the scheduled timetable, customers can also most of the time demand payment of penalties, or even terminate the contract. Furthermore, a growing portion of Alstom's order backlog includes significant contracts that can impose localised manufacturing or purchasing requirements in countries in which the project is being executed, particularly in emerging countries such as South Africa, India or Brazil, but also in other countries such as the United States or Russia. In order to win contract bids and to complete the projects associated with these contracts, Alstom must build local production capacities or secure or increase its volume of third-party purchases from new local suppliers. At times, these contracts also restrict Alstom's freedom to select its own partners, which can lead to constraints regarding costs, refinancing, target volumes and execution. Finally, the political instability that exists in certain countries can have an impact on the public entities with which long-term contracts are signed and, as a result, have the consequences mentioned above.	The tender review process includes a list of items which must be systematically reviewed and verified. These include, for example, the profile of the customer, the contractual organisation of the project and the project partners, supplier and subcontracting risks related to the technology being used and other technical risks, reliability and coherence of the estimated costs, the project timetable, the contractual clauses, secured payment mechanisms, bank and financial guarantees, exchange risks, geographical risks, tax issues, key financial elements (contract price, margin, risks and opportunities and related financial reserves, cash curves, etc.). The review process for commercial offers includes several review steps from the identification of the opportunity, upon receipt of the tender documentation and up to the final submission of the offer to the customer. Prior to submitting the offer, the region management and the local sites which will be involved in the quality, costing and timing elements of the offer must systematically approve the technical, legal and economic aspects of the project. The application of these processes is centralized in a specific tool for reporting and approval. The tendering risk is also managed *via* a tight monitoring of the transition period between tender and project phases, and a return on experience loop to capitalize best practices and lessons learned. In addition, the Group's bids and projects management is subject to a detailed risk assessment and management process which is continually being enhanced.

Technology transfers

Risk identified	Monitoring and management of the risk
The Group designs, manufactures and sells several high-value products and solutions of large individual value that are used particularly in major infrastructure projects. In addition, Alstom carries out some of its business through the control it shares with, or exercised by, other partners. Such partners may develop from Alstom's transfer of technologies their own products and services and become competitors to Alstom, by leveraging their local position to gain an advantage on a local market. In addition, some partners are requesting not only manufacturing technology transfers but increasingly design and industrialization technology transfer, inducing a more significant transfer of technology. Alstom's partners or suppliers may also exploit data on products they manufacture to service themselves. The risk can be characterized as follows: • if partners developed from our Transfer of Technologies become competitors, and leverage on their local position to gain an advantage on a local market; • if the License policy is not be able to compensate market share loss; • a trend is observed to have partners requesting not only manufacturing technology transfers but increasingly design and industrialisation technology transfer; and • if an Alstom partner or supplier is exploiting data on products they manufacture to service them.	Alstom's key response to the Technology Transfer risk are to: • ensure IP process deployment across Regions; • ensure process application, notably *via* a partner assessment during contract preparation; and • define Alstom strategic technologies to ensure consistent protection and communicate at all appropriate levels. Additionally, an upgraded Transfer of Technology process focusing on interfaces was deployed during 2018/19.

SECURITY RISKS

Cyber-attack against Alstom network and/or products

Risk identified	Monitoring and management of the risk
The Group relies on state-of-the-art information systems and technology to support its business activities and promote operational efficiency. The Group's broad geographic footprint, its diverse businesses and ranges of products, the integration of successive business activities and since November 2015 the separation of the infrastructure, systems and solutions from the ones integrated by General Electric with the Energy activities acquisition all make for a complex environment. The Group has also set up partnerships to carry out the management of its IT infrastructures and the support of solutions. The main issues relating to the information systems and technologies used by the Group are ensuring business continuity, protecting sensitive data and intellectual property rights, maintaining systems availability and managing IT assets compliance. The malfunction or failure of these systems may have external causes (viruses or other malware and computer hacking, network failures, etc.) or internal causes (malicious acts, breaches of data confidentiality, human error or negligence, obsolescence). The risk also encompasses the possibility that following a successful cyber-attack against Alstom, the company will lose data or have its data corrupted, triggering business interruption and loss of competitivity (*e.g.* tenders, intellectual property). Any such malfunction or failure can have an impact on the Group's operations and its financial results. The risk of cyber-attacks also exists regarding the products, services and systems developed by Alstom and sold to customers. Cyber-attacks can occur at any time during the life of Alstom products, from the conception phase to production, delivery, installation and implementation and during the actual operation of the products. The risk remains until the decommissioning of the products. These attacks can impact the comfort, availability and even the security of the Alstom solutions used by its customers. Such attacks may include business interruption and the fraudulent use of Alstom products and solutions for criminal purposes. The failure of these products and systems might impact the business activity of the product lines concerned, the Group's reputation, and hence its financial results. Commercial impacts are also possible as well as financial costs required to resolve such issues.	Defense mechanisms against cyber-attacks are implemented at every level in Alstom platforms and during projects execution, to decrease the exposition, and thus the likelihood for an attacker to reach the last step of the cyber-attack (In-depth defense principle). The Alstom Security strategy is based on 4 pillars: • Governance and risk management; • Detection/Prevention; • Protection; • Reaction. The risk of cyber-attack against Alstom products is addressed *via*: • Alstom dedicated Cybersecurity organization (and cybersecurity governance); • development of cyber security risk assessment awareness; • Alstom offer to be developed, including risk assessment, vulnerability management services to sustain operational security level of customer installed base; • creation of Cyber Security policies and guidelines, *i.e.* Global policies, Development policies, and Cyber security measures; • Alstom leading some standardization committees • Partnership with Airbus and several collaborations with cutting-edge organizations bringing innovation and expertise;

Employees security

Risk identified	Monitoring and management of the risk
The general environment in which Alstom undertakes its activities presents an increasing risk of intentional acts of aggression. Such acts can be the result of factors such as the political, social or economic context. Criminal or malicious acts targeting the Group are a real threat and could have damaging consequences on the safety of Alstom employees, assets, information security and, as a result, its activities. Two developments explain this situation: an increase in global insecurity on a worldwide level and, the increase in Alstom activities in high risk areas, especially in the southern hemisphere. These changes increase the risk that the Group's activities, its employees and infrastructures be the target of malicious acts which can be classified in four categories: • attacks on individuals: violence, robbery, extortion, harassment, kidnapping; • damage to assets: robbery, sabotage, destruction of means of production; • terrorist attacks; • intentional attacks on the image or reputation of the Group. Alstom employees could be the victim of violence either because they are seen as being part of a French company or as collateral victims of an act which does not specifically target them. On a legal level, French and European legal developments have reinforced the liability of companies in this field by creating a general obligation for companies to ensure the security of their employees. This obligation requires companies to foresee and prevent such risks that could endanger the security of their employees, with criminal consequences in case of non-compliance. Tools and processes have been implemented to minimize the impact of such malicious acts. Nevertheless, it is impossible to totally prevent such acts and their human, legal, financial or reputational impact could be particularly serious for the Group.	Implementation of a central security organization and of local security organizations within Regions and countries, when necessary. These organizations are based upon internal employees and/or security providers, depending on countries. The Security Department classifies countries with a risk-based approach (Extreme risk, High risk, Medium risk, Moderate risk, Globally safe). This classification is available for all employees, and travel-specific recommendations and specific warnings are issued whenever the situation requires. Additionally, this Department ensures that: • regular risk level reassessments are taking place; • the travel procedure is adapted to each country risk rating, and that pre-authorizations to travel are requested and processed (possibility of vetoing a travel if security conditions are not met); • the travel follow-up system implemented in March 2017 captures all travel needs and ensures the above process is respected; • prevailing country security plans are updated and security plans in countries where they had not been already edited are progressively established; • high security meet and greet programs and adapted procedures are implemented in the most sensitive countries. Induction programs are carried out in most countries of Latin America, Middle East or Africa.

INVENTORY RISK

Risk identified	Monitoring and management of the risk
The risk that Customer demand shifts or projects planning updates may result in: • high levels of inventory and an increase in working capital; • potential obsolescence of over stock, not usable for other projects increasing depreciation and scrap; • additional storage costs.	Permanent action plans are in place to monitor the hard inventory level and therefore mitigate the risk: • the majority of hard inventory is purchased based on customer order (*vs.* anticipation based on forecast); • hard inventory performance dashboard is reviewed monthly at site level and at central level monitoring root causes and action plans in value and coverage; • strategic planning initiatives such as Planning & Forecast Meeting are deployed aiming at an effective synchronization of all Sites planning.

LEGAL & REGULATORY **RISKS**

COMPLIANCE

Risk identified	Monitoring and management of the risk
Alstom's business activities are conducted in a varied, complex and changing legal and regulatory environment that covers both national and international areas. Due to its established presence in many countries, Alstom is subject to national legislation, particularly that resulting from the transposition of international treaties as well as to international norms and standards. This is especially the case in the area of competition laws and legislation relating to the fight against corruption and money laundering. These latter regulations have not only considerably widened their scope and gained in strength in recent years, for example, with the Sapin II law in France (Law No. 2016-1691 of 9 December 2016 relating to transparency, fight against corruption and modernization of business practices) or the 2010 ratification of the UK Bribery Act (British law on repression and the prevention of corruption ratified by the British Parliament on 8 August 2010 and effective on 1 July 2011), but authorities and jurisdictions responsible for their application have also increased their efforts to hunt and track down offenders and have enforced increasingly tougher sanctions. Alstom is inherently exposed to risks related to non-compliant commercial practices, which could mainly encompass two natures of risks: bribery/corruption and infringement of competition laws. The corruption and bribery risk can come also from third parties involved on Alstom's behalf or in cooperation with the Group (*e.g.*, consultants, joint venture/consortium partners, suppliers and, to a lesser extent, customers) as well than public officials in the environment surrounding the Alstom business. These third parties may not be fully aware of the boundaries that should not be crossed in respect to the International and local laws and may not have compliance rules and structures which meet Alstom's internal instructions and standards. Failure to comply with the laws and regulations applicable to ethical business conduct and, in particular, the fight against corruption and influence peddling, may have serious legal and financial consequences for the Group and severely damage its reputation. In addition, the act of exporting products from the markets in which they are produced can be restricted or subject to checks or to the receipt of an export licence. Certain countries are subject to export control regulations, embargoes, economic sanctions or other forms of trade restrictions imposed by the USA, Canada, the European Union, Russia or other countries or organisations (the "Sanctions"). These Sanctions or expanded Sanctions imposed on countries may restrict or prevent the business of the Group in such countries or result in amendments of the Group's policies and practices. No assurance can be given that checks on export goods, to which Alstom is subject, will not be made more stringent, that new generations of products developed by Alstom will not also be subject to similar checks, or even more rigorous checks, and that geopolitical factors or changes in the international context will not prohibit the receipt of export licences for certain customers or will not reduce Alstom's ability to execute previously signed contracts. Limited access to exported goods could have an adverse impact on the business activities, financial position, earnings, or outlook of Alstom.	Alstom is fully committed in the elimination of unlawful practices in relation to corruption and bribery and competition laws. Alstom constantly seeks to improve its compliance program and implement best in class compliance rules and processes. Alstom was among the first companies in the World to obtain the AFAQ ISO 37001 certification awarded by AFNOR Certification following an audit carried out between March and May 2017, confirming its commitment to fight corruption. The Ethics & Compliance (E&C) team is led by the Alstom Chief Compliance Officer who reports directly to the General Counsel and has a direct access to the Chairman and CEO and to the Ethics, Compliance and Sustainability Committee of the Board, of which she is the secretary. To avoid any possible internal conflict of interest, the Chief Compliance Officer has the authority and independence to define and implement the appropriate rules. The E&C rules and procedures in Alstom are centralized in the Alstom Integrity Program which is implemented through people, learning and communication. It is monitored both internally and externally. A Code of Ethics was first put into place in Alstom in 2001. Updated in December 2015, The Code of Ethics is available in multiple languages on Alstom's intranet and internet web sites. Despite the high quality of Alstom's products and the competitiveness of Alstom's offers, external business advisors (Lobbying, advising, Intelligence and Representation services) are sometimes required to improve Alstom's commercial relationships expertise in some countries. Alstom policies and instructions set forth strong principles, rules, safeguards and checking procedures for the selection, the use and the payment of such services. Information provided by all areas implicated when dealing with consultants must be disclosed in proper time and in a transparent manner to optimize the analysis of a potential risk that could damage the company's image. These procedures are enforced by a regular training followed by assessments to ensure all participants understand the key learning points and the extent of their obligations. Face to face training sessions and e-learning are essential to explain our policy and Ethics & Compliance rules and processes. Two e-learning modules dedicated to prevention of Corruption and Competition Law have been issued and all exposed employees of the Group are formally requested to participate to the e-learning exercises. A training campaign to address a wider and more focused target audience was implemented in 2017 and, as of end of December 2019, 83% of the target audience has been trained.

Risk identified	Monitoring and management of the risk
Concerning competition rules, Alstom's business activities are subject to a wide range of national and international regulations mainly aimed at combating anti-competitive practices, concerning suppliers, customers, partners and the competitors themselves. Infringement of these rules could lead to severe sanctions, such as fines, payment of damages and interest, and statutory prohibitions and criminal penalties. Such sanctions could also have a serious impact on the Group's reputation. Despite the measures Alstom has taken to comply with the regulations applicable to its business activities, it cannot guarantee that it will remain risk-free in this regard. If the Group or its employees were to commit any voluntary or involuntary act in breach of, or non-compliance with, applicable provisions and guidelines, this could potentially cause civil, criminal, or administrative liability issues for Alstom, exclude or eliminate Alstom from project bidding or manufacturer selection procedures, or even prohibit Alstom from accessing public contracts or exercising its business activities and, as a result, have an adverse impact on its business activities, financial position, earnings, or future outlook, as well as on its reputation.	Disciplinary measures are a key element of any E&C program and Alstom has made efforts to strengthen this aspect of its E&C program. All breaches of E&C rules are submitted to the Alstom Disciplinary Committee, made up of the CEO, General Counsel, SVP Human Resources and Chief Compliance Officer. Cases are presented to the committee and appropriate sanctions are taken. In addition to the rules regarding interactions with third parties' consultants, a specific instruction is in place presenting the rules and procedures for dealing with consortium or Joint Ventures/M&A activities, suppliers and subcontractors. Additional instructions focusing on Consulting companies, Gifts & Hospitality, Political and Charitable contributions, Sponsorship and the management of conflicts of interest are in place and must be applied by all employees. The Delegation of Authority rules for Gifts & Hospitality, Political and Charitable contributions, Sponsorship are harmonised within Alstom. The E&C Ambassadors community created in May 2010 has increased in 2019 to more than 340 people. All appointed persons are volunteers from various functions. Their role is to diffuse the culture of integrity in the Group and to be a point of contact. The 2018/19 Yearly Integrity Review was launched in April 2019 to around 500 Executive and senior managers who reported on the efforts made to implement the Alstom Integrity Program in their scope of influence and on the ethical incidents that have taken place and the corrective actions undertaken. In terms of communication, the intranet has a dedicated section on E&C, posters are displayed on sites, and the internet website provides our external stakeholders much information. Regarding the antitrust/competition law risks, the Alstom policy called «Competition Awareness Guideline» sets forth strong principles, rules, safeguards and approval procedures to ensure the proper level of awareness and compliance with antitrust laws within Alstom. These procedures are enforced by regular trainings deployed in Alstom worldwide to ensure that all participants understand the key learning points and the extent of their obligations. Disciplinary measures are a key element of the competition awareness program. Any detected breaches of antitrust laws are submitted to the Alstom Disciplinary Committee. Cases are presented to the committee and appropriate sanctions are taken. For all compliance matters, Alstom also has an online whistleblowing tool, the Alstom Alert Procedure, which allows employees (*via* the Alstom intranet) and third parties (*via* the Alstom internet site) to report suspected violations and breaches of Alstom Code of Ethics.

PUBLIC ECOLOGICAL AND SOCIETAL ACCEPTANCE

Risk identified	Monitoring and management of the risk
The risk, coming from various third parties opposition to the Group's products and projects due to ecological and social factors could impact image and projects execution leading to delays or cancellation.	Public ecological and societal acceptance matters are managed in a transverse way *via* an internal workgroup involving HR, EHS, Legal, E&C, Sourcing, Internal Control and Sustainability & Corporate Social Responsibility. A Vigilance plan is published, and details measures to manage environment, safety and human rights aspects in Alstom processes and activities (especially regarding supply-chain).

FINANCIAL **RISKS**

The Group is exposed to currency exchange risks. Note 28.2 to the consolidated financial statements for the fiscal year ended 31 March 2019 presents the Group's exposure to currency exchange and the relating hedging portfolio, the exposure to interest rate, credit and liquidity risks, as well as the management policy of these risks. Detailed information on the Group financial debt amounting to €1,318 million as of 31 March 2019 and the financial risks is given in Note 27 to the consolidated financial statements for the fiscal year ended 31 March 2019.

The ability to obtain sufficient sources of bonding is for the Group a condition to bidding, obtaining new orders and receiving advances and progress payments from the clients. Alstom faces the risk of bonds being called (whether Alstom views this call as legitimate or not) and their values not recovered. In the event that Alstom's bonding capacity does not meet its bonding needs, or that the bonding market is closed to Alstom following an event of default under the relevant financing documentation, this situation could have an adverse impact on the financial position, earnings, business activities or outlook of Alstom.

In addition, any downgrading of Alstom's rating would unfavorably impact the financial conditions of the Group's financings and the access to certain financings and to bonding capacities. This may result in a substantial deterioration of the Group's financial and commercial situation.

Also, the Group cannot exclude the risks that would arise in project execution because of a degradation of the rating of its banks. Indeed, certain contracts of the Group include requirements on the rating level of the banks used for the corresponding projects, including for the issuance of bank guarantees. In case of events triggering a degradation of the rating of these banks, Alstom cannot warrant that this will not lead to various contractual complications, which would have negative consequences on projects execution such as delayed payments, postponement of project schedule, costs increase or other financial impacts.

Note 28 to the consolidated financial statements for the fiscal year ended 31 March 2019 present the Group's exposure to financial risks.

TAX

Risk identified	Monitoring and management of the risk
Due to its established presence in many countries, Alstom is subject to many different national tax laws. As the tax laws and regulations in force in the various countries in which Alstom conducts its business activities do not always provide clear and definitive guidelines, Alstom's structure, the operation of its business, and its tax regime are based on its interpretation of laws and regulations applicable with respect to fiscal matters. Alstom cannot guarantee that these interpretations will not be questioned by the relevant tax authorities or that the laws and regulations applicable in certain countries will not be subject to changes, fluctuating interpretations, and contradictory applications. In addition, the Group's transfer pricing policy may be challenged, as certain countries do not rely on OECD transfer pricing guidelines but on their own benchmarks, leading to challenge and reassessment or re-computation of transfer pricing leading to double taxation. More generally, any violation of the tax laws and regulations of countries in which the companies of the Group are located or operate could trigger tax reassessments, or the payment of late fees, fines, and penalties. These measures could have an adverse impact on the tax rate, cash position, results or outlook of Alstom.	The Tax risk is managed *via* the following actions: • periodical internal tax reviews; • specific mitigation plan for Customs, Brazil, India and training on Derivatives; • transfer Pricing Country files for the major countries.

BONDS

Risk identified	Monitoring and management of the risk
The risk of bonds being called (whether Alstom views this call as legitimate or not) and their values not recovered. The risk that bonding capacity does not meet bonding needs, or worse, that the bonding market is closed to Alstom following an Event of Default.	The Bonds risk is managed *via* the following actions: • an experienced team at central Alstom treasury involved at Tender stage to support Project Export Finance, Tender Control & Support, and the business at an early stage of contract negotiation; • a Central management of bank bonding lines (*e.g.* negotiation of Terms & Conditions, full pricing negotiation in 2016) and associated Parent Company Guarantees (PCGs), permanently adapting to affiliates needs on a project by project basis; • a restrictive Power of Attorney to issue PCGs from a central holding entity to back operating units requesting bonds issuance to banks. A Board authorization from the central holding entity is needed to execute important bonding lines, or not complying with the Group's golden rules; • processing of Bonds & Guarantees and PCGs through a unique dedicated tool; • ensure that Golden rules are well known and understood to avoid deadlocks during Execution phase; • ensure release of Bonds/Guarantees in due time to save available B/G lines; • define process and instruction to follow up Suppliers B/G issued in Alstom's favor; • close follow up of facility agreements and other bonding lines covenants/undertakings to avoid any breach under the documentation.

RISK CONTROL **ENVIRONMENT**

The Group has put in place a system of internal control procedures and evaluations initially based on control guidelines prepared by a recognised body, COSO (Committee of Sponsoring Organisations of the Treadway Commission). The procedures are compliant with the AMF "Reference Framework" published in July 2010 and updated from time to time.

The system of internal control put in place provides reasonable assurance that:

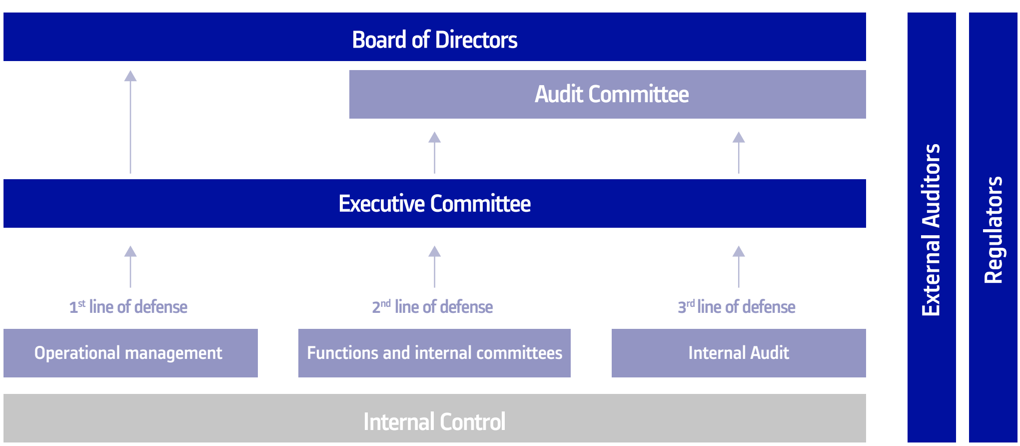
- the Group's Internal Rules and instructions including applicable laws and regulations are always complied with;
- information is complete, accurate and to the required quality, particularly financial information;
- operations are completed in an optimal manner and internal control processes are effective, particularly those concerning the safeguard of assets;
- achievement of business objectives is reached with identification and control of risk;
- the risk of fraud is minimised; and
- controls, including controls over risks, are widely understood at all levels within the Group and appropriate actions are taken to mitigate and minimise these risks.

Internal control consists of five inter-related components, which have been implemented within the Group:

- control environment covering integrity, ethics, competencies, authorities, responsibilities and staff development;
- risk assessment including the identification, analysis and minimisation of relevant risks;
- control activities, namely policies and procedures that ensure that Management's instructions are applied;
- information and reporting: information must be identified, captured and communicated in a format and timeframe to enable the relevant persons to carry out their responsibilities; and
- monitoring, including internal check and internal control procedures as well as internal audit: a process that assesses the quality of the systems performance over time and within a defined schedule.

By essence, an internal control system cannot provide a guarantee that such risks have been eliminated. It must bring them down to an acceptable level.

The Group's various actors of risk identification and monitoring are described below and can be illustrated according to the three lines of defense model set forth by the IFACI (*Institut Français des Auditeurs et Contrôleurs Internes*).



INTERNAL ENVIRONMENT

First line of defense: operational management

The Chairman and Chief Executive Officer is responsible for the internal control and risk management systems and for ensuring that internal control and risk management procedures are designed and operated effectively within the Group. Management is responsible for developing, operating and monitoring the systems of internal control and for providing necessary assurance that it has done so.

Unit Management always has the responsibility of maintaining internal control. An Internal Control Questionnaire (or "Self-assessment Questionnaire") has been developed which differentiates requirements to units based on their contribution to the Group's financial statements, using a risk-based approach and covering the Group consolidation perimeter. This Self-assessment Questionnaire is regularly reviewed in relation with the Group risks evolution. At least once a year, the Managing Director of each reporting unit formally certifies that the unit under his/her responsibility has correctly self-assessed its control environment.

Where the results of the Self-assessment Questionnaire indicate that controls are not at the required level, corrective action plans are required to be put in place. The progress of action plans is regularly followed up. The Self-assessment Questionnaire results are approved by unit Management (Finance and Managing Directors) and are subject to review by Internal Audit. The results are presented annually to the Audit Committee.

Good practices identified during this self-assessment process are promoted and broadcasted on the internal social media platform to ensure large information coverage to the units.

During the July 2018 Self-assessment Questionnaire review, over 1,000 users were mobilised.

Second line of defense: functions

Finance function and the procedures used in the preparation of the Group's financial statements and other accounting and financial information

The finance function controls business, operations and projects to optimise the Group's profitability and cash generation whilst providing internal and external stakeholders with reliable information including financial information.

The finance function defines the Group's principles and financial policies in terms of tenders and projects control, funding, treasury, internal control, accounting, tax and management control.

The accounts of reporting units are prepared in accordance with the Group's accounting policies. The data is then adjusted, where necessary, to produce the local statutory and tax accounts. Integrated consolidation software is used for both management reporting purposes and to produce the Group financial statements. The consolidation software allows the reconciliation between contract data and financial reporting. The main reporting processes facilitate consolidation of financial data to produce the consolidated financial statements and forecast data, as well as regular management information.

Accounting standards

The consolidated financial statements are prepared in accordance with IFRS as adopted by the European Union. The consolidated financial statements comply with accounting policies as detailed in Note 2 of the consolidated financial statements at 31 March 2019.

Accounts closing process

The reporting units produce monthly statements which are used to determine the Group's monthly operating income, cash flow and balance sheet.

Role of the Group's Accounting Department

The list of entities to be accounted for by the equity or line by line methods or fully consolidated is drawn up by the Accounting Department. This Department also checks the quality of the reporting packages submitted by the units, focusing primarily on inter-company eliminations, and the accounting treatment of non-recurring transactions for the period, and movements between the opening and closing balance sheet used to prepare the statement of cash flows and reconciliations between legal entities and reporting entities.

The Department also checks the results of procedures, including foreign exchange, inter-company eliminations, transfers to minority interests and recognition of the effects of changes in scope of consolidation. The Group's consolidated financial statements are also analysed in detail, to understand and check the main contributions by Regions, businesses or subsidiaries, as well as the transactions reflected in the accounts.

Internal Control

The Internal Control function at Group level is responsible for promoting and coordinating all actions and projects aiming at defining the Group's requirements in terms of internal control, and updating the Internal Control Questionnaire. It is also in charge of following the global results of the Self-assessment campaigns, the main deficiencies identified in the Group's internal control and their respective action plans. During the 2017/18 financial year, the Company management decided to reinforce the regional presence of the Internal Control team by recruiting internal control managers in four geographic regions.

The Internal Control Management Team is responsible for defining the internal control requirements as well as producing and updating the Internal Control Questionnaire and monitoring the results.

Where internal control weaknesses are identified, detailed action plans are put in place to correct these weaknesses in a timely manner with the support of the regional and operating teams and overseen by the central Internal Control team under the responsibility of the Director of Internal Control.

Legal function

The Legal Function is responsible for monitoring and mitigating risks arising out of the activities of the Group, as well participating in the Group's efforts to ensure full compliance with applicable laws and the Alstom Code of Ethics. Legal is comprised of Region Legal Departments and the Corporate Legal Department.

The Legal Function is headed by the Group General Counsel, reporting to the Chairman and Chief Executive Officer. The Group General Counsel attends all the meetings of the Board of Directors, the EC&S Committee, and attends Audit Committee meetings when legal matters are discussed. He or she routinely provides an account of ongoing legal proceedings and investigations.

The Corporate Legal Department handles major disputes affecting the whole Group and compliance matters involving criminal investigations. It monitors the Group exposure reporting relating to disputes and prepares the Group Annual Litigation Report concerning the status of the main potential and pending law suits which is submitted annually to the Corporate Disclosure Committee, the Audit Committee and the Group Statutory Auditors. Legal provides training on the management of legal risks at all levels of the Group.

The Corporate Legal Department is responsible for the implementation of the program developed by the Group aiming to prevent any anti-competitive activity during the Group's activities and to ensure the compliance by all employees with the Code of Ethics, the laws and regulations in the area of competition law in the countries where Alstom carries out its activities.

Ethics and Compliance

Ethics and Compliance stands as a top priority for Alstom, and the team has the responsibility of the Alstom Integrity Programme aiming at implementing the culture of integrity as well as the application of all the rules in relation to Business Ethics and Personal Integrity.

The role of Ethics & Compliance at Group level is to:

- promote and explain Alstom's culture of integrity ensuring that the highest standards of integrity and ethics are applied throughout the Group;
- ensure compliance with international and national laws and regulations together with internal Group rules;
- prevent all illegal activity and unlawful payments;
- control the business partner selection process, including a prior check of these partners' integrity;
- implement all necessary rules and policies; and
- continually monitor the performance of the Alstom Integrity Programme on a continuous basis.

The Ethics & Compliance team comprises 13 employees. Ethics & Compliance has full authority and independence through its reporting to the Group General Counsel. The Chief Compliance Officer has direct access to Alstom's Chairman and Chief Executive Officer and to the Ethics, Compliance & Sustainability Committee. The Chief Compliance Officer is fully independent and has an unfiltered access to the governing authorities of Alstom.

To reinforce the resources of Ethics & Compliance team, a community of about 340 Ethics & Compliance Ambassadors, all of whom are volunteers, is in place since May 2010 to promote the Group's culture of integrity. More than 5,000 attendees were trained on ethics and compliance during the 2014-2017 training cycle. A new cycle has been launched in 2017 with more than 5,000 attendees to be trained.

Corporate funding & treasury

The Funding and Treasury Department defines rules and procedures regarding cash management, currency risk hedging, as well as bonds and guarantees. In addition, it manages the related risks (liquidity risks, including availability of lines of credit and deposits, counterparties, foreign exchange and interest rate), the financial relationships with subsidiaries, the cash pooling structure and the netting process.

The central organisation facilitates the financial risk management as all transactions on derivative products are performed or, when that is not possible, at least supervised by the Corporate front-office and under the control of a strictly independent middle office.

The Funding and Treasury Department is solely entitled to raise bank loans and invest cash surplus except when local regulations do not permit it. In such cases, the involvement and approval from the Funding and Treasury Department remain mandatory before any commitment.

It has also defined a detailed list of authorised banks which the units are authorised to operate with. For further information regarding the management of financial risk, see Note 28 to the consolidated financial statements for the fiscal year ended 31 March 2019.

Environment, Health, Safety (EHS)

The Corporate Environment, Health, Safety (EHS) Department is responsible for defining the risk management policy and strategy and programs with respect to the environment, health and safety in the workplace. It is supported in its mission by the EHS managers' network, organised per Region, by cluster, by country, and by operational worksites or projects, which ensure operational implementation of all such programmes.

Based on the Group EHS roadmap internal and external assessors network validate EHS actions and advice on deployment plans.

Through the programmes the Group seeks to:

- ensure high standard level of monitoring industrial risks at least equal or above local regulations;
- evaluate environment and employee health impact of new industrial processes prior to implementation, as well as, discontinuation of existing processes;
- develop a continuous improvement process to reduce energy and water consumption, generation of industrial waste, Greenhouse gas and Volatile Organic Compounds emission and to minimize risks related to accidental pollution; and
- ensure to its employees, suppliers and contractors, involved in contract execution and on sites the best protection regarding safety and health.

Particular attention is given to high risk activities performed by Group employees, suppliers or contractors during contracts execution.

External specialised assessors regularly perform audits and self-evaluation of fire prevention and natural disasters. During the fiscal year 2018/19, seven sites were audited by an independent third party and expertise and consultation assignments were performed during this fiscal year.

During fiscal year 2018/19, more than 60 EHS audits were performed, in connection with the plan to reduce serious accidents and control of high-risk activities: "Alstom Zero Deviation Plan". With regards to environment, as of the date of this document more than 88% of Alstom employees were implementing the processes in accordance with the ISO 14001 standard.

The Group has launched several actions towards the setting-up of the vigilance plan as required by French law dated 27 March 2017, considering that the Group already has existing processes supporting directly or indirectly certain requirements of the new law (*e.g.* risks mapping processes, suppliers qualification processes, alert procedure, etc.).

Information Systems and Technology

The Information Systems and Technology (IS&T) function is the central function, covering all of the Group's businesses and the main purpose of which is to provide IS&T solutions and services aiming to support Alstom businesses, operations and projects, and meeting the strategic evolution of the Group, support business efficiency, process excellence and overall Regions productivity using optimised and innovative technology in a cost effective, secure and compliant way.

Many initiatives have been launched to reinforce IS&T internal control:

- IT assets management centralisation;
- infrastructures upgrade;

- decommissioning of obsolete systems and the rationalisation of existing solutions;
- new tool deployment to secure the workplace environment; and
- adaptation of the IS&T security policy to new disruptive trends.

The central management of the Group's systems and infrastructure strengthens its ability to manage the IS&T risk and ensures better control of IS&T activities. "Business Solutions and Innovation", "Technology and Security" and "Service Performance and User Support" Departments assist the Group's CIO in setting IS&T principles, corporate architecture, processes and rules, and in applying common practices to services and standards.

Third line of defense: Internal Audit

The main role of the Internal Audit Department is to advise the Chairman and Chief Executive Officer and the Audit Committee on the adequacy and effectiveness of the internal control system in all phases of the Group's business. The Internal Audit Department operates in accordance with the terms of an Internal Audit Charter approved by the Audit Committee and has the authority to examine all aspects of operations.

The Internal Audit Department evaluates controls that promote:

- compliance with applicable laws and with internal policies and procedures;
- physical safeguarding of assets including risk identification;
- availability, reliability, integrity, confidentiality of information and reporting; and
- efficiency of business processes, functions, and activities.

The Internal Audit Department takes into account the risks mapping and risk profiles in assessing its audit programmes.

After each internal audit assignment, a report is issued setting out the audit findings and recommendations. The results are also summarised in the bi-annual internal audit activity reports, which are presented to the Audit Committee on the overall results of the internal audits as well as on any other matter which affects internal control. These reports provide the basis for the Audit Committee to review the effectiveness of the work performed by the Internal Audit Department.

Each internal audit report which evidences an unsatisfactory control environment triggers, 6 months after the initial assignment, a follow-up audit to verify that the remediation action plan is implemented.

Insurance

The Group policy is to purchase insurance policies from insurers presenting excellent solvency criteria. The amount of insurance purchased varies according to Alstom's estimation of the maximum foreseeable loss, both for Property Damage & Business Interruption as well as for Civil Liability Insurance. This estimate is made within the framework of Industrial Risk Management Audits that are conducted for property damage and business interruption. For civil liability, the estimation of insurance needs depends on the evaluation of the maximum legal risk considering the various Group activities. The annual risk assessment process which results in the Group risk mapping, has allowed the Group to confirm that the appropriate level of insurance was purchased for insurable risks. The main risks covered are the following, subject to certain customary limitations, exclusions and declarations in relation of each type of insurance:

- property damage and business interruption caused by fire, explosion, natural events or other perils as well as machinery breakdown;
- liability incurred because of damage caused to third parties by operations, products and services;
- transit, covering transportation risks from start to unloading of goods at warehouse, construction site or destination; and
- construction and installation, covering risks during execution of contracts.

In addition to these Group policies, Alstom purchases, in the various countries where it is present, policies of a mandatory nature or designed to cover specific risks such as automobile, worker's compensation or employer's liability. The presentation above is a summary of the main Group insurance policies and does not reflect all applicable restrictions, exclusions and limits. These policies are usually negotiated for one- to two-year periods. For reasons of confidentiality and protection of the interests of the Group, it is not possible to describe exhaustively all policies.

MONITORING AND CONTROL BODIES

The committees

Corporate Pension Committee

Pensions and other employee benefits are governed and monitored by the Corporate Pension Committee which is composed of the Corporate Treasury, Consolidation and Compensation & Benefits functions, according to the following principles:

- assets/liabilities management approach so that only risks necessary to cover Alstom's liabilities are taken;
- when possible, simplicity in the investment strategy to ensure visibility on the portfolio risk;
- a global policy on employee benefits to address principles for pension plan design, funding & investment, administration and governance;
- a responsibility chart whereby changes to plan design, funding & investment and administration must be authorised by designated Corporate officers.

The Committee meets at least two times per year to monitor the schemes' evolution. During the 2018/19 financial year, the Committee met on two occasions, mainly to i) assess risk reduction strategies, ii) to control volatility of net pensions in the United Kingdom, the USA and in Germany.

Audit Committee

The Audit Committee reviews and evaluates twice a year the internal control procedures including those relating to financial information, contributing to the preparation of the financial statements of the Group. A review and evaluation of the risks mapping, including risk assessment and risk management is also made.

Within the Audit Committee, the scope of planned internal audit activities is reviewed in advance and the Internal Audit Department develops a plan and determines the allocation of resources.

The Audit Committee provides a report to the Board of Directors. For more information regarding the Audit Committee, see the corporate governance report in Chapter 5.

Disclosure Committee

The Chairman and Chief Executive Officer and the Chief Financial Officer have established a Disclosure Committee at the central level in order to assist them in evaluating the effectiveness of the Group's disclosure controls and procedures that are designed to ensure that material financial and other information required to be disclosed is recorded, processed, summarised and reported on a timely basis and that appropriate information is communicated to the Management to allow timely decisions.

The Disclosure Committee is composed of the Chief Financial Officer, the General Counsel, the Vice President of Internal Audit and Internal Control, the Vice President Finance Controller, Chief Tax and Finance Officer and the Vice President Tenders & Projects Control. The Disclosure Committee met twice during fiscal year 2018/19 under the Chairmanship of the Chief Financial Officer.

The consolidated financial statements for the fiscal year ended 31 March 2019 and the Management and other financial information disclosed in the Annual Report were reviewed. The interim consolidated financial statements for the six-month period to 30 September 2018 were reviewed. In the reviews of the consolidated financial statements the Committee considered the disclosures made to determine and confirm their relevance, accuracy, completeness and presentations.

Information Committee

The Information Committee was put in place by the Group pursuant to its new internal procedure relating to the identification of and the terms applicable to the transmission and use of inside Information. This procedure was adopted to take into account the recommendations issued by the French financial markets regulator "AMF" (Position-Recommendation AMF DOC-2016-08, Guide on Ongoing Information and the Management of Inside Information, "Preliminary Reminder" section).

The Committee comprises the Chief Financial Officer, the Investor Relations Director, the VP Communications, the General Counsel and the VP Legal Governance, Finance and Market Law. In addition, the Chief Compliance Officer is involved, at the Committee's request, to assist with solving any relevant issues pertaining to the qualification and management of inside information. The main mission of the Committee is to assess whether the information concerning the Group qualifies as inside information and to determine the terms and conditions applicable to the transmission and use of such information. To that end, the Committee meets at least on a quarterly basis at the time of preparation of financial statements and results, but it can hold meetings at any time when called pursuant to the rules laid down in the above-mentioned procedure.

Insurance Committee

The purpose of the Insurance Committee is to review the Group's insurance policies and to set the strategy for the renewal of these policies. The Committee also defines the actions to be launched for the management of insurance aspects in tenders and contracts. Finally, the Committee analyses main insurance claims.

The Insurance Committee meets at least every semester and comprises the Insurance Director, the Chief Financial Officer, the General Counsel, the VP Legal Operations & Transformation, as well as the Regions General Counsels.

External actors

The setup described above is completed by the following third-parties:

- the external auditors; and
- the certifying body which certifies the Group's activities on a three-year cycle on: environment (ISO 14001), quality (ISO 9001), anti-corruption (37001). Additionally, specific activities are certified from a quality standpoint regarding: development of products and projects (CMMI), Rolling Stock manufacturing (ISO/TS 22163-IRIS), and health and safety at work (OHSAS 18001).

5 CORPORATE GOVERNANCE

AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram

This chapter presents the corporate governance information of the Company for the 2018/19 financial year as well as further details regarding the resolutions being proposed to its shareholders at the 2019 Annual General Meeting.

The Company has, for many years, made every effort to comply with the corporate governance principles set forth in the AFEP-MEDEF Corporate Governance Code (the "AFEP-MEDEF Code").

BOARD OF DIRECTORS' REPORT ON CORPORATE GOVERNANCE

In application of the provisions of Article L. 225-37 of the French Commercial Code, the Board of Directors hereby presents to the 2019 Annual Shareholder Meeting its report on corporate governance which is attached to the management report.

This report was approved by the Board of Directors during its meeting of 6 May 2019.

In application of the provisions of Article L. 225-235 of the French Commercial Code, this report of the Board of Directors on corporate governance has been submitted in full to the Company's Statutory Auditors who, in their report on the annual accounts of the Company (see page 126), present their observations related to the information mentioned in article L. 225-37-5 of the French Commercial Code and attest to the existence of the required information pursuant to Articles L. 225-37-3 and L. 225-37-4 of the French Commercial Code.

BOARD OF DIRECTORS

Composition of the Board of Directors

As of 6 May 2019, the Board of Directors is composed of thirteen members. Women account for 46% of the Board of Directors. Five Directors are non-French nationals (38.5%), seven are independent according to the Company and within the meaning of the AFEP-MEDEF Code (53.8%), and Mr Henri Poupart-Lafarge, Chairman and Chief Executive Officer (CEO), is the only Director who performs executive duties.

The Board of Directors does not include any Directors representing the Company's employees or employee shareholders. Within the Alstom Group, the legal provisions regarding employee representation on the Board of Directors apply to Alstom Transport SA, which has one Director representing employees on its Board of Directors.

The Directors are appointed for a four-year period. Spread-out terms of office were never planned for under the terms of the Articles of Association, since the renewal of such terms of office is distributed over four consecutive years. The Articles of Association do not specify any age limit applicable to Directors beyond the legal limit.

Pursuant to the Board's Internal Rules, each Director must hold 2,000 shares, which approximately corresponds to one year of Director's fees for Board meetings. Each Director has two years as from the day he or she takes office to increase his or her equity holdings to this minimum level. As of 31 March 2019, Directors who are natural persons together held a total of 104,312 Company shares, while Bouygues held 62,086,226 shares.

Based on the Nominations and Remuneration Committee's recommendation, the Board of Directors examines the Board and Committees' membership at the time of renewal of Directors' mandates. Directors are also invited to indicate their views on this topic during the annual assessment of the Board and Committees' functioning. The Nominations and Remuneration Committee provides recommendations on proposals for new candidates or on the renewal of Directors' mandates, then submitted to the Board of Directors. The Board of Directors has an on-going objective to increase the diversity and complementarity of skills required for service on the Board, to maintain diversity of nationalities and a balanced ratio of men and women.

During the fiscal year, the appointments of Ms Clotilde Delbos and Mr Baudouin Prot as Directors, and the renewals of the directorships of Mr Olivier Bouygues, Bouygues SA, and Ms Bi Yong Chungunco were approved by the Annual Shareholder Meeting on 17 July 2018.

The Board of Directors also acknowledged the resignation on 30 July 2018 of Ms Géraldine Picaud.

The following chart sets forth the membership of the Board of Directors and its Committees as of 6 May 2019.

MEMBERSHIP OF THE BOARD OF DIRECTORS AS OF 6 MAY 2019

				Committee Membership						
Name	Sex	Age	Independent Director	Audit	N&R (1)	EC&S (2)	First Term Start	Current Term End	Years on Board	Attendance rate during the 2018/19 financial year (number of meetings)
Henri Poupart-Lafarge *Chairman of the Board of Directors and Chief Executive Officer*	M	50					2015	2019	4	100% (13/13)
Yann Delabrière *Lead Independent Director*	M	68	√	√	Chairman		2017	2020	2	92.31% (12/13)
Candace K. Beinecke	F	72			√		2001	2019	18	92.31% (12/13)
Olivier Bouygues	M	68					2006	2022	13	92.31% (12/13)
Bi Yong Chungunco	F	56	√			√	2014	2022	5	92.31% (12/13)
Françoise Colpron	F	48	√				2017	2021	2	92.31% (12/13)
Clotilde Delbos	F	51	√	√			2018	2022	1	66.67% (6/9[*])
Gérard Hauser	M	77			√	√	2003	2020	16	92.31% (12/13)
Sylvie Kandé de Beaupuy	F	62	√			Chairwoman	2017	2019	2	92.31% (12/13)
Klaus Mangold	M	75			√		2007	2019	12	76.92% (10/13)
Baudouin Prot	M	67	√		√		2018	2022	1	88.89% (8/9[*])
Sylvie Rucar	F	62	√	Chairwoman	√		2015	2019	4	100% (13/13)
Philippe Marien, Representative of Bouygues SA	M	62		√			2008	2022	11	100% (13/13)
	54% M / 46% F	**Average age: 63**	**53.8% independent**	**75% independent**	**50% independent**	**66.66% independent**			**Average: 7 years**	**Average: 89.5% (3)**

(1) Nominations and Remuneration Committee.
(2) Ethics, Compliance and Sustainability Committee.
(3) Including the attendance rate of Ms Géraldine Picaud, who left the Board in the course of the fiscal year 2018/19, which was 75% (3/4).
(*) Director who joined the Board of Directors on 17 July 2018.

The directorships of Mr Henri Poupart-Lafarge, Ms Candace K. Beinecke, Ms Sylvie Kandé de Beaupuy, Ms Sylvie Rucar and Mr Klaus Mangold will end following the Annual Shareholder Meeting called to approve the accounts for the fiscal year ending on 31 March 2019. Ms Candace K. Beinecke and Mr Klaus Mangold both expressed the wish that their directorship be not proposed for renewal.

Upon the Nominations and Remuneration Committee's recommendation, the Board of Directors consequently proposes the renewal of the directorships of Mr Henri Poupart-Lafarge, Ms Sylvie Kandé de Beaupuy and Ms Sylvie Rucar for a four-year period of at the 2019 Annual Shareholder Meeting.

Upon the Nominations and Remuneration Committee's recommendation, the Board of Directors held on 6 May 2019, considered that Ms Sylvie Kandé de Beaupuy and Ms Sylvie Rucar, according to the Company and the criteria of the AFEP-MEDEF Code, meet the requirements to be considered as Independent Directors.

Upon the conclusion of the 2019 Annual Shareholder Meeting and subject to the renewal of the directorships of Mr Henri Poupart-Lafarge, Ms Sylvie Kandé de Beaupuy and Ms Sylvie Rucar, and considering the non-renewal of the directorships of Ms Candace K. Beinecke and Mr Klaus Mangold, the Board of Directors will be composed of eleven members. The proportion of women will remain 46%, with three non-French nationals Directors (27.3%) and only one Director, Mr Henri Poupart-Lafarge, Chairman and CEO, with executive functions. The proportion of independent Directors on the Board will be 63.6%, with seven Directors qualified as independent according to the Company and the criteria of the AFEP-MEDEF Code.

Changes in the composition of the Board of Directors and Committees between the 2018 and 2019 Annual Shareholder Meetings

Subject to shareholders' approval of the proposed renewals of directorship at the 2019 Annual Shareholder Meeting, the changes in the composition of the Board of Directors will be as follows.

	Annual General Meeting held on 17 July 2018	17 July 2018-6 May 2019	2019 Annual General Meeting
Departure: End of term (E) or Resignation (R)		Ms Géraldine Picaud (R)	Ms Candace K. Beinecke (E) Me. Klaus Mangold (E)
Renewal	Mr Olivier Bouygues Bouygues SA (represented by Mr Philippe Marien) Ms Bi Yong Chungunco(*)		Mr Henri Poupart-Lafarge Ms Sylvie Kandé de Beaupuy(*) Ms Sylvie Rucar(*)
Ratification (R)/Appointment (A)	Ms Clotilde Delbos(*) (A) Mr Baudouin Prot(*) (A)		

(*) Independent Director.

Subject to the approval by the 2019 Annual Shareholder Meeting of the three proposed renewals of directorships, the changes in the composition of the Committees will be as follows.

	After the Annual General Meeting on 17 July 2018	On 6 May 2019	After the 2019 Annual General Meeting
AUDIT COMMITTEE			
Chair	Ms Géraldine Picaud(*)	Ms Sylvie Rucar(*)	Ms Sylvie Rucar(*)
Members	Mr Philippe Marien (permanent representative of Bouygues SA) Ms Sylvie Rucar(*)	Ms Clotilde Delbos(*) Mr Yann Delabrière(*) Mr Philippe Marien (permanent representative of Bouygues SA)	Ms Clotilde Delbos(*) Mr Philippe Marien (permanent representative of Bouygues SA)
NOMINATIONS AND REMUNERATION COMMITTEE			
Chair	Mr Yann Delabrière(*)	Mr Yann Delabrière(*)	Mr Yann Delabrière(*)
Members	Ms Candace Beinecke Mr Gérard Hauser Mr Klaus Mangold(*) Ms Sylvie Rucar(*)	Ms Candace Beinecke Mr Gérard Hauser Mr Klaus Mangold Ms Sylvie Rucar(*) Mr Baudouin Prot(*)	Ms Sylvie Rucar(*) Mr Gérard Hauser Mr Baudouin Prot(*)
ETHICS, COMPLIANCE AND SUSTAINABILITY COMMITTEE			
Chair	Ms Sylvie Kandé de Beaupuy(*)	Ms Sylvie Kandé de Beaupuy(*)	Ms Sylvie Kandé de Beaupuy(*)
Members	Ms Bi Yong Chungunco(*) Mr Gérard Hauser	Ms Bi Yong Chungunco(*) Mr Gérard Hauser	Ms Bi Yong Chungunco(*) Mr Gérard Hauser

(*) Independent Director.

EXECUTIVE MANAGEMENT

Combination of the positions of Chairman and Chief Executive Officer

In 2014, the Board of Directors chose to proceed with the appointment of a Lead Director whenever the functions of Chairman of the Board of Directors and Chief Executive Officer are combined as one, in order to provide additional guarantees on the existence of a well-balanced and controlled system of corporate governance.

At its meeting on 28 January 2016, the Board of Directors decided to keep the functions of Chairman and Chief Executive Officer combined as one and to appoint Mr Henri Poupart-Lafarge as Chairman and Chief Executive Officer of the Company. After analysing and assessing the workings of the Board of Directors, and upon the Nominations and Remuneration Committee's recommendation, the Board of Directors decided on 6 May 2019 to maintain the combination of these functions, subject to Mr Henri Poupart-Lafarge directorship's renewal.

Choosing to continue to combine the functions of Chairman of the Board of Directors and Chief Executive Officer was dictated by the necessity expressed by the entire Board of Directors to be chaired by the person who implements especially the strategic guidelines the Board has set and who bears at the same time the operational vision of the Group. The Directors underlined the extent to which their meetings gained in fluidity, relevance and quality of information exchanged due to the ability of Mr Henri Poupart-Lafarge to shoulder the missions of a Chairman of the Board of Directors whilst assuming the responsibilities of executive corporate officer in charge of the Company.

The Board of Directors also made this decision insofar as solid counter-powers are permanently in place (the implementation of governance safeguards specific to the Company, the existence of limitations on the authority of the Chief Executive Officer and the appointment of a Lead Director with specific powers and responsibilities as described below).

Specific Governance Safeguards

Various factors contribute to ensuring balanced and controlled corporate governance, including:

- a strong presence of independent Directors on the Board of Directors and the Committees, whose chairing was entrusted to independent Directors from their inception;
- information provided on a regular basis to the Board of Directors, both at its meetings and outside of its meetings, detailing the business activities of the Group and any significant events;
- the development of interactions between the Board of Directors and the members of the Executive Committee or the functional or operational executives holding key positions within the Group, in particular in the context of their participation in, and presentations given at, Board of Directors and Committee meetings, or during work site visits;
- an annual review of the corporate governance practices and of the operation of both the Board of Directors and the Committees, which enables the identification, on a regular basis, of the desired focus points for improvement and the priorities associated therewith, and to assess the follow up of the recommendations; the annual meeting of Directors who are external to the Company in order to assess the performance of the Executive Corporate Officer, as directed by the Chairman of the Nominations and Remuneration Committee;
- the availability of the Chairman and Chief Executive Officer and Chairs of the Board of Directors Committees, all independent Directors, in order to discuss with institutional investors and shareholders, notably in the context of the Annual Shareholder Meeting, key subjects of corporate governance of the Company and sustainable development;
- a routine review of the Internal Rules of the Board of Directors and the Committees, and the adaptation of their provisions, as the case may be.

Limitations imposed by the Board of Directors on the authority of the Chief Executive Officer

The restrictions imposed by the Board on the powers of the Chairman and Chief Executive Officer are set forth in the Internal Rules of the Board, as amended on 5 July 2016, which provide that the Board of Directors' prior approval is required for:

- any transaction that is not part of the Group's announced strategy or that could significantly affect it;
- any transaction that could materially modify the financial structure or results of the Group;
- any single acquisition or divestiture in excess of €80 million, any business partnership or joint venture where the contribution of the Group exceeds €80 million, as well as any financing transaction which exceeds €400 million for new medium or long term loans, or €1 billion for short-term treasury bills;
- organic growth investments in an amount higher than €80 million and the significant internal restructuring undertakings in particular at the time of the annual review of the Group's budget and strategy.

For acquisitions and divestitures, "amount" means the enterprise value, regardless of the terms of payment (immediate or differed, in cash or in shares, etc.). For a business partnership or a newly created company, "the contribution of the Group" means the financial undertaking of the Group (contribution to the share capital or shareholder's loan, exposure to external financings, etc.).

The Internal Rules also require the Board of Directors to review and approve the annual budget and the medium-term plan.

Lead Independent Director

Since 2014, when the functions of Chairman and Chief Executive Officer were combined, the Board of Directors, pursuant to the terms of its own Internal Rules, must appoint a Lead Independent Director, the main responsibility being to ensure the proper functioning of the corporate governance bodies of the Company. The Internal Rules set the following terms and conditions applicable to the role of Lead Director:

Excerpt from the Internal Rules of the Board of Directors on the Lead Director (Article 6)

Whenever the functions of Chief Executive Officer and Chairman of the Board of Directors are held by and entrusted to the same individual, the Board of Directors must appoint a Lead Director from among the independent Directors. This Lead Director is appointed for a two-year term, which cannot exceed his or her term of office as Director. He or she is eligible for reappointment. The Board of Directors can terminate the Lead Director's functions at any time.

The main duty of the Lead Director is to ensure the proper functioning of the corporate governance bodies of the Company.

In this context, he or she exercises his or her duties and has the following prerogatives:

6.1. Functioning of the Board of Directors and of the Board of Directors' Committees

- The Chairman of the Board of Directors consults with the Lead Director regarding the matters on the agenda of Board of Directors' meetings and can recommend including additional matters to the agenda.
- The Lead Director may request the Chairman of the Board of Directors to call a meeting of the Board of Directors to discuss a predetermined agenda.
- The Lead Director ensures that the Internal Rules are applied when the meetings of the Board of Directors are prepared and held, and also ensures that the Directors comply with such Internal Rules.
- The Lead Director makes sure that the Directors are able to exercise their duties in the best possible conditions and, in particular, that they can rely on a high level of information prior to the meetings of the Board of Directors.
- The Lead Director can, at his or her own initiative, call for and preside meetings of Directors who do not exercise executive or salaried functions within the Group (non-Executive Directors).
- The Lead Director can be the Chairman of the Nominations and Remuneration Committee. As such, he or she is responsible, in particular, for managing the succession plan for Corporate Officers, selecting new Directors, and for securing the balance with respect to the composition of the Board of Directors and the Committees.
- The Lead Director can attend any of the meetings of any Committee of which he or she is not a member and has access to the work completed by such Committees and to the information made available to them.

6.2. Relations with Directors

- The Lead Director maintains a regular dialogue with Directors and, if need be, is their spokesperson to the Chairman of the Board of Directors.

6.3. Conflicts of interest

- The Lead Director plays a preventive role to raise the awareness of all Directors with respect to conflicts of interest.
- Together with the Chairman of the Board of Directors, he or she reviews situations that could potentially trigger conflicts of interest.

6.4. Relations with shareholders

The Lead Director is kept abreast of any comments and suggestions submitted by shareholders in relation to governance and the compensation of corporate officers. He or she ensures that their questions are answered, makes him or herself available to communicate with such shareholders at the request of the Chairman of the Board of Directors, and keeps the Board of Directors abreast of these communications.

The Lead Director reports annually to the Board of Directors and to the Shareholders regarding his or her work.

The Secretary of the Board of Directors is available to assist to the Lead Director in the completion of his or her assignments.

Following the Annual Shareholder Meeting of 4 July 2017, the Board of Directors decided to appoint Mr Yann Delabrière, independent Director, as Lead Director and Chairman of the Nominations and Remuneration Committee, the Committee which oversees the corporate governance of the Company. After analysing and assessing the functioning of the Board of Directors, and upon the Nominations and Remuneration Committee's recommendation, the Board of Directors decided on 6 May 2019 that Mr Yann Delabrière will be reappointed as Lead Independent Director following the 2019 Annual Shareholder Meeting. The report on the activity of the Lead Independent Director is included in this report on page 170.

INFORMATION REGARDING DIRECTORS

Directorships and activities of Directors

This section is based on the information provided by the members of the Board in answer to the annual questionnaire sent to them by the Company. The information is accurate as of 6 May 2019.

Henri Poupart-Lafarge

Age: 50.

Nationality: French.

Professional address: Alstom – 48, rue Albert-Dhalenne – 93400 Saint-Ouen (France).

Principal functions: Chairman and Chief Executive Officer of Alstom.

Current Term End: 2019 AGM.

First appointment: 30 June 2015.

Holds 86,202 shares.

Other current directorships and positions:

In France:

–

Abroad:

Outside the Alstom Group:

Director of Transmashholding (Russia)

Past directorships and positions (held during the past five years):

In France:

Outside the Alstom Group:

Director of Vallourec(*) (2014 to 2018)

Within the Alstom Group:

Chairman of Alstom Executive Management (2014-2015)
Director of Alstom Transport SA (2012-2015)
Director of Alstom T20 (2014)

Abroad:

–

Biography:

Mr Henri Poupart-Lafarge is a graduate of *École polytechnique,* the *École nationale des ponts et chaussées* and the Massachusetts Institute of Technology (MIT). He started his career in 1992 at the World Bank in Washington, D.C., before joining the French Ministry of Economy and Finance in 1994. Mr Henri Poupart-Lafarge joined Alstom in 1998, as Head of Investor Relations and responsible for management control. In 2000, he became the Transmission and Distribution Sector's Senior Vice-President of Finance, a position he held until the sale of the sector in 2004. From 2004 to 2010, he was Chief Financial Officer of the Alstom Group, from 2010 to 2011 President of the Alstom Grid Sector and was President of the Transport Sector from 4 July 2011 until his appointment as Chairman and Chief Executive Officer. Mr Henri Poupart-Lafarge has been the Chairman and Chief Executive Officer of Alstom since 1 February 2016.

Yann Delabrière

Age: 68.

Nationality: French.

Professional address: Idemia – 2, place Samuel-de-Champlain – 92400, Courbevoie (France).

Principal functions: Chairman of the Management Board of Idemia Group.

Current Term End: 2020 AGM.

First appointment: 17 March 2017.

Independent Director.
Lead Director.
Chairman of the Nominations and Remuneration Committee.
Member of the Audit Committee.

Holds 2,000 shares.

Other current directorships and positions:

In France:

Chairman of Idemia France (France)
Chairman of Idemia Identity & Security France (France)
Chairman of Galaxy Manco (France)
Chairman and Chief Executive Officer of MM Consulting (France)

Abroad:

–

Past directorships and positions (held during the past five years):

In France:

Chairman of the Management Board of Zodiac Aerospace(*) from June 2017 to February 2018
Chairman and Chief Executive Officer of Faurecia(*) from February 2007 to July 2016, then Chairman of the Board of Directors from July 2016 to May 2017
Chairman of the Supervisory Board of Idemia Group from January to October 2018
Director of Capgemini SE(*) from May 2004 to May 2018
Director of Société Générale(*) from May 2012 to May 2016

Abroad:

–

Biography:

Mr Yann Delabrière is a graduate of the *École normale supérieure* in mathematics and of the *École nationale d'administration.* He began his career at the French *Cour des comptes* before working in the cabinet office of the Foreign Trade Ministry. He then worked as Chief Financial Officer for Coface and then Printemps Group. In 1990, he joined PSA as Chief Financial Officer and he became a member of the Executive Committee in 1998. Mr Yann Delabrière was appointed Chairman and Chief Executive Officer of Faurecia from 2007 until July 2016 and remained Chairman of the Board until May 2017. He was then appointed Chairman of the Management Board of Zodiac Aerospace from June 2017 until February 2018. He then became the Chairman of the Supervisory Board of Idemia Group. He has been the Chairman of the Management Board of Idemia Group since October 2018. He is a former Director of Cap Gemini SE and Société Générale.

(*) Listed company.

Candace K. Beinecke

Age: 72.

Nationality: American.

Professional address: Hughes Hubbard & Reed LLP – One Battery Park Plaza – New York, NY 10004 – 1482 (United States).

Principal functions: Senior Associate of Hughes Hubbard & Reed LLP.

Current Term End: 2019 AGM.

First Term: 24 July 2001 – 26 June 2007.

Member of the Nominations and Remuneration Committee.

Holds 2,000 shares.

Other current directorships and positions:

In France:

–

Abroad:

President of the Board of Directors of First Eagle Funds(*), a US public family mutual fund (United States)
Lead Independent Director and Trustee of the Vornado Realty Trust (United States)(*)
Director of the CBS Corporation (United States)

Non-profit organisations:

Director, Vice-President, the Partnership for New York City (United States)
President of The Wallace Foundation (United States)
Trustee, The Metropolitan Museum of Art (United States)

Past directorships and positions (held during the past five years):

In France:

–

Abroad:

President of Hughes Hubbard & Reed LLP (United States) from 1999 to 2017
Member of the Board of Directors of Rockefeller Financial Services, Inc. and Rockefeller & Co., Inc (United States) from 2005 to 2018.

Biography:

Ms Candace K. Beinecke, Senior Partner of Hughes Hubbard & Reed LLP, was named in 1999 the first woman to chair a major New York law firm. Ms Beinecke is also a practicing partner in Hughes Hubbard's Corporate Department. Ms Beinecke serves as Chairperson of First Eagle Funds, a leading US public mutual fund family. She is a Lead Independent Director of Vornado Realty Trust (NYSE) and a Director of CBS Corporation (NYSE). She also serves as a Director of the Partnership for New York City, as Chair of The Wallace Foundation, and as Trustee of The Metropolitan Museum of Art. She is also a member of the Board of Advisors, Yale Law School Center for the Study of Corporate Law. She has been included in *The Best Lawyers in America,* in Chambers, and in the *National Law Journal's* 100 Most Influential Lawyers in America, and one of the "25 New York executives whose contributions in and beyond business changed the City".

Olivier Bouygues

Age: 68.

Nationality: French.

Professional address: Bouygues SA – 32, avenue Hoche – 75378 Paris Cedex 08 (France).

Principal functions: Vice Chief Executive Officer of Bouygues SA(*).

Current Term End: 2022 AGM.

First Term: 28 June 2006 – 22 June 2010.

Holds 2,000 shares.

Other current directorships and positions:

In France:

Outside Bouygues Group:

Chief Executive Officer of SCDM (France)
Chairman of SCDM Domaine SAS (France)

Within Bouygues Group:

Director of Bouygues(*), TF1(*), Bouygues Telecom, Colas(*) and Bouygues Construction (France)
Member of the Board of Bouygues Immobilier (France)

Abroad:

Outside Bouygues Group:

Chairman and Chief Executive Officer and Director of SECI (Ivory Coast)
Director of SCDM Energy Limited (United Kingdom)

Within Bouygues Group:

Chairman of the Board of Directors and Director of Bouygues Europe (Belgium)

Past directorships and positions (held during the past five years):

In France:

Director of Bouygues Immobilier (2016 to 2017)
Standing representative of SCDM on the Board of Bouygues(*) (1991 to 2016)
Chairman of SCDM Énergie (SAS) (2011 to 2015)
Chairman of Sagri E SAS (2006 to 2017)
Director of Eranove (formerly Finagestion) (2004 to 2015)
Liquidator of SIR (2015)
Director of Eurosport (2014)

Abroad:

Director of Sodeci(*) (Ivory Coast) (2002 to 2015)
Director of Compagnie Ivoirienne d'Électricité (Ivory Coast) (2002 to 2015)
Director of Sénégalaise des Eaux(*) (Senegal) (1999 to 2015)

(*) Listed company.

Biography:

Mr Olivier Bouygues joined the Bouygues Group in 1974 after graduating in engineering from the *École nationale supérieure du pétrole* (ENSPM). He began his career in the group's civil works branch. From 1983 to 1988, he worked at Bouygues Offshore as Director of the Cameroon subsidiary Boscam and then Director for the France Works and Special Projects division. From 1988 to 1992, he was Chairman and CEO of Maison Bouygues. In 1992, he became group Executive Vice President for Utilities Management, which grouped the international and French activities of Saur. In 2002, Mr Olivier Bouygues was appointed Deputy Chief Executive Officer of Bouygues.

Bi Yong Chungunco

Age: 56.

Nationality: Filipino.

Professional address: Luzon International Premiere Airport Development Corporation – Clark Field, Clark Freeport Zone – Andres Bonifacio Avenue – Dau Mabalacat City – Pampanga 2023 – Philippines.

Principal functions: Chief Executive Officer of Luzon International Premiere Airport Development Corporation.

Current Term End: 2022 AGM.

First appointment: 1 July 2014.

Independent Director.
Member of the Ethics, Compliance and Sustainability Committee.

Holds 2,000 shares.

Other current directorships and positions:

In France:

–

Abroad:

–

Past directorships and positions (held during the past five years):

In France:

Group General Counsel and *Secrétaire Général* of Lafarge SA(*) until 2015

Abroad:

Head of Divestment of LafargeHolcim – Holcim Technology Singapore Pte Ltd (Singapore) until 2017
Head of Lafarge China Cement Ltd until 2017
Director of Lafarge Malaysia Sdn Bhd(*) (Malaysia) until 2017
Director of Sichuan Shuangma Cement Ltd(*) (China) until 2017
Director of Lafarge Republic Inc.(*) (Philippines) until 2017
Director of Lafarge Surma Cement Ltd* (Bangladesh) until 2017

Biography:

Ms Bi Yong Chungunco is currently the Chief Executive Officer of Luzon International Premiere Airport Development Corporation, the consortium that was awarded the operations and maintenance of Clark International Airport.

Until August 2017, she was the Head of the Divestments of Lafarge Holcim Group focusing mainly in the Asia Pacific region and concurrently, Head of Lafarge operations in China. From July 2015 to March 2016, she was the Area Manager, South East Asia (West) of LafargeHolcim Group, based in Singapore, overseeing the operations in Malaysia, Singapore, Bangladesh, Sri Lanka, and Myanmar and also served as the Corporate Secretary of Lafarge SA. Prior to this, she was the Senior Vice President, Group General Counsel and *Secrétaire Général* of Lafarge S.A based in Paris, France.

She joined the Lafarge Group in 2002 as Senior Vice President for Legal, Corporate Governance & External Relations of the Lafarge affiliated company in the Philippines.

From 2004 to 2007, she was Group Regional Counsel and then Deputy General Counsel of Lafarge, overseeing from Paris the merger and acquisition transactions of the group and coordinating the worldwide legal network. From 2008 to 2012, she was Chief Executive Officer and Director of Lafarge Malayan Cement Berhad, one of the largest industrial companies listed on the Malaysian Stock Exchange (a 51% owned subsidiary of Lafarge, with operations in Malaysia and Singapore).

A lawyer by training, she worked in various law firms prior to taking an executive position in private companies.

(*) Listed company.

Françoise Colpron

Age: 48.

Nationality: American and Canadian.

Professional address: Valeo – 150 Stephenson Highway – Troy – Michigan 48083 – United States.

Principal functions: President of Valeo North America Inc. (United States).

Current Term End: 2021 AGM.

First appointment: 4 July 2017.

Independent Director.

Holds 50 shares.

Other current directorships and positions:

In France:

–

Abroad:

Outside Valeo group:

Director of the Original Equipment Suppliers Association (United States) since 2016
Director of the Motor and Equipment Manufacturers Association (United States) since 2017

Within Valeo group:

Director of Valeo Canada Inc., subsidiary of Valeo (Canada) since 2014
Director of Detroit Thermal Systems LLC (United States) since 2012
Director of DTS Leverage Lender, LLC (United States) since 2013
Director of Valeo Kapec North America, Inc. (United States) since 2017

Past directorships and positions (held during the past five years):

In France:

–

Abroad:

Director of FACC from 2010 to 2016.
Director of Inforum from 2015 to 2017.

Biography:

Ms Françoise Colpron has been, since 2008, President of Valeo North America in charge of the activities of the group in the United States, Mexico and Canada. She joined Valeo in 1998 in the Legal Department and held various positions, first as General Counsel of the Thermique Habitacle Division in Paris and, more recently, General Counsel of the North America and Latin America zones from 2005 to 2015. Before joining Valeo, Françoise Colpron started her career in private practice at the lawfirm Ogilvy Renault (Montreal, Canada) which merged with Norton Rose. Françoise Colpron holds a degree in Civil Law from the University of Montreal (Canada) (1992). She was admitted to the Bar of Quebec in 1993 and the Michigan Bar in 2003. Françoise Colpron was selected by Automotive News in 2015 as one of the 100 most influential women in the North American automotive industry and, in 2016, by Crain's Detroit Business as one of the 100 most influential women in Michigan in a list that includes leaders in the fields of business, education and political groups. Françoise Colpron is a *Chevalier* in the Legion of Honour.

Clotilde Delbos

Age: 51.

Nationality: French.

Professional address: Groupe Renault – 13/15 quai Le Gallo – 92513 Boulogne-Billancourt (France).

Principal functions: Executive Vice-President and Chief Financial Officer of Groupe Renault(*).

Current Term End: 2022 AGM.

First appointment: 17 July 2018.

Independent Director.
Member of the Audit Committee.

Holds 230 shares.

Other current directorships and positions:

In France, in Groupe Renault:

Chairperson of the Board of Directors of Banque RCI S.A. (France)
Chairperson of Renault Venture Capital (France)

In France, outside Groupe Renault:

Co-Manager of Hactif Patrimoine (France)

Abroad, in Groupe Renault:

Member of the Management Board of Alliance Rostec Auto BV (Netherlands)
Director of Renault España (Spain)

Past directorships and positions (held during the past five years):

In France:

Group Controller of Renault from 2012 to 2016

Abroad:

–

Biography:

Ms Clotilde Delbos started her career in California, then moved to Price Waterhouse in Paris before joining the Pechiney Group in 1992. She held various positions in France and in Brussels in Internal Audit, Treasury and Mergers & Acquisitions and then became Division Financial Director (Bauxite Alumina and International Trade). After the Pechiney acquisition by Alcan, Clotilde Delbos became in 2005 VP and Business Finance Director of the Engineered Products Division, until it was sold in 2011 to Apollo Global Management (Private Equity Fund) and to the "Fonds Stratégique d'Investissement". In this new company, Constellium, her last two positions were Deputy CFO and Chief Risk Officer. She joined Groupe Renault in 2012 as Group Controller. In 2014, she was appointed member of the Renault Management Committee and appointed Alliance Global Director, Control, in addition to her role as SVP, Groupe Renault Controller. On 25 April 2016, Clotilde Delbos was appointed EVP, Chief Financial Officer of Groupe Renault and Chairperson of the Board of Directors of Banque RCI S.A.

(*) Listed company.

Gérard Hauser

Age: 77.

Nationality: French.

Principal functions: Director of companies.

Current Term End: 2020 AGM.

First Term: 11 March 2003 – 9 July 2004.

Member of the Nominations and Remuneration Committee.
Member of the Ethics, Compliance and Sustainability Committee.

Holds 3,430 shares.

Other current directorships and positions:

In France:

Director of TechnipFMC France (France)

Abroad:

Director of TechnipFMC Italie (Italy)

Past directorships and positions (held during the past five years):

In France:

Chairman of the Supervisory Board of Stromboli Investissement (SAS) (France) from 2009 to 2016
Director of Ipsen(*) (France) from 2006 to 2014
Director of Delachaux (France) from 2011 to 2018

Abroad:

Director of Mecaplast (Monaco) (2009-2016)

Biography:

From 1965 to 1975, Mr Gérard Hauser occupied several high-level positions in the Philips Group. From 1975 to 1996, he worked for the Pechiney Group, as Chairman and Chief Executive Officer of Pechiney World Trade first and of Pechiney Rhénalu later. He was later appointed Senior Executive Vice-President of American National Can and member of the Pechiney group Executive Board. Mr Gérard Hauser joined Alcatel in 1996 and became President of its Cable and Component Sector in 1997. From October 2000 to May 2009, he was Chairman and Chief Executive Officer of Nexans.

Sylvie Kandé de Beaupuy

Age: 62.

Nationality: French and Senegalese.

Professional address: Airbus SAS, B80 Building – Office E253 – PO Box 31 – 2, rond-point Émile-Dewoitine, BP 90112 – 31703 Blagnac (France).

Principal functions: Group Ethics and Compliance Officer of Airbus(*).

Current Term End: 2019 AGM.

First appointment: 30 January 2017.

Independent Director.
Chairwoman of the Ethics, Compliance and Sustainability Committee.

Holds 2,000 shares.

Other current directorships and positions:

In France:

–

Abroad:

–

Past directorships and positions (held during the past five years):

In France:

Senior Vice-President – Group Chief Compliance Officer, Technip(*) (France) from 2008 to 2015
Executive Vice-President – Group Corporate Counsel, Technip(*) (France) in 2015

Abroad:

–

Biography:

Ms Sylvie Kandé de Beaupuy has been the Executive Vice-President – Chief Ethics and Compliance Officer at Airbus since 2015.
She manages a team of almost 200 people (Compliance Managers and administrative staff) working all over the world in all of the various Airbus activities and divisions (Airbus Commercial, Helicopters and Defence and Space).
Before joining Airbus, from 2008 to 2015, she was the Senior Vice-President – Group Chief Compliance Officer, then Executive Vice-President – Group Corporate Counsel at Technip, the world leader in the para-oil sector.
Ms Sylvie Kandé de Beaupuy began her career as a lawyer at the Paris Bar and was part of the Corporate/Mergers and Acquisitions Department of Clifford Chance in Paris for nearly 20 years. She then opted for the business sector, joining EADS/Airbus as the General Counsel for the Airbus/Leonardo partnership, ATR.

(*) Listed company.

Klaus Mangold

Age: 75.

Nationality: German.

Professional address: Mangold Consulting GmbH – Leitz-Strasse 45 – 70469 Stuttgart (Germany).

Principal functions: CEO of Mangold Consulting GmbH.

Current Term End: 2019 AGM.

First Term: 26 June 2007 – 28 June 2011.

Member of the Nominations and Remuneration Committee.

Holds 2,000 shares.

Other current directorships and positions:

In France:

–

Abroad:

Vice-Chairman of Rothschild Europe
Chairman of the Supervisory Board of Rothschild Russia and CIS
Member of the Supervisory Board of Continental AG(*), Germany
Chairman of the Supervisory Board of TUI AG(*), Germany
Member of the Supervisory Board of Baiterek National Managing Holding JSC, Kazakhstan
Chairman of the Supervisory Board of Knorr Bremse, Germany
Chairman of the Consultative Committee of Lürssen Maritime Beteiligungen GmbH & Co KG, Germany

Past directorships and positions (held during the past five years):

In France:

–

Abroad:

Chairman of the Supervisory Board of Alstom Deutschland AG, (Germany) (until 2016)
Chairman of the Supervisory Board of Rothschild GmbH (Germany) (until 2018)
Member of the Supervisory Board of Ernst & Young USA (United States) (until 2017)

Biography:

Prof. Dr. Klaus Mangold is a former Member of the Board of Management of DaimlerChrysler AG, former Chairman of the Board of Management of DaimlerChrysler Services AG and former Executive Advisor to the Chairman of DaimlerChrysler AG. He studied law and economics at the Universities of Munich, Geneva, Paris, London, Heidelberg and Mainz and finished his studies with a law degree at Heidelberg University. After graduating, he held different functions in German industry before being nominated a Member and Chairman of the Board of Management of Rhodia AG, a branch of the French Rhône-Poulenc group (1983-1990), and Chairman and Chief Executive Officer of Quelle-Schickedanz AG (1991-1994). He joined the Daimler-Benz group as a Member of the Board of Management in charge of its Services Division and Central and Eastern European markets (1995-2003). Prof. Dr. Klaus Mangold holds the position Chairman of the Supervisory Board of TUI AG, Germany and is a member of several Supervisory and Advisory Boards, including those of Alstom and Continental AG (Germany). He is also Chairman of the Supervisory Board of Knorr Bremse AG, Munich/Germany and of Rothschild Russia and CIS as well as Vice Chairman of Rothschild Europe, Paris/London and Chief Executive Officer of Mangold Consulting GmbH. Until November 2010 he was Chairman of the Committee on Eastern European Economic Relations of German Industry. Klaus Mangold has been Honorary Consul of the Russian Federation in the federal state of Baden-Wuerttemberg since 2005. He is also *Commandeur de la Légion d'honneur* in France. Klaus Mangold is Honorary Senator of the University of Freiburg since 1986.

Baudouin Prot

Age: 67.

Nationality: French.

Professional address: -

Principal functions: Senior Advisor of Boston Consulting Group (United States).

Current Term End: 2022 AGM.

First appointment: 17 July 2018.

Independent Director.
Member of the Nominations and Remuneration Committee.

Holds 400 shares.

Other current directorships and positions:

In France:

Chairman of the Supervisory Board of Foncia
Director of Kering(*)
Chairman of the BNP Paribas Emergency and Development Fund

Abroad:

Director of Finastra (United Kingdom)
Director of BGL BNP Paribas (Luxembourg)
Senior Advisor of Partners Group (Switzerland)

Past directorships and positions (held during the past five years):

In France:

Chairman of the Board of Directors of BNP Paribas(*) until 2014
Director of Lafarge(*) until 2016
Director of Veolia Environnement(*) (until 18 April 2019)

Abroad:

Member of the Institute of International Finance (United States) until 2014
Vice-President of the International Monetary Conference until 2014
Member of the International Advisory Panel of the Monetary Authority of Singapore (Singapore) until 2014
Member of the International Business Leaders' Advisory Council of the city of Shanghai (China) until 2014

(*) Listed company.

Biography:

Mr Baudouin Prot began his career as an *Inspecteur des finances* in the French administration after graduating from the *École nationale d'administration*. He joined the Banque Nationale de Paris in 1983 as Deputy Director of the Banque Nationale de Paris Intercontinentale prior to assuming the leadership of the Europe Department in 1985. He joined the management team of Réseaux France in 1987. For ten years (1987-1996), he was in charge of Réseaux France and appointed Deputy Managing Director in 1992. In 1996, he took on the role of Managing Director of the Banque Nationale de Paris and, at the time of the creation of BNP Paribas, he took on the position of Deputy CEO of the new group. In 2000, he was appointed to the Board of Directors of BNP Paribas. In 2003 he became CEO and Director of BNP Paribas, a position he held until 2011. From 2011 to 2014 he served as Non-Executive Chairman of BNP Paribas. He is currently a Senior Advisor of the Boston Consulting Group.

Sylvie Rucar

Age: 62.

Nationality: French.

Professional address: SR Corporate Finance Advisory – 9 *bis*, rue Saint-Amand – 75015, Paris (France).

Principal functions: Manager of SRCFA.

Current Term End: 2019 AGM.

First appointment: 30 June 2015.

Independent Director.
Chairwoman of the Audit Committee.
Member of the Nominations and Remuneration Committee.

Holds 2,000 shares.

Other current directorships and positions:

In France:

Senior Advisor at Alix Partners (U.S. consulting firm, Paris office)
Director of Avril Gestion (France)
Director of CFAO (France), Chairperson of the Audit Committee

Abroad:

–

Past directorships and positions (held during the past five years):

In France:

Director of SOPROL (France) and Cooper Standard (France)
Senior Advisor at Grant-Thornton Corporate Finance (consulting firm)

Abroad:

–

Biography:

Ms Sylvie Rucar began her career in 1978 at Citroën (PSA Group), and then joined the PSA group Finance Management from 1984 to 2007. There, she worked in the fields of mergers and acquisitions, financial controls, and international finance, and was Group Treasurer before becoming the Chief Financial Officer and Chairman of the PSA Finance Bank. She was a member of PSA Group's Management Committee.
In early 2008, Ms Sylvie Rucar joined Société Générale where she was the Deputy CFO and Chief Operating Officer of the Group's Investor Services business, then integrated Family Office Cogepa in mid-2009. Since 2010, she has been a consultant in financial management, mergers and acquisitions and corporate restructuring for her own firm and a Senior Advisor of the consulting firm Alix Partners. Ms Sylvie Rucar is a graduate of the ESCP-Europe Business School (*École supérieure de commerce de Paris*, ESCP-Europe).

Philippe Marien

Age: 62.

Nationality: French.

Professional address: Bouygues SA – 32, avenue Hoche – 75378 Paris Cedex 08 (France).

Principal functions: Vice Chief Executive Officer of Bouygues SA(*).

Permanent representative of Bouygues SA(*).
Member of the Audit Committee.

End of Bouygues SA's appointment: 2022 AGM.

First appointment of Bouygues SA: 18 March 2008 – 22 June 2010.

Bouygues SA
French *société anonyme* with a share capital of €354,908,547.
Registered Office: 32, avenue Hoche – 75378 Paris Cedex 08 (France).

Bouygues SA holds 62,086,226 shares.

Current directorships and positions of Mr Philippe Marien as a permanent representative of Bouygues SA(*):

In France:

Permanent representative of Bouygues SA(*), Director of Bouygues Construction
Permanent representative of Bouygues SA(*), Director of TF1(*)
Permanent representative of Bouygues SA(*), Director of Colas(*)
Permanent representative of Bouygues SA(*), Director of Bouygues Immobilier
Permanent representative of Bouygues SA(*), Director of Bouygues Telecom

Abroad:

–

Other directorships and positions of Mr Philippe Marien inside the Bouygues Group:

In France:

–

Abroad:

Director of Bouygues Europe (Belgium)
Director of Uniservice (Switzerland)

(*) Listed company.

Current directorships and positions of Mr Philippe Marien outside the Bouygues Group:

In France:

Chief Executive Officer of SCDM

Abroad:

–

Past directorships and positions of Mr Philippe Marien (held during the past five years):

In France:

Permanent representative of Bouygues SA(*), Director of C2S from 2010 to 2017
Liquidator of Finamag (2015)
Director (from 2009 to 2017) and Chairman of the Board of Directors (from 2009 to 2013) of Bouygues Telecom

Abroad:

–

Other current directorships at Bouygues SA:

Director of 32 Hoche
Member of the Board of Directors of the management organisation of the Gustave Eiffel Centre
Member of the Board of Directors of the Registrar EIG

Past directorships and positions at Bouygues SA (held during the past five years):

Director of C2S from 2010 to 2017
Member of the Board of Directors of Fondation Dauphine from 2008 to 2016

Biography:

Mr Philippe Marien is a graduate of *École des hautes études commerciales* (HEC). He joined the Bouygues group in 1980 as an international finance manager. In 1984, he was special advisor for the takeover of the AMREP oil services group before being appointed Finance Director of Technigaz, a liquefied gas engineering contractor in 1985. In 1986, he joined the Group's Finance Department to take responsibility for the financial aspects of the takeover of Screg. He was successively Chief Financial and Cash Management Officer of Screg in 1987 and Chief Financial Officer of Bouygues Offshore(1) in 1991. He was appointed Senior Vice-President of Finance and Administration of Bouygues Offshore in 1998, then moved to Bouygues Bâtiment in 2000 as Chief Financial Officer. In March 2003, Philippe Marien became Chief Financial Officer of the Saur group(2). He managed the sale of Saur by Bouygues to PAI partners, then by PAI partners to a new group of shareholders led by the Caisse des Dépôts et Consignations. He was appointed Chief Financial Officer of the Bouygues group in September 2007. In February 2009, Philippe Marien was appointed Chairman of Bouygues Telecom's Board of Directors, a position that he held until April 2013. His remit within the Bouygues group was extended to include Information Systems and Innovation in 2015 and Human Resources in 2016. On 30 August 2016, he was appointed Deputy CEO of Bouygues.

Diversity and areas of expertise of the Board of Directors

The Board of Directors is composed in a manner that enables it to accomplish its missions (for example, in terms of strategy-related skills, approval of the accounts, risk, ethics and compliance management, governance, or compensation).

In order to achieve this goal, the Board of Directors oversees the complementarity of its skills (which are assessed, in particular, on the basis of the educational background and the experiences of each member), but also the development of the personal diversity of its members (based on criteria such as nationality, geographical origin, age, seniority on the Board of Directors or gender).

This process has resulted in the creation of a skills matrix (based on the information provided by the members of the Board in answer to the annual questionnaire sent to them by the Company). In particular, it is intended to identify any needs for expertise and, consequently, to guide the selection of profiles that could add value to the work of the Board of Directors in the event of future nominations. This matrix is also used in the analyses conducted by the Nominations and Remuneration Committee.

(1) A Bouygues' offshore and oil services activity, sold to Saipem in May 2002.
(2) A Bouygues' water treatment subsidiary, sold to PAI partners in November 2004.
(*) Listed company.

The matrix showing the diversity of the expertise of the Board of Directors on 6 May 2019 is shown below.

	Trans-portation industry	Equip-ment suppliers	Management of large companies (turnover ≥ €7 billion)	Finance/ Mana-gement Control	Legal/M&A	Ethics and Compliance	Human Resources	Corporate Social Responsi-bility	Digital and Cyberse-curity	Interna-tional
Henri Poupart-Lafarge	√	√	√	√	√	√	√	√	√	√
Yann Delabrière	√	√	√	√					√	√
Candace K. Beinecke				√	√	√				√
Olivier Bouygues			√					√		√
Bi Yong Chungunco			√		√	√				√
Françoise Colpron	√	√			√	√	√	√		√
Clotilde Delbos	√		√	√	√	√	√			√
Gérard Hauser	√	√	√	√		√	√			√
Sylvie Kandé de Beaupuy	√		√		√	√	√	√		√
Klaus Mangold	√		√	√	√	√		√		√
Baudouin Prot			√	√	√	√	√	√		√
Sylvie Rucar	√		√	√	√	√		√		√
Philippe Marien (Representative of Bouygues SA)			√	√						√

The diversity of the Board of Directors assessed on the basis of more personal information is shown on page 153 of this Registration Document.

Within the entire Group, this diversity policy results in the quest for a balanced representation of men and women on the Executive Committee, where the proportion of women increased from 8% to 25% on 7 May 2019. Moreover, on 31 March 2019, 16.4% of the most senior positions (and 20.7% of all managers and professionals) within the Group were held by women, while women represented 18.1% of the total number of employees on this same date.

Absence of conviction or conflicts of interest

This section is based on the information provided by the members of the Board in answer to the annual questionnaire sent to them by the Company. The information is accurate as of 6 May 2019.

To the Company's knowledge, no member of the Board of Directors:

- has been convicted of fraud during the last five years and/or has been the subject of any official public investigation and/or sanction by statutory or regulatory authorities, it being specified that by a decision of 18 December 2014, the Enforcement Committee of the French Financial Markets Authority (AMF) considered that Faurecia S.A. and its Chairman and CEO, Mr Yann Delabrière, had failed to meet certain obligations defined in articles 223-1, 223-2 and 223-10-1 of the AMF General Regulation pertaining to information related to Faurecia S.A.'s objectives for 2012. In application of Articles L. 621-15 (paragraphs II-(c) and III-(c)) of the French Monetary and Financial Code, the AMF fined Faurecia S.A. and its Chairman and CEO, Mr Yann Delabrière, €2 million and €100,000, respectively.

  On 26 February 2015, Faurecia S.A. and Mr Yann Delabrière, supported by the Board of Directors of Faurecia S.A., lodged an appeal against this decision with the Paris Court of Appeal. In a ruling rendered on 30 June 2016, the Paris Court of Appeal, considering that the decision did not enable an assessment of the proportionality of the fine, decided that the financial penalty imposed on Faurecia S.A. should be overturned and, as a consequence, reduced to €1 million. As regards Mr Yann Delabrière, the Paris Court of Appeal found no evidence of personal wrongdoing and maintained the penalty solely in his capacity as legal representative of Faurecia S.A. On 22 August 2016, Faurecia S.A. and Mr Yann Delabrière lodged a further appeal against this ruling before the French Supreme Court. The appeal with the French Supreme Court lodged by Faurecia and its former Chairman and Chief Executive Officer, Mr Yann Delabrière, was withdrawn and the French Supreme Court recorded this withdrawal by a judgment dated 26 September 2018;
- has been associated in his/her capacity of manager in any bankruptcy, receivership or liquidation for the past five years;
- has been disqualified by a court from acting as a member of an administrative, management or supervisory body of an issuer or from acting in the management or conduct of the business of any issuer for the past five years.

In the event of a conflict of interest, according to the Director's Charter annexed to the Board of Directors' Internal Rules, any Director must inform the Board as soon as he/she is aware of any, even potential, conflict of interests and he/she must refrain from participating in discussions on the conflicting subject matter and from voting on the corresponding resolution. In case of conflict of interest that cannot be resolved to the satisfaction of the Board, the Director must resign.

In this context, the Board of Directors has acknowledged that, since September 2018, Mr Klaus Mangold has been Chairman of the Supervisory Board of Knorr-Bremse, one of the main providers of the Company. The Board of Directors has consequently monitored the compliance with the rules provided by the Director's Charter annexed to the Board of Directors' Internal Rules.

Moreover, to the Company's knowledge:

- no arrangement or agreement has been reached with shareholders, clients, suppliers or others to appoint a member of the Board of Directors;
- there is no family relationship among the members of the Company's Board of Directors;
- there is no service contract linking any members of the Board of Directors to the Company or to any of its subsidiaries and granting them any benefits.

To the Company's knowledge, there is no restriction applicable to any of the other members of the Board of Directors related to the sale of their stake in the share capital of the Company other than the internal rules set by the Group or, more generally, all applicable legal or regulatory provisions governing refraining from trading in the Company's securities in the context of insider trading prevention.

Directors' independence

According to the AFEP-MEDEF Code and as set forth in the Board of Directors' Internal Rules, the Board of Directors annually assesses the situation of each Director in light of the independence criteria. The Board meeting of 6 May 2019 performed this review based on the recommendations issued by the Nominations and Remuneration Committee which were entirely approved by the Board.

As in past years, the Board referred to the AFEP-MEDEF Code's definition and considered that a Director is independent when he or she has no relationship of any kind whatsoever with the Company, its Group or its Management that could potentially compromise his or her ability to exercise independent judgement.

The Board took into account all the AFEP-MEDEF Code's recommendations for assessing the independence of its members, and established that, in order to be qualified as independent, a Director must not:

- be or have been, in the past five years, an employee or an executive corporate officer ("*dirigeant mandataire social exécutif*") of the Company, or an employee or executive corporate officer or Director of a company within its scope of consolidation, or an employee, executive officer, or Director of the Company's parent company, or of a company within such parent's scope of consolidation;
- be an executive corporate officer ("*dirigeant mandataire social exécutif*") of a company in which the Company holds, either directly or indirectly, a seat on the Board of Directors, in which an employee designated as such or an executive corporate officer ("*dirigeant mandataire social exécutif*") of the Company (currently or over the past five years) holds a directorship;
- be, either directly or indirectly, a customer, supplier, investment or commercial banker, advisor:
  - who is significant for the Company or its Group, or
  - for which the Company or its Group represents a material proportion of the entity's business;
- have any close family ties with a Corporate Officer ("*mandataire social*") of the Company;
- have been a Statutory Auditor of the Company in the past five years;
- have been a Director of the Company for more than twelve years (loss of the status of independent Director occurs on the date at which this period of twelve years is reached);
- be, control, or represent a shareholder that holds, individually or in concert, more than 10% of the Company's share capital or voting rights of the Company;
- receive variable compensation in cash or shares or any other form of compensation linked to the performance of the Company or of the Group.

Every year, each Director is asked to provide the Company with a statement on its status vis-à-vis each of these criteria.

In compliance with the AFEP-MEDEF Code's recommendation, the Board of Directors may conclude that a Director is not qualified as independent even though he or she meets the criteria for independence, and vice versa.

The Board of Directors reviewed in particular the key business relationships criterion. Whenever business activities or relationships are identified between the Company and the companies where the Directors qualified as independent perform functions or hold mandates, the Board takes into account factors such as the nature and the economic value, as assessed from each party's point of view, of the relationship (which has not to be significant), the fact that the concerned Director does not hold an executive position within the company or group concerned or the existence of any other qualitative element (such as the lenght and the continuation of the relationship), in order to assess the independence of the concerned Directors.

As in past year, the Board also assessed the situation of Ms Sylvie Kandé de Beaupuy in light of the cooperation agreement that the Company signed on 27 April 2017 with Airbus, the company in which she is the Group Ethics and Compliance Officer. The Board of Directors considered that given the nature (i) of her activities within Airbus and (ii) the agreement which seeks only to implement a co-development programme to reinforce the efforts to prevent cyber-attacks (with an objective of providing services to analyse the vulnerability of transport systems, to create a common protection platform and define a new standard for security operational centres adapted to the industrial sector), Ms Sylvie Kandé de Beaupuy met all the independence requirements and should, therefore, be considered as an independent Director.

The Board of Directors has also acknowledged that Mr Klaus Mangold has been Chairman of the Supervisory Board of Knorr-Bremse, one of the main providers of the Company, since September 2018. As a consequence, the Board of Directors did not qualify him as independent.

Therefore, after reviewing all the criteria, the Board of Directors decided that, as of 6 May 2019, seven out of the thirteen Directors qualified as independent, corresponding to 53.8%.

AFEP-MEDEF criteria (The criterion is considered met when marked with a "√")	**No employment or corporate officer position in the Company within past 5 years**	**Absence of cross-directorships**	**Absence of material business relationships**	**Absence of family connections**	**Not having been the Statutory Auditor of the Company for the past 5 years**	**Duration of appointment < 12 years**	**< 10% shareholding and voting rights in the Company**	**Absence of variable compensation based on performance of the Company**	**Qualification assigned by the Board**
Henri Poupart-Lafarge		√	√	√	√	√	√		Not independent
Candace Beinecke	√	√	√	√	√		√	√	Not independent
Olivier Bouygues	√	√	√	√	√			√	Not independent
Bi Yong Chungunco	√	√	√	√	√	√	√	√	Independent
Françoise Colpron	√	√	√	√	√	√	√	√	Independent
Yann Delabrière	√	√	√	√	√	√	√	√	Independent
Sylvie Kandé de Beaupuy	√	√	√	√	√	√	√	√	Independent
Gérard Hauser	√	√	√	√	√		√	√	Not independent
Klaus Mangold	√	√		√	√	√	√	√	Not Independent
Philippe Marien (Representative of Bouygues SA)	√	√	√	√	√	√		√	Not independent
Sylvie Rucar	√	√	√	√	√	√	√	√	Independent
Clotilde Delbos	√	√	√	√	√	√	√	√	Independent
Baudouin Prot	√	√	√	√	√	√	√	√	Independent

Rules of conduct – Ethics for Directors

Director's Charter

Attached to the Board of Directors' Internal Rules is the Director's Charter, defining the Directors' rights and obligations, and the content of which is, in most respects, compliant with the recommendations of the AFEP-MEDEF Code. Before accepting their appointment, all Directors must make themselves aware of the legal and regulatory requirements relating to their office, as well as of the Company Articles of Association, the Group's Code of Ethics, the internal procedures for the Board of Directors, Board Committees and the Director's Charter. Any Director can refer to the Secretary of the Board at any time, regarding the application of these rules and the rights and obligations of their role.

Each Director shall dedicate to her/his function all the required time and attention and shall attend – unless prevented from doing so – all meetings of the Board of Directors and of the Committees of which he or she is a member, as well as all General Shareholder Meetings.

Pursuant to the charter, each Director has a duty to inform the Board as soon as he or she is aware of a conflict of interest, even a potential one, and to abstain from attending discussions and from voting on the corresponding resolution. It specifies that the Director must consult with the Chairman of the Board of Directors (or, whenever the Director in question is the Chairman of the Board of Directors, the Chairman of the Nominations and Remuneration Committee) prior to committing to any responsibilities or accepting to exercise any functions or fulfilling any obligation that could, according to him or her, create a conflict of interest for him or her, including a potential one. After consulting with the Lead Director, the Chairman can submit such questions to the Nominations and Remuneration Committee, or the Board of Directors. The Lead Director will analyse any potential conflicts of interest with the Chairman of the Board of Directors. In the event of a conflict that cannot be resolved to the satisfaction of the Board, the Director must resign. Upon taking office, then once a year, the Director must submit a statement to the Company on the existence of or the potential for any conflicts of interest by answering a questionnaire provided by the Company. He or she must notify the Company if ever this submitted information becomes inaccurate, and is required to answer to the Chairman of the Board of Directors' information request at any time, in accordance with the Directors' Charter.

Pursuant to the charter, each Director is bound by professional secrecy and must personally protect the confidentiality of any information he or she obtains in connection with his or her office that has not been made public.

In addition, the charter states that the Director must also comply with the provisions of the AFEP-MEDEF Code and the legal provisions in force concerning rules applicable to the combination of mandates. Each Director must provide information to the Company regarding the mandates he or she holds in other companies, including his or her participation in Committees of the Boards of such French or foreign companies. He or she must disclose any new mandate or professional responsibility to the Company as soon as possible. When he or she exercises executive functions within the Company, he or she must also solicit the opinion of the Board of Directors prior to accepting a new corporate mandate in a company outside the Group.

The Director's Charter also restates the Directors' duty to comply with the Group's Internal Rules and, more generally, with the applicable legal or regulatory provisions regarding the Directors' abstention from dealing in the Company's securities, as set forth in the Group's Code of Conduct on the misuse of inside information designed to prevent insider trading.

Code of Conduct on the misuse of inside information designed to prevent insider trading

The Code of Conduct on the misuse of inside information designed to prevent market abuse (the "Code of Conduct") defines the situations in which certain individuals must refrain from carrying out transactions involving the Company's securities. These principles are also contained in the Group's Code of Ethics presented in the second part of this report.

The Group's Code of Ethics and Code of Conduct are also delivered to each Director at the beginning of his or her mandate and following each amendment. Compliance with confidentiality rules is also among the essential rules of the Group's Code of Ethics.

The Code of Conduct applies to directors, executive managers and assimilated persons, and to employees of the Group who have regular or occasional access to inside information.

In addition, the opening of each blackout-trading period is notified by email to the interested persons. together with an updated timetable of all such periods.

The Board's Internal Rules, as well as this Code of Conduct to which the Internal Rules of the Board refer, also remind the managers and persons related to them of their legal obligations to report dealings in the Company's securities made either by them or by persons close to them.

Pursuant to the Code of Conduct, transactions involving the Company's securities are not allowed:

- during the 30 calendar days before Alstom's first six-month and annual results are disclosed to the public and until the second trading day included after the date when the information has been disclosed to the public;
- during the 15 calendar days before the public disclosure of the sales and orders (or other results) for the first and third quarters of the financial year and until the second trading day included after the date when the information has been disclosed to the public; and
- in any case, when inside information is held and until the second trading day included after the date when this information has been disclosed to the public.

CONDITIONS OF PREPARING AND ORGANISATION OF THE WORK OF THE BOARD OF DIRECTORS

Organisation and functioning of the Board of Directors

The procedures governing the organisation and functioning of the Board of Directors are defined in the Board of Directors' Internal Rules whose purpose is to complement applicable laws and regulations.

The rules are regularly reviewed by the Board of Directors to determine whether its provisions need to be amended or detailed in order to better comply with regulations in force or to improve the efficiency and operation of the Board of Directors and its Committees.

The Internal Rules notably state that the Board of Directors:

- shall be comprised of independent Board members numbering not less than half of its total members, as determined and reviewed annually by the Board of Directors on the basis of a proposal to be made by the Nominations and Remuneration Committee;
- shall define, upon the proposal of the Chief Executive Officer, the Group's strategy, and shall regularly review the Group's strategic options as previously defined, supervise management and verify the quality of information supplied to shareholders and the financial markets;
- shall review and approve the annual budget and the medium-term plan;
- shall consider prior to implementation, any operation that is not part of the Group's announced strategy or that could significantly affect it or materially modify the financial structure or results of the Group;
- shall approve before implementation any acquisition or divestiture insofar as the amount exceeds €80 million, any decision to set up a partnership or a joint venture where the contribution of the Group exceeds €80 million, as well as any financing transaction which exceeds a total of €400 million for any one transaction for new medium-term or short-term borrowings, or €1 billion for short-term treasury notes;
- shall approve before implementation organic growth investments in an amount higher than €80 million and the significant internal restructuring undertakings in particular at the time of the annual review of the Group's budget and strategy;
- shall be kept regularly informed of developments in the Group's business activities and results, the Group's significant risks, its financial position, indebtedness, cash position and, more generally, any Group commitments, and may request information about the foregoing at any time;
- shall create one or more specialised Committees and shall define their composition and responsibilities;
- shall approve the composition of the Group's Executive Committee;
- shall set the compensation of the Corporate officers ("mandataires sociaux") and assess each year the Chief Executive Officer's performance outside of his presence;
- shall review and approve annually the information published in the Company's Annual Report on its practices and structure of corporate governance, including the presentation of the policy that is followed with respect to the compensation of Executive and Non-Executive Directors.

The Board shall examine its method of working at least once a year and implement a formal assessment every three years.

Every year, the Board conducts an internal assessment of its method of working and of the Committees' methods of working and entrusts the preparation of such assessment to external consultants every three years.

A minimum of six meetings are scheduled each year.

Training of Directors

Upon being appointed to the Board of Directors, each Director receives all information needed to perform his or her duties and may request any document he or she considers appropriate.

Interviews with those responsible for the Group's main central functions are organised with detailed presentation of the businesses and the visits of production sites to allow the Directors to gain initial contact with management teams and develop a more thorough understanding of elements that are specific to the Company, its activities and the markets in which it operates.

Within the framework of the development of continuing training initiatives, it is also proposed to all Directors the option to participate in these induction and training programs intended for new Directors.

During the annual assessment of the Board of Director's functioning, the members are requested to indicate whether they feel the need to update their knowledge or broaden their skills.

The Board of Director's Internal Rules specify that any further training a Director may request, if he or she considers it necessary, may cover not only Group activities and product lines, but also accounting and financial aspects.

Each year, one Board of Directors meeting is held (when possible) on one of the main Group sites and provides in-depth presentations of the business concerned, visits of production sites and exchanges with operational executives.

Information to be provided to Directors

Prior to each Board or Committee meeting, the Directors shall receive, sufficiently in advance and with proper notice (generally one week of advanced notice), a report on the agenda items that require prior examination and consideration.

In addition to Board of Directors meetings, the Chairman regularly informs the Directors of any event or development that may have a material impact on operations or on any information previously communicated to the Board of Directors or on any matters discussed during the meetings; the Chairman also regularly forwards to the Directors any material information regarding the Company. The Board of Directors' Internal Rules, notably provide for prior approval by the Board for any acquisition, disposal or any decision to set up a partnership or a joint venture in excess of €80 million.

The Directors also receive copies of any press releases, as well as the main articles appearing in the press and reports by financial analysts.

The Directors may at any time request further information from the Chairman of the Board, who shall assess the relevance of the request. Any Director is also entitled to meet with the Group's Senior Executives outside of the presence of the Corporate Officers ("*mandataires sociaux*") of the Company.

The Directors can also be asked to join work groups organised by the Company whose subject matter will then be presented to the Board of Directors.

The operational or functional executives of the Group, as well as persons outside the Group, participate in meetings at the request of the Chairman, based on the matters on the agenda.

Board Committees

Since the Company's listing in 1998, the Board of Directors has operated two Committees, the Audit Committee and the Nominations and Remuneration Committee, invested with the responsibility to study and prepare the Board's main deliberations in order to improve the Board's efficiency, which is the only body duly authorised to make decisions.

In September 2010, the Board of Directors decided to establish a third Committee, the Ethics, Compliance, and Sustainability Committee.

Each Board meeting is generally preceded by a meeting of one or more of these Committees depending on the items on the Board of Directors meeting agenda. The Committees report to the Board on their work and observations, and submit their opinions, proposals or recommendations. Given the travelling requirements Directors may face, Audit Committee meetings are usually held the day prior to Board meetings and not two days ahead as recommended by the AFEP-MEDEF Code, on the basis of documents that have already been sent to participants (a week before the meeting).

The composition, the powers and the procedures of each Committee are also defined by Internal Rules put forward by each Committee involved and approved by the Board of Directors. Each Committee reviews its Internal Rules to take into account the evolution of the regulations or recommendations and can submit any modifications that it considers appropriate to the Board.

In addition, the Board of Directors can at any time decide to create an *ad hoc* Committee of Directors to examine a specific matter. Such *ad hoc* Committee was set up for the project to combine Alstom with the activities of Siemens Mobility.

A Director's professional career and skills are taken into account as selection criteria in deciding on his or her presence on a given Committee.

According to the Audit and EC&S Committees' Internal Rules, these Committees shall consist of at least three members of whom at least two thirds must be independent Directors, including the Chairman of the Committee. As for the Nominations and Remuneration Committee, the Rules recommend that it shall consist of at least three members and that at least a majority of the Committee's members are independent, among whom the Chairman of the Committee, who shall have a casting vote in case of a tie vote.

In the context of its work, each Committee can meet any Group executive it wishes, retain the services of experts at its own initiative and ask for any information useful for it to perform effectively.

Moreover, each member of a Committee may propose that a meeting be held if he or she considers this necessary in order to discuss a particular issue.

The Committees' work is subject to an oral report during the Board meeting, followed by a report in writing made available to Directors. Each Committee prepares a report presenting its work during the past financial year. This report is included in the Registration Document (see hereinafter).

The Internal Rules of the Board of Directors and its Committees and the Director's Charter appended to the Board's Internal Rules, of which large extracts are provided herein, as well as the Code of Conduct to which the Board Internal Rules refer, are available on the Alstom website.

Activity report of the Board of Directors for fiscal year 2018/19

The Board of Directors met thirteen times during the financial year (eight times during fiscal year 2017/18 and six times during fiscal year 2016/17). The attendance rate was 89.5% (97% in fiscal year 2017/18 and 92% in fiscal year 2016/17).

Based on the Audit Committee's recommendation, the Board of Directors reviewed and approved the consolidated and statutory accounts for fiscal year 2017/18, the consolidated accounts for the first half of fiscal year 2018/19, as well as the related management reports. The Board of Directors reviewed the draft press releases on these accounts before their publication.

Each time it reviewed the half-year and full year accounts and also on a regular basis, the Board of Directors reviewed the financial situation of the Group, the evolution of the cash flow, debt, liquidity position and its financial rating. The Board of Directors received information on the significant risks faced by the Group, how they have evolved, and the action plans launched. In May 2018, the Board of Directors discussed and approved the description of the main risks faced by the Group that were included in the Company's 2017/18 Registration Document.

In the framework of the publication of its Registration Document for the 2017/18 fiscal year and its Annual Shareholder Meeting on 17 July 2018, the Board of Directors discussed Directors' independence status and, more generally, approved the Chairman's report pursuant to article L. 225-37 of the French Commercial Code and the section "Corporate governance" of the 2017/18 Registration Document before its filing with the AMF *(Autorité des marchés financiers)*. It approved the "Sustainable Development" section after having heard the Ethics, Compliance and Sustainability Committee's report. The Board of Directors also approved the draft report on the resolutions submitted to the Special Meeting of Shareholders holding shares with double voting rights and the draft report on the resolutions submitted to the Combined Shareholder Meeting held on 17 July 2018.

The Board examined and answered the three written questions asked by a shareholder prior to the Annual Shareholder Meeting convened on 17 July 2018.

During the 2018/19 fiscal year, the Board of Directors continued to pay special attention to reviewing the Group's strategy and reviewing prospects and opportunities for the Group's growth. The Board of Directors was regularly informed of the progress of the discussions with Siemens on the project to merge with the activities of Siemens Mobility during the 2018/19 fiscal year. It reviewed and approved the main contractual documents for this business combination (in particular the agreements covering the contributions, the draft Articles of Association and the composition of the Board of Directors of the combined entity), as well as the document E, which was filed with the AMF on 30 May 2018. The Board of Directors also reviewed the merger control clearance by the European and worldwide competition authorities.

In May 2018, based on the Nominations and Remuneration Committee's proposal and on the level of achievement of set financial and personal objectives, the Board of Directors determined the amount of variable compensation for the Chairman and Chief Executive Officer for the 2017/18 fiscal year. The Board of Directors also set the objectives for the determination of his variable compensation for fiscal year 2018/19 as well as his annual fixed compensation.

In the area of governance, the Board discussed more general comments on the permanent objective of the Board to strengthen diversity and complementarity of required skills, maintaining diversity among nationalities, and balanced representation of men and women. These activities allowed the Board of Directors to have an active involvement in the selection process for the two members who joined the Board of Directors following the Annual Shareholder Meeting held on 17 July 2018. The Board of Directors also deliberated on the changes to the composition of its Committees, in particular in light of the election of Ms Clotilde Delbos and Mr Baudouin Prot, and the departure of Ms Géraldine Picaud.

The Board of Directors held two meetings without the participation of the Chairman and Chief Executive Officer (executive sessions). These meetings were devoted to the evaluation of the performance of the Chairman and Chief Executive Officer and the changes to his compensation package. The succession plan in case of incapacity of the Chairman and Chief Executive Officer was also reviewed and maintained.

The Board of Directors approved the adoption of a performance share plan ("PSP 2019") and set its conditions based on the recommendation of the Nominations and Remuneration Committee pursuant to the authority granted by the shareholders at the Annual Shareholder Meeting of 17 July 2018.

The Board of Directors internally undertook an annual evaluation *via* a questionnaire and individual interviews with the Lead Director. The Lead Director presented the results of this annual review for 2018/19 during the meeting of the Board of Directors on 6 May 2019.

The Board also:

- renewed the financial delegation of authority to the Chairman and Chief Executive Officer for issuing debt securities;
- followed the evolution of the main on-going investigations and disputes, and received, on a regular basis, information on the internal control and risk management systems by reviewing the Audit Committee's work reports, and on the procedures, actions, and organisation of the Group relative to ethics, compliance, and sustainable development by monitoring the work of the Ethics, Compliance and Sustainability Committee.

The Committees' Chairs submitted their Committee work reports to the Board for discussion.

The Board of Directors discussed and acted on all other important matters concerning the Group.

The Statutory Auditors were invited to the two Board meetings dedicated to the review and approval of the annual and half-yearly accounts.

Lead Independent Director: activity report for fiscal year 2018/19

Mr Yann Delabrière, independent Director, was appointed as Lead Director following the Annual Shareholder Meeting of 4 July 2017. He chairs the Nominations and Remuneration Committee whose missions are described pages 172.

During the 2018/19 fiscal year:

- As Chairman of the Nominations and Remuneration Committee, the Lead Director led the discussions on the composition of the Board of Directors and the Committees.
- He oversaw the proper induction of the two Directors who joined the Board of Directors following the 2018 Annual Shareholder Meeting, in particular by supervising the induction sessions organised with the Company managers and site visits.
- The Lead Director chaired the executive sessions of the Board of Directors which were devoted to the performance evaluation of the Chairman and Chief Executive Officer and the changes to his compensation package.
- The Lead Director consulted with the Chairman and Chief Executive Officer on a regular basis concerning the preparation of Board meetings and all of the important matters that were presented or decisions

made at such meetings. This part of his activity was particularly intense during fiscal year 2018/19 as a result of the combination project with the activities of Siemens Mobility.

- The Lead Director maintained a regular and open dialogue with the members of the Board of Directors. He led the activity to evaluate the activities of the Board of Directors by interviewing each Director and presented a summary of this evaluation.

The Lead Director submitted a report of his work to the Board of Directors at its meeting on 6 May 2019.

Audit Committee

Members

The Audit Committee is currently composed of four members: Ms Sylvie Rucar, Committee Chairwoman, Ms Clotilde Delbos, Mr Philippe Marien and Mr Yann Delabrière.

Following the 2019 Annual Shareholder Meeting, and provided that the resolutions related to the composition of the Board are approved by shareholders, the Audit Committee will be composed of three members: Ms Sylvie Rucar, Committee Chairwoman, Ms Clotilde Delbos and Mr Philippe Marien.

Two out of the three members will be independent, including its Chair, which complies with the two-thirds of independent members recommended by the AFEP-MEDEF Code.

The members of the Audit Committee have specific expertise in financial or accounting matters due to their qualification or professional expertise as set forth in their biographies.

Duties

Acting under the authority of the Board of Directors, the general purpose of the Committee is to assist the Board in overseeing issues relating to the development and management of financial and accounting information. In particular, the Committee is responsible for monitoring (i) the process according to which the financial information is developed, (ii) the efficiency of internal controls and risk management systems, (iii) the legal auditing of annual account statements and consolidated account statements as carried out by the Statutory Auditors, and the independence of such Statutory Auditors.

In fulfilling its role, as stated in its Internal Rules, the Committee is responsible for the following:

- to review the scope of consolidation and examine all draft consolidated and corporate financial statements and related reports which will be submitted to the Board for approval and to discuss them with Management and the Statutory Auditors;
- to review with Management and the Statutory Auditors the generally accepted accounting principles used in the preparation of the accounts, including the review of alternative accounting principles, as well as any change in accounting principles, methods or rules while monitoring that such principles are still relevant;
- to examine and monitor the production process and the treatment of financial and accounting information used in the preparation of account statements;
- to evaluate the validity of the methods chosen for processing significant transactions as well as those transactions through which a conflict of interest could have occurred;
- to examine Management's presentation on risk exposure (including legal risks) and significant off-balance sheet commitments and contingencies at the time of the Committee's review of the accounts;
- to review and evaluate at least annually, the efficiency of internal control procedures and risk management procedures in place, including those associated with the development and treatment of financial and accounting information; the Committee monitors that the main risks are identified and managed, and that it is kept informed of their existence and status, it being specified that it shall receive the opinion of the Ethics, Compliance, and Sustainability Committee on the risk map concerning ethics and compliance, social responsibility and sustainable development and on the procedures in place for preventing the identified risks;
- to examine and review, on an annual basis, the organisation and operation of the internal audit; the Committee approves the internal audit programme, monitors its development and the results of its plans of action;
- to review with the Statutory Auditors the nature, scope, and results of their audit and work performed; and to review their comments and suggestions, in particular those relating to internal control and risk management procedures, to accounting practices and to the internal audit programme;
- to examine and provide the Board of Directors with its opinion on the Chairman of the Board of Director's draft report to shareholders at the General Shareholders' Meeting on the internal controls and risk management procedures implemented by the Company;
- to review and control, if any, the call for tenders procedure associated with the selection of Statutory Auditors and provide the Board of Directors with a recommendation on the Statutory Auditors proposed for appointment by shareholders at the General Shareholders' Meeting and on the amount of fees that the Company intends to pay them;
- to approve the Statutory Audit Charter governing relations with the Statutory Auditors and examine, on an annual basis, the amount of the fees paid by the Group to the networks to which such Statutory Auditors belong, including fees that are not directly linked to the Statutory Auditors' duties;
- to oversee the Statutory Auditors' independence, to examine with them, if applicable, the risks that could impact such independence and the safety measures undertaken to mitigate these risks and grant its prior approval to any assignments that may be given to the Statutory Auditors and their network.

The Committee may also perform any other activity as the Committee or the Board of Directors deems necessary or appropriate. The Committee is entitled to seek any external assistance it may deem necessary.

Unless the Committee decides differently, the Statutory Auditors attend meetings.

Activity report of the Audit Committee for fiscal year 2018/19

The Audit Committee met four times during fiscal year 2018/19 (five times during the two preceding fiscal years). The attendance rate was 85% (93% in fiscal year 2017/18 and 100% in fiscal year 2016/17).

The Chief Financial Officer, the Vice President of Internal Audit, the Chief Tax and Accounting Officer and representatives of the two independent audit firms attended all four meetings. The Group Controller and the Group General Counsel attended four and three meetings, respectively.

The Committee reviewed the Statutory and Consolidated Financial Statements as of 31 March 2018 as well as the half-year consolidated accounts as of 30 September 2018 (financial statements, notes and management or activity reports) in May and November 2018 respectively. In May 2018, the Committee also reviewed the Registration Document for the fiscal year 2017/18 prior to its filing with the AMF *(Autorité des marchés financiers)*, and especially the section concerning risks, as well as the section concerning internal controls and risk management procedures of the Chairman's Report, which the Committee approved.

On the basis of the presentations by General Management and the independent audit firms, the Committee verified the relevance of the accounting methods and treatments used in the financial statements.

As in prior years, the annual and half-year closing of accounts were the subject of detailed presentations by Financial Management, of the Group's major risks (risks linked to the activity, to contract execution, to the main disputes), of cash flow evolution, of the off-balance sheet commitments and of provisions. At the end of each meeting to review the accounts, the Chairman of the Audit Committee met with the independent audit firms, without management being present, to enquire as to whether all the relevant issues have been raised by them.

In September 2018, the Committee reviewed the existing internal control procedures put in place in the Group and the internal control evaluation carried out by the Company through an annual evaluation questionnaire. The Committee was informed of the detailed results of the annual internal control programme and of the action plans aiming to improve internal controls and risk control, to eliminate weaknesses and to ensure compliance with applicable regulations. The results of the action plans were presented to the Committee. The Vice President of Internal Audit reported on the status of the audit and internal controls. The Committee also heard the Statutory Auditors' observations and recommendations on internal control in March 2019.

In March 2019, the risk map, a process to identify and monitor risks over the three-year plan, was examined. The Vice President of Internal Audit presented the updated risk map and the associated risk management measures.

The Vice President of Internal Audit presented the Internal Audit half-year and full year activity reports for 2017/18, and the proposed internal audit plan for the next year was reviewed and approved.

The Committee examined the amount of fees paid out to the statutory audit firms during the fiscal year 2017/18. The Statutory Auditors' Charter includes the listing of pre-approved services that can be performed within defined limits by the independent audit firms. The Committee ensured that the work performed by the statutory audit firms was within their guidelines.

After each meeting, the Committee reported to the Board on its work.

The Nominations and Remuneration Committee

Members

The Nominations and Remuneration Committee is currently composed of six members: Mr Yann Delabrière, Lead Director and Committee Chairman, Ms Candace K. Beinecke, Ms Sylvie Rucar, Mr Gérard Hauser, Mr Klaus Mangold and Mr Baudouin Prot.

Following the Annual Shareholder Meeting, and provided that the resolutions related to the composition of the Board are approved by the shareholders, the Nominations and Remuneration Committee will be composed of four members: Mr Yann Delabrière, Lead Director and Committee Chairman, Ms Sylvie Rucar, Mr Gérard Hauser and Mr Baudouin Prot.

Three out of the four members will be independent, including the Chairman, which complies with the AFEP-MEDEF Code recommendation to have a majority of independent members within the Committees in charge of Nominations and of Remuneration.

Duties

As stated in its Internal Rules, the Committee reviews and makes proposals or gives its opinion to the Board of Directors on the following subjects:

- the compliance by the Company with corporate governance principles that the Company abides by, notably regarding the policy with respect to the compensation of corporate officers. The Committee advises the Board on the part of the Annual Report dedicated to the shareholders' information on these matters and on the Board's work;
- the Board and Committees' composition and functioning (including the Nominations and Remuneration Committee);
- the Company's definition of the notion of Independent Director and the list of Independent Directors to be inserted in the Company's Annual Report;
- the separation or combination of the functions of Chairman of the Board of Directors and Chief Executive Officer of the Company;
- the nomination (or revocation) of the Chairman of the Board of Directors and of the Chief Executive Officer;
- the nomination of new Directors, including cases of unforeseeable vacancy; in particular, the Committee organises an appropriate procedure for selecting future Independent Directors and makes its own independent research on potential candidates prior to them being approached;
- the creation and implementation of a formal evaluation of the ways of working of the Board of Directors and the three Committees of the Board of Directors;
- the nomination (or revocation), upon proposal of the Chief Executive Officer, of any other executive Corporate officers *(dirigeants mandataires sociaux)* and members of the Executive Committee;
- the preparation of the annual evaluation of the executive corporate officers;
- the succession plans for the Company's senior executive corporate officers;
- all the elements comprising the compensation policy of executive corporate executives of the Company and its implementation, including any award of stock options or performance-based shares, as well as compensation and benefits of any kind (including pensions and termination benefits), also paid to them by the Company or companies belonging to the Group. The Committee notably reviews and defines the rules for determining the variable part of such compensation, ensures their coherence with the annual performance evaluation and the strategy of the Company, and thereafter controls the implementation of these rules;

- the definition or the validation of the compensation, particularly with regard to variable pay, of the members of the Executive Committee and the annual evaluation of its members;
- the Company's general policy relating to compensation plans based on shares in the Company (share subscription or stock options, performance-based shares, free shares, etc.), including the timing and frequency of allocations and their beneficiaries;
- the Company's general policy relating to employee share purchase schemes and any proposed schemes;
- the Directors' fees for Board meetings and the conditions for their award; and
- the analysis of any other issues at the request of the Board of Directors or at its own initiative.

Activity report of the Nominations and Remuneration Committee for fiscal year 2018/19

The Nominations and Remuneration Committee met five times during fiscal year 2018/19 (as in the two preceding fiscal years). The attendance rate was 80% (96% in fiscal year 2017/18 and 88% in fiscal year 2016/17).

Throughout the year, the Committee took an active part in the preparation of the merger project with the activities of Siemens Mobility, in particular with regard to governance, the planned compensation policy for the future corporate executives, the composition of the Board of Directors, the human resources policy and the corporate culture. It also considered the different possibilities for the implementation of long-term incentives and employee shareholding plans in the light of this merger.

The Committee discussed the action plans to be put in place following the evaluation of the functioning of the Board and its Committees in the spring of 2018. In particular, it confirmed its active participation in the selection of new Directors, particularly through the determination of skills which would further enrich the work of the Board, and in the formalization of the report to the Board of the work of the Committee by its Chairman. It discussed the diversity policy of the Board of Directors and proposed it to the Board for validation.

It was informed of the new applicable legal provisions (in particular the law of 5 September 2018 on the freedom of choice of one's professional future) and of the planned changes to the current legal framework (the PACTE bill), whose possible impacts on the governance of the Company were analysed.

The Committee proposed to the Board of Directors the amount of the variable compensation for the Chairman and Chief Executive Officer for fiscal year 2017/18 and made proposals to the Board relating to the structure of his variable compensation in respect of fiscal year 2018/19. It was also informed about the succession plans and the compensation for members of the Executive Committee, which it also approved, based on a review of market practices provided by a specialised external consultant (Mercer). The Committee also reviewed the Company's practices in terms of the Directors' compensation and recommended changes to this compensation to the Board of Directors in the light of current practices in companies from the SBF 120 and other European markets.

It analysed and discussed the results of the shareholders' vote at the Annual General Meeting on 17 July 2018 and took part in the modification of certain aspects of the compensation policy of the executive Corporate Officer to take into account the comments from certain investors and proxy advisers. The Committee thus examined the possible changes to the compensation principles for the executive Corporate Officers and the elements of the Chairman and Chief Executive Officer's compensation, which will be submitted for approval by the Board and the Annual General Meeting on 10 July 2019.

After each meeting, the Committee reported to the Board on its work.

The Ethics, Compliance and Sustainability Committee

Members

The Ethics, Compliance and Sustainability Committee (EC&S Committee) is currently composed of three members: Ms Sylvie Kandé de Beaupuy, Committee Chairwoman, Ms Bi Yong Chungunco and Mr Gérard Hauser.

Duties

As stated in its Internal Rules, the Committee reviews and makes proposals or gives its opinion to the Board of Directors on the following subjects:

With respect to ethics and compliance, the Committee reviews and monitors the Company's policies on ethics and compliance matters and the systems and procedures in place to effectuate these policies and provides the Board of Directors with its views.

The Committee is responsible for the following:

- to review the definition of the Group's core values and ethics and compliance policy;
- to review the organisation of the Ethics and Compliance function and make recommendations, if any;
- to review the Group's Code of Ethics, rules and procedures (including procedures with third parties); the Committee is informed of the plans for their promotion and implementation;
- to receive, on an annual basis, the presentation of the Group's risk map concerning ethics and compliance; it reviews the risks thus identified and is kept informed of their evolution and of the characteristics of their management systems;
- to receive from the Head of Ethics and Compliance function the annual activity report on the Company's ethics and compliance policy and actions undertaken; to review and recommend the proposed compliance action plan for the following year and to monitor its development;
- the Committee is informed of any possible cases of non-compliance with respect to the ethics and compliance policy, and reviews the action plans carried out as a result of such cases;
- to review the liaison with stakeholders over ethical issues.

With respect to sustainable development, the Committee is responsible for:

- reviewing the Group's environmental policies and management systems, the human resource policies, policies with respect to relationships with stakeholders (customers, suppliers, local communities);
- receiving, on an annual basis, the presentation of the Group's risk map concerning social responsibility and sustainable development and reviewing the risks thus identified while being kept informed of their evolution and of the characteristics of their management systems;
- reviewing and assessing the reporting and control procedures on non-financial indicators (environmental, health and safety, social reporting and indicators);

- reviewing the main lines of the Company's communication on corporate responsibility and sustainable development; the Committee is also responsible for reviewing the annual Board of Directors' draft report on the social and environmental impact of the Company's operations and providing the Board with its views on such report;
- reviewing and monitoring the ratings received by the Group from non-financial rating agencies.

The EC&S Committee provides an opinion to the Audit Committee on the risk map for ethics, compliance, social responsibility, and sustainable development, and on the procedures for preventing such risks from occurring.

Activity report of the EC&S Committee for fiscal year 2018/19

The EC&S Committee met three times during fiscal year 2018/19 (as in the two preceding fiscal years). The attendance rate was 100% (as in the two preceding fiscal years).

The EC&S Committee reviewed:

- the Group's Ethics and Compliance goals and performance indicators in the 2018/19 financial year;
- the status of implementation of the Alstom Integrity Programme, including the Code of Ethics, the Group Instructions training and awareness efforts, and the implementation of the resources of the Ethics and Compliance team;
- the results of second audit of the ISO 37001 standard for Anti-Bribery Management Systems.

At each meeting, the Committee was provided with updates on the on-going proceedings and investigations, including those of the UK Serious Fraud Office.

The EC&S Committee also reviewed the Group's sustainability activity and, in particular:

- the evolution of the policy and objectives, and in particular the Climate and Energy Transition strategy and the approach to sustainable development;
- compliance with the Duty of Vigilance law;
- the scope of activities and the organisation set up for sustainable development;
- the approach deployed and actions taken regarding the safety of subcontractors.

It was kept informed of the evaluations prepared by non-financial rating agencies.

It continued monitoring the Group's performance in terms of environment and of safety at work, to which it continued to pay close attention. More specifically, the results about severe accidents were presented and discussed at each meeting of the Committee.

It also reviewed the main non-financial indicators used by the Group.

The Committee reviewed and discussed the Group's risk map concerning ethics, compliance, environmental and social risks and human rights, and provided its opinion to the Board of Directors.

The Committee also approved its activity report for fiscal year 2017/18 and the "Sustainable Development" section of the 2017/18 Registration Document, which included the Board's report on social and environmental information and provided the objectives and indicators of the Group in these fields.

After each meeting, the Committee reported to the Board on its work.

Annual assessment of the functioning of the Board and of the Committees and the follow-up

Since 2004, the Board has carried out annually a formal assessment of its organisation and functioning pursuant to its Internal Rules. This assessment is based on a questionnaire prepared by the Nominations and Remuneration Committee sent to each Director. Every three years, it entrusts the preparation of these assessments to a specialised independent expert, in compliance with the recommendations of the AFEP-MEDEF Code.

The Board carries out an assessment of its functioning and of its Committees every year.

The assessment for year 2018/19 was done on the basis of a questionnaire addressed to each Board member and direct exchanges with the Lead Independent Director.

The main findings of this assessment were acknowledged by the Nominations and Remuneration Committee and the Board of Directors of 6 May 2019 as being the following:

- the diversity of the Board of Directors is globally positive and should be maintained;
- the Board members praise the good functioning of the Board and Committees and confirm their constant interest for strategic issues, interaction with top management and financial markets' vision;
- the dynamics of relations between the Committees themselves and with the Management should carry on.

On the basis of these findings, the Board of Directors of 6 May 2019, on recommendation of the Nominations and Remuneration Committee, identified the main areas of action as follows:

- increase industrial skills within the Board;
- dedicate full day meetings on strategy;
- review more frequently top and senior management assessment and succession plans;
- dedicate more focus on financial markets view on the Company.

COMPENSATION OF THE EXECUTIVE CORPORATE OFFICER

At the Annual Shareholder Meeting on 17 July 2018, almost 95.9% of Alstom's shareholders approved the 11th resolution that set forth the principles and the criteria for determining, allocating, and awarding the fixed, variable, and exceptional components constituting the total compensation and benefits-in-kind to be granted for fiscal year 2018/19 ("ex ante" vote). These principles and criteria will remain in effect until shareholders adopt a new compensation policy, such as the one, described below, which will be put to vote at the 2019 Annual Shareholder Meeting.

This new compensation policy of the executive corporate officers, described below, was drawn up in light of the high level of shareholders' support to the resolutions pertaining to compensation submitted to the Annual Shareholder Meeting on 17 July 2018, and with a view to incorporating the factors put forward by shareholders in their discussions with the Company in the course of fiscal year 2018/19. In particular, Mr Henri Poupart-Lafarge, who wants to comply with the best market practices and the recommendations of the AFEP-MEDEF Code, will resign after the 2019 Annual Shareholder Meeting, with effect from the date of the latter, from the employment contract that binds him to Alstom Executive Management SAS.

Therefore, this part of the Board of Directors' Report on Corporate Governance was written in compliance with Articles L. 225-37-2 and L. 225-100 of the French Commercial Code, in view of the vote of the shareholders convened to the 2019 Annual Shareholder Meeting on:

- a resolution pertaining to the principles and criteria for determining, allocating and awarding the fixed, variable and exceptional components of the total compensation and benefits of any kind payable to executive corporate officers. This new policy would become applicable at the end of the 2019 Annual Shareholder Meeting and as from the date of the latter, subject to prior shareholders' support ("*ex ante*" vote); and
- a resolution pertaining to the compensation due or granted to Mr Henri Poupart-Lafarge, Chairman and Chief Executive Officer, for fiscal year 2018/19 ("*ex post*" vote).

Principles and criteria for determining, allocating and awarding the fixed, variable and exceptional components of the total compensation and benefits of any kind payable to executive corporate officers

The information set forth below constitutes the compensation policy for executive corporate officers as set in accordance with Article L. 225-37-2 of the French Commercial Code. This policy sets forth the principles and criteria for determining, allocating, and awarding fixed, variable, and exceptional components constituting the total compensation and benefits-in-kind to be granted to the executive corporate officers of Alstom, starting from fiscal year 2019/20. As stipulated below, on numerous points, this policy remains identical to the policy adopted by shareholders (11th resolution) at the 2018 Annual Shareholder Meeting. The proposed changes will only take effect at the end of the 2019 Annual Shareholder Meeting, and as from the date of the latter, subject to a prior vote in favour by shareholders at this same meeting.

As of 31 March 2019, Mr Henri Poupart-Lafarge is the only executive corporate officer of Alstom.

General principles of the compensation policy

The approval of the new compensation policy by the 2019 Annual Shareholder Meeting would not affect the following principles, on which the compensation policy of the Chairman and Chief Executive Officer of Alstom would still be based:

- **Balance:** the compensation of the Chairman and Chief Executive Officer is set by the Board of Directors upon the Nominations and Remuneration Committee's proposal and comprises a fixed part, an annual variable part paid in cash and an annual grant of performance shares, the delivery of which is entirely conditioned to the Group's performance over at least three years. The Board of Directors thus ensures maintaining a balance among such three components and a preponderance of long-term and short-term variable elements directly linked to the officer's and the Group's performance. The Board of Directors takes into account all the components of the Chairman and Chief Executive Officer's compensation when determining the overall financial conditions pursuant to his mandate.
- **Consistency, strategy and performance:** The performance conditions of the annual variable compensation in cash are set so that they are fully aligned with the short-term goals of the Company and the executive himself. The performance conditions of the performance shares, as well as the objectives attached to them, are defined in such a way that they are completely aligned with the Company's strategy in the long term. In addition, the Board ensures that the level and structure of compensation is consistent with that of all managers in the Company.
- **Transparency:** The Company publishes all the elements constituting the compensation of the executive corporate officer. Insofar as they are not considered as confidential with regard to the Company's competitors (most of them themselves not listed and therefore not subject to the transparency obligations related to the Company's listing), the objectives to achieve and the results achieved are precisely communicated.
- **Stability and stringency:** The compensation policy is stable over time. Its principles and criteria are reviewed each year by the Nomination and Remuneration Committee and the Board of Directors, which rely in particular on analyses enabling them to identify market best practices. They are possibly modified only to reinforce the requirement or adapt them to the Company's strategy. The performance criteria used must correspond to the Company's objectives, and be demanding and long-lasting.

  These analyses offer a comparison of the level and the structure of the compensation paid to an executive corporate officer with that of a panel of other companies of a similar size and activity of the CAC 40 and SBF 120 (level and evolution of the compensation, respective ratio of each of the components of the compensation) and of international companies operating in similar sectors. This panel includes in particular companies such as Arkema, Faurecia, Dassault Systèmes, Legrand, Nexans and Thales in France, and BAE Systems, Leonardo, Rolls Royce and ThyssenKrupp in Europe.

The compensation policy submitted to shareholders' vote at the 2019 Annual Shareholder Meeting draws inspiration from the analysis conducted by the Nominations and Remuneration Committee and by the Board of Directors as part of the planned combination with the activities of Siemens Mobility. The planned compensation policy, which was subject to the actual combination, was supported by more than 96.7% of shareholders at the 2018 Annual Shareholder Meeting.

Upon the Nominations and Remuneration Committee's recommendation, the Board of Directors proposes to shareholders to make changes to the current compensation policy (i) considering the European Commission's decision to prohibit the proposed combination of the mobility businesses of Siemens and Alstom, and (ii) taking into account the Chairman and Chief Executive Officer's commitment to resign from the employment contract (currently suspended) binding him to Alstom Executive Management SAS at the end of the 2019 Annual Shareholder Meeting, and as from the date of this meeting. As of this date, the Chairman and Chief Executive Officer will perform his executive functions exclusively in his capacity as a corporate officer. There will be no active or suspended employment contract binding him to the Company, its subsidiaries or any company that is a shareholder.

Compensation during the mandate

The Chairman and Chief Executive Officer's compensation is made of:

- a fixed compensation;
- a short-term variable compensation under performance conditions; and
- a long-term compensation under performance conditions (performance shares).

Fixed compensation

The Chairman and Chief Executive Officer's fixed compensation is determined by the Board of Directors, upon the Nominations and Remuneration Committee's recommendation, at least for a two-year period, unless significant changes in his scope of responsibility or substantial developments in the macro-economic conditions. The fixed annual compensation takes into account the level and difficulty of related responsibilities, experience in the position, prior seniority in the Group and practices in groups or companies with comparable activities and of a comparable size on the French and European markets that form the Company's reference panel.

In application of these provisions and as an illustration, the fixed annual compensation of the Chairman and Chief Executive Officer would be €850,000 at the end of the 2019 Annual Shareholder Meeting and as from the date of this meeting. The Board intends to incorporate the change in practices on French and European markets – the fixed annual compensation of the Chairman and Chief Executive Officer had not been changed since 1 February 2016 – in order to offer attractive compensation (which is nevertheless lower than the forecasted compensation of the Chief Executive Officer in the planned merger with the Mobility activities of Siemens). The fixed annual compensation of the Chairman and Chief Executive Officer remains €750,000 until the 2019 Annual Shareholder Meeting and will be increased to €850,000, as from the latter (subject to shareholders' support at this same Annual Shareholder Meeting).

Variable compensation

The target variable portion of the Chairman's Chief Executive Officer's short-term compensation represents 100% of the fixed annual gross remuneration. It is capped, in the event of over-performance, at 170% of his gross annual fixed compensation. No minimum compensation is set.

It is fully linked to the achievement of performance conditions predetermined each year by the Board of Directors on the proposal of the Nomination and Remuneration Committee. The levels of achievement of these conditions are measured, whenever possible, on the basis of performance indicators adopted more generally within the Company. This last point ensures the relevance of the nature of the criteria selected and their alignment with the Company's strategy. At least one of these conditions is based on social or environmental considerations.

The vast majority of these conditions is quantifiable since they are based on the Group's overall performance and the achievement of individual objectives, most of them themselves quantifiable as they are linked to the implementation of specific action plans.

All objectives are pre-established annually by the Board, upon the Nominations and Remuneration Committee's recommendation, based on the strategic priorities defined for the Group and for the Chief Executive Officer.

The achievement level of these performance conditions is measured by the Board of Directors on the basis of the outcomes of the entire fiscal year.

The target variable compensation of 100% is based for 60% on global performance objectives (quantitative) and for 40% on individual objectives (quantitative and/or qualitative). In case of over-performance, the global Group performance objectives and the individual objectives may respectively represent up to 120% and 50% of the gross annual fixed compensation (*i.e.* a global cap of 170%).

The actual outcomes, the achievement level of each objective and the amount of the variable compensation are decided by the Board of Directors no later than at the meeting which has to approve the financial statements for the fiscal year.

As per Article L. 225-37-2 of the French Commercial Code, payment of such variable compensation is conditional upon approval of a resolution at the Company's Shareholders' Meeting, under the terms set forth in Article L. 225-100-II of the French Commercial Code.

The new compensation policy, submitted for shareholders' approval at the 2019 Annual Shareholder Meeting, would not amend this item, which is included in the current compensation policy.

For a description of the performance criteria for fiscal year 2019/20, please refer to the below section "Principles of short-term variable compensation for the benefit of Mr Henri Poupart-Lafarge, Chairman and Chief Executive Officer, under fiscal year 2019/20."

Long Term Incentive (performance shares)

The main characteristics of the performance shares allocation policy applied to the Chairman and Chief Executive Officer, which contributes to align his interests with those of the shareholders, are compliant with the recommendations of the AFEP-MEDEF Code and are the following:

Performance conditions	All of the performance shares are subject to the achievement of performance conditions which are relative and/or internal. The Board of Directors commits, in the event of a major change in the Group's strategy or structure, to adapt the performance conditions to future new challenges, in their nature as well as in the level of results to be achieved, while maintaining stringent requirements and comprehensive disclosure.
Vesting and performance period	Satisfaction of these performance conditions is assessed at the end of the third fiscal year following the grant date. The Board of Directors shall not assess the achievement of performance conditions or deliver the shares of a given plan prior to the definitive acquisition date initially forecast.
Limits applicable to the grant	The Board of Directors, at its meeting held on 12 March 2019, reiterated the following principles regarding grants to executive corporate officers: • the IFRS 2 value (which is used in the establishment of the Group's consolidated financial statements) of any annual grant shall not exceed one year of fixed plus target variable compensation, which corresponds to the compensation obtained when achievements are strictly aligned with the set objectives. Thus, performance share compensation is capped at 100% of target short-term compensation (fixed and target variable), *i.e.* 200% of fixed short-term compensation; • the aggregate amount of annual grants to corporate officers cannot exceed 2.5% of the overall amount authorised by the General Shareholders' Meeting for grants of performance shares within the Group or 10% of the total grants under the relevant plan.
Holding requirement	Since 2007, the Board of Directors has also set, for each grant, the number of shares that the Chairman and Chief Executive Officer must hold until he no longer exercises his duties. The Chairman and Chief Executive Officer is thus required to hold, in registered form, 50% of the performance shares definitively delivered to him during the entire term of his mandate (as renewed, if applicable). This holding requirement no longer applies when the Chairman and Chief Executive Officer reaches a retention target of shares held in registered form corresponding to the value of three years of his last gross annual fixed compensation. For the assessment of the holding requirement cap, the following is taken into account: • the gross annual fixed compensation applicable as at the date of the last final share performance acquisition; and • the respective market prices of the shares held in registered form by the Chairman and Chief Executive Officer as at the time of each final acquisition of performance shares. The holding requirement was met on 31 March 2019 as Mr Henri Poupart-Lafarge held a number of registered shares on that date representing a value of more than three years of his last gross annual fixed compensation.
Prohibition of hedging instruments	The Chairman and Chief Executive Officer commits not to use hedging instruments on the performance shares granted by the Company during the full length of his term of office. To the Company's knowledge, no hedging instrument has been set up.
Periods during which the sale of shares is prohibited	Any transaction involving the Company's securities during the 30-calendar day period preceding public disclosure of Alstom's half-year and annual results (reduced to 15 calendar days for quarterly results) until, and including, the third trading day following the date of disclosure of this information to the public is prohibited. During periods where trading is not prohibited, the Group's internal rules of good conduct create an obligation to consult the Compliance Officer, in the event of any doubt prior to conducting a transaction.
Periodicity	The grants are completed annually (when completed), around the fiscal year closing date.

The level of grant determined by the Board of Directors, upon the Nominations and Remuneration Committee's recommendation, takes into consideration all of the Chairman and Chief Executive Officer's compensation elements as well as market practices followed by comparable listed companies.

The general characteristics of the performance shares granted to the Chairman and Chief Executive Officer are identical to those offered in all other grants made under the same plan to the Company's management teams.

The Company's policy is no longer to grant stock options.

Multi-year compensation

The Company's policy is not to grant multi-year compensation.

The new compensation policy, submitted for shareholders' approval at the 2019 Annual Shareholder Meeting, would not amend this item, which is included in the current compensation policy.

Exceptional compensation

The Company's policy is not to grant exceptional compensation.

The new compensation policy, submitted for shareholders' approval at the 2019 Annual Shareholder Meeting, would not amend this item, which is included in the current compensation policy.

Directors' fees

The Chairman and Chief Executive Officer does not receive any compensation (Director's fee or others) as member of the Board of Directors or the Company or of any of its subsidiary.

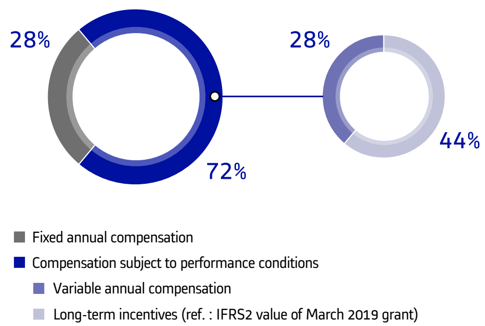
The new compensation policy, submitted for shareholders' approval at the 2019 Annual Shareholder Meeting, would not amend this item, which is included in the current compensation policy.

Benefits in-kind

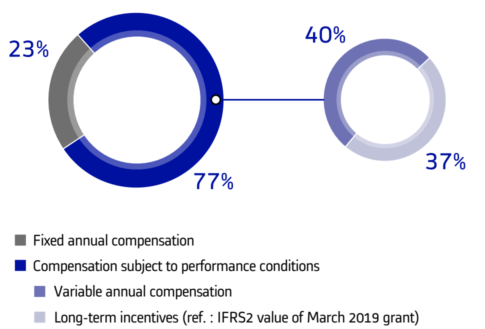
The corporate officer is entitled to a Company vehicle as well as supplemental health insurance, life and disability insurance and a private unemployment insurance coverage, the costs of which are borne in part by the Company and for the remaining by the Chairman and CEO.

Illustration of the evaluation of the variable part of the compensation of the Chairman and Chief Executive Officer

TARGET COMPENSATION



MAXIMUM COMPENSATION



Post-mandate compensation conditions

Non-compete covenant

The Company's policy is to enter into a non-compete covenant with its executive corporate officer.

This non-compete covenant is limited to a two-year period from the date when the executive corporate officer's term of office expires. Consequently, at the end of his term of office (for any reason and at any time), the Chairman and Chief Executive Officer agrees to refrain from acquiring an interest, stake or role in any capacity, or engaging directly or through any intermediary, in the capacity of corporate officer, employee or consultant, with any company worldwide with a significant activity (15% of turnover or at least €1 billion) related to the production of equipment or systems used in the railway industry or in public ground. The transportation operators are excluded from the scope of this non-compete covenant.

In return for this commitment, the executive corporate officer would receive a total gross indemnity amounting to 1.5 times his average fixed and variable gross annual compensation, excluding performance shares, received during the three fiscal years preceding the date of the end of his term of office. This compensation is paid on a monthly basis, in twenty-four equal instalments, for the entire duration of the validity of this non-compete covenant.

Such kind of non-compete covenant, with such type of financial indemnity, which was subject to the combination with Siemens Mobility business, was approved by the 2018 Annual Shareholder Meeting. The indemnity amounted to 24 months of the average gross annual compensation, fixed and variable, excluding performance shares, received during the three fiscal years preceding the date of the end of the corporate officer's term of office.

To take into account the comments received by the Company in its engagement with investors during fiscal year 2018/19, the Company policy now provides that this indemnity represents 18 months of the average compensation, fixed and variable, excluding performance shares, paid during the three financial years preceding the date of the end of the corporate officer's term of office.

In the event of breach, at any time, of the non-compete covenant by the executive corporate officer:

- the Company will be released from its obligation to pay the financial indemnity; and
- the executive corporate officer would have to reimburse all the sums already received in application of the non-compete covenant.

Acting through its Board of Directors, the Company reserves the right, in particular in the event of gross misconduct or major financial issue, to unilaterally waive this non-compete covenant on the date when the executive corporate officer's term of office ends, in which case the latter will be freed from any obligation and no indemnity will be due in this respect.

In every instance, this non-compete covenant does not apply if the executive corporate officer retires at the end of his term of office. In this case, no indemnity would be due.

The Board of Directors considers that, under certain conditions, the possibility of requiring executive corporate officers to enter into a non-compete covenant is beneficial to the Company. This is particularly the case with Mr Henri Poupart-Lafarge, in view of his knowledge, acquired during more than 20 years, of the mobility sector and of the new challenges resulting from its digitalisation. The Board of Directors considers that the Company's competitors must not benefit from this expertise. Therefore, this commitment is intended to protect the Group's interests.

Severance indemnity

The Company's policy is not to pay any severance indemnity to the corporate officer.

Therefore, at the end of the 2019 Annual Shareholder Meeting, and as from the date of this meeting, Mr Henri Poupart-Lafarge will resign from the employment contract binding him to Alstom Executive Management SAS and, as a consequence, will no longer be entitled to the severance indemnity provided under the terms of this agreement. Mr Henri Poupart-Lafarge will also waive any severance indemnity due under the terms of his corporate office and, consequently, will not be entitled to any severance indemnity of any kind.

Retention conditions of performance shares under vesting period

If the executive corporate officer leaves the Company, the Board of Directors will assess if he may keep, in part or in full, the right to acquire performance shares allocated under plans that remain subject to performance conditions, subject to the following limits:

- retention is only possible in case of forced departure, *i.e.* in the event of revocation, not resignation;
- no definitive delivery is authorised before the date of acquisition specified in the concerned plans' rules. Consequently, no early vesting of performance shares is authorised;

- the performance conditions shall continue to apply throughout the specified acquisition period;
- the number of shares definitively acquired, as established after measuring the achievement level of the performance conditions, shall be reduced in proportion to the amount of time spent in the Company's service divided by the vesting period time of each concerned plan (*i.e.,* a *prorata temporis* discount); and
- in any case, the opportunity of a final delivery of the performance shares will be assessed in view of the Company's situation at the date of the executive corporate officer's departure and at the date of delivery initially planned. No performance shares can be acquired if the Company is facing major difficulties.

Supplemental pension plans

The Company compensation policy consists of entitling its executive corporate officer to two defined contribution supplemental pension schemes, from the "Article 82" and from the "Article 83" of the French General Tax Code, and to no longer entitle the executive corporate officer to defined benefit pension plans, as per "Article 39" of the French General Tax Code.

These three schemes are available (for "Article 82" and "Article 83" schemes) or were formerly available (for the "Article 39" scheme) to other senior managers in the Group.

The "Article 39" defined benefit scheme was closed on 31 December 2016 and the related rights were frozen. The Company's policy is to provide the executive corporate officer with a system that is equivalent, but significantly less expensive for the Company to the defined-benefit pension plan, *i.e.,* an annual contribution dedicated to retirement to a third-party organisation under an "Article 82" scheme.

In addition, the implementation of the "Article 82" scheme aimed at creating a pension saving whose amount, at the time when the Chairman and Chief Executive Officer retires, should enable him to receive an annual pension equivalent to the one he would have acquired under the "Article 39" defined benefit plan, reduced by a discount related to the suppression of the presence condition and depending on his age and seniority in the scheme.

The Company's policy is also to provide the executive corporate officer with a defined contribution pension plan under an "Article 83" scheme.

As an illustration, upon decision of the Board of Directors held on 8 November 2016, the Chairman and Chief Executive Officer therefore benefits, in terms of supplemental pension plans, from:

- a defined contribution supplementary retirement scheme ("Article 83") as follows:
  - the contributions are paid annually and correspond to 1% of the annual compensation up to four annual Social Security ceilings, 4% of the annual compensation between four and eight times the annual Social Security ceiling and 11% of the annual remuneration between eight and twelve times the Social Security ceiling,
  - since 1 July 2014, contributions are 95% borne by the Company;
- an annual contribution dedicated to retirement paid under an "Article 82" scheme. The calculation of this annual contribution is based on the total annual compensation (fixed and variable compensation due in cash) according to the following methods:
  - 10% of gross fixed compensation between 8 and 12 annual Social Security ceilings and 20% of his fixed compensation in excess of 12 annual Social Security ceilings,
  - 20% of his annual variable compensation as determined by the Board of Directors,
  - the reference compensation (fixed and variable due in cash) for calculating the contribution cannot, in any case, be greater than €2,000,000,
  - no contribution is paid if the calculation of the variable compensation is zero.

  The Chairman and Chief Executive Officer committed, once the tax and social obligations relating to these contributions are satisfied, to keep the amounts paid on the dedicated retirement savings vehicle, at least for the duration of his mandate;
- a defined benefit pension plan ("Article 39"), of which closure and freezing of cumulated rights (accounting for an annual pension of €176,000) was decided from 31 December 2016, as previously authorised by the Board of Directors on 8 November 2016 and approved by the Annual Shareholder Meeting on 4 July 2017, in accordance with the procedure applicable to related party agreements. No new rights can be or has been acquired under this plan since this date.

On 6 May 2019, further to a presentation by the Nominations and Remuneration Committee, the Board of Directors took note of the final conditions of liquidation of the "Article 39" plan on the date of Mr Henri Poupart-Lafarge's termination of his employment contract with Alstom Executive Management SAS, while considering that:

- Mr Henri Poupart-Lafarge will no longer be bound by an employment contract to Alstom Executive Management SAS after the Annual Shareholder Meeting on 10 July 2019, and as from the date of this meeting;
- the loss of the rights acquired between 1 January 2004 and 31 December 2016 will be offset by a balance payment of on the "Article 82" defined contribution plan, to be paid annually in thirds over three years from the first anniversary of his resignation from his employment contract, and subject to his presence within the Company at each date on which payment of the amount falls due. This amount includes an individual discount from the value of the related liability based on a proposal by actuarial advisers that takes into account several criteria and hypotheses:
  - rules of the initial "Article 39" pension plan,
  - age and potential turnover of the beneficiaries,
  - mortality tables, and
  - the future transposition into French law of the EU Directive on the portability of pension rights, with the possible crystallisation of the accrued rights under such schemes;
- the value of this gross amount, as valued by the Company's actuarial advisers, is €3,375,000 and will be subject to social charges and taxes, in accordance with the applicable legislation at the time of the different payments. It shows a discount of about 20% compared with the value of the liabilities (excluding taxes) on 31 March 2019 in order to take into account the impact of the transformation of rights subject to presence requirements into a definitively acquired pension capital, *i.e.,* savings of more than €1 million for the Company;
- the final closeout of this "Article 39" scheme will apply to all its beneficiaries;
- Mr Henri Poupart-Lafarge's commitment, after the payment of the corresponding social and fiscal contributions, will consist of keeping all the amounts paid into this pension plan at least until the expiration of his corporate officer mandate.

The payment of the balance relating to Mr Henri Poupart-Lafarge will be made in thirds in three annuities, subject to his presence within the Company. On this occasion, the related liability of the Company will be reduced by about €5.4 million. The assessment of the discount and the calculation of the amount were proposed by the Group's actuarial advisers, Willis Towers Watson.

Compensation paid or granted to Mr Henri Poupart-Lafarge, Chairman and Chief Executive Officer, for fiscal year 2018/19

Pursuant to Article L. 225-100-II of the French Commercial Code, the components of the compensation paid or granted to the Chairman and Chief Executive Officer in respect of fiscal year 2018/19 will be submitted, in a specific resolution, to shareholders' approval at the 2019 Annual Shareholder Meeting.

Fixed compensation

For fiscal year 2018/19, Mr Henri Poupart-Lafarge's total fixed compensation amounted to €750,000. It was unchanged from the preceding fiscal year.

Variable compensation

At its meeting on 15 May 2018, the Board of Directors decided that the nature and the weight of the performance conditions retained would remain similar to those of the previous year.

At its meeting held on 6 May 2019 and acting upon the recommendation of the Nominations and Remuneration Committee, the Board of Directors found that:

- with respect to Company global performance objectives, all quantifiable and based on the following six performance criteria all measured over a full year:
  - free cash flow,
  - adjusted EBIT,
  - gross margin on orders received,
  - injury frequency rate,
  - attendance rate of managers in Ethics and Compliance training,
  - the result of the social responsibility survey "Dow Jones Sustainability Index",

  the level of achievement should be evaluated at 101.1% of set objectives for a target at 60% and a ceiling at 120%.

ACHIEVEMENT LEVEL OF GLOBAL PERFORMANCE OBJECTIVES

	Target	Ceiling	Performance level for the fiscal year	Criteria evaluation
GLOBAL OBJECTIVES	**60%**	**120%**		
Free Cash Flow	20%	40%	€153 million	30.3%
Adjusted EBIT	20%	40%	€570 million	35.8%
Gross margin on orders received	10%	20%	Confidential (1)	20%
Lost time injury frequency rate	5%	10%	1.1 lost time injury per million of worked hours (2)	5%
Attendance rate of management in Ethics and Compliance training	2.5%	5%	97% of eligible managers followed the "Alert Procedure" training (3)	5%
Performance in the "Dow Jones Sustainability Index"	2.5%	5%	95th percentile (4)	5%
2018/19 OVERALL ANNUAL PERFORMANCE				**101.1%**

(1) The Board of Directors considers that margin on orders received is a key performance indicator for the business of the Company as it reflects the strategic orientation to focus on most profitable projects. However, Alstom being the only "pure player" of the rail industry (*i.e.* whose business relies solely on the rail industry), the Board considers it would be against the interests of the Group to publicly state the objectives and performance of the Company as to the gross margin on orders received, as this would give competitors strategic information.

(2) With regard to the safety-related indicator, the evolution of the rate of accidents at work exceeded the numeric targets set by the Board (1.4 lost time injury per million of worked hours), but the Board, upon the proposal of the Nominations and Remuneration Committee and the Executive Committee, considered that the fatal accidents that occurred in South Africa and Algeria in 2018 do not allow the Company's objective regarding safety at work to be considered as having been exceeded. As a result, the rate of achievement of this variable compensation target is capped at 100% for all employees eligible to the annual bonus.

(3) The Company's target was that at least 90% of managers eligible for the annual bonus (more than 10,000 people) followed the training. The maximum level is said to have been reached from 95% of the eligible population.

(4) The Company's target is to remain in the DJSI index, *i.e.*, to be one of the 15% of the companies in the comparable group that achieve the best performances. The Company reaches the maximum level of performance if it is in the 5% of companies in the comparable group that achieve the best performances, which was the case for the second consecutive year in 2018 (95th percentile).

- with respect to individual objectives related to specific action plans, based on five criteria, measurable whenever possible, the level of achievement should be evaluated at 35% for a target set at 40% and a ceiling at 50%, as detailed hereafter.

ACHIEVEMENT LEVEL OF INDIVIDUAL OBJECTIVES

	Comments	Target	Criteria evaluation
INDIVIDUAL OBJECTIVES		**40%**	
Preparing the transaction with Siemens Mobility	The goal set by the Board of Directors was to secure the transaction with Siemens by 31 March 2019 at the latest, with a level of remedies reduced to a minimum whilst ensuring positive communication in both France and Germany. The Board of Directors considered that the goal could not be deemed as fully achieved given that the European Commission, in its Decision of 6 February 2019, forbade the transaction as built by the Boards of Directors of both groups. The Board nevertheless considered that all efforts made by the Chairman and Chief Executive Officer and the Alstom teams had culminated in the best possible proposal from the Company's point of view, that the additional remedies required by the European Commission would have produced a transaction devoid of any strategic advantage and that the considerable communication on this decision had not prejudiced the image of the Company in the markets, as proven by the evolution in its share price. As a result, the Board established that this goal should be deemed to be 50% achieved.	12%	6%
Preparing the new organisation	The goal set by the Board of Directors was to construct the new corporate organisation model, prepare the nominations of future management teams and prepare the cultural integration between the teams from the two original entities. The Board considered that the work on organising the new Company had resulted in a coherent, effective organisational model; this will serve as a basis for the current configuration of the Alstom model, failing the execution of the transaction. In addition, the individual assessments of candidates to the General Management positions had been carried out with the assistance of an outside service provider and had been used to refine the composition of the management teams, including under the current Alstom organisation. Lastly, the working groups centred around the creation of a new corporate culture had been sponsored, strongly encouraged and supported by the Chairman and Chief Executive Officer and the results of their work contribute directly to the construction of the strategic positioning envisaged for the 2020-2025 period. As a result, the Board established that the goal should be deemed to be achieved.	6%	6%
Strategy	The goal set by the Board of Directors was to construct the new strategic vision and define synergies to be implemented under the transaction. The new strategic guidelines were defined by the Company's teams, under the direct impetus and coordination of the Chairman and Chief Executive Officer. They will be presented to the market and the shareholders during the first quarter of the 2019/20 financial year. These guidelines are based on clearly-identified elements established as part of the work to prepare the strategy of the combined entity and include especially an optimisation section for the Company's operating modes that was used when creating the new entity. They will serve as the basis for changes in the corporate cost structure in its traditional framework by 2025. The Board therefore considered that this work had been successful and that the goal should be deemed to be achieved.	6%	6%
Sales performance	The record number of orders taken in the 2018/19 financial year close to €12 billion persuaded the Board of Directors that the goal set had been exceeded significantly, thanks notably to securing two major projects in France, Greater Paris Metro and *TGV du futur*, or confirmation of the REM project in Montreal. The first orders for iLint, the hydrogen train manufactured in Germany, and for the Aptis electric bus were also registered during the 2018/19 financial year. The orders for the Service activity have also shown record growth, mainly thanks to the Riyad metro. The Signalling activity (Alstom Digital Mobility) showed as well genuine robustness with over €1.4 billion of orders taken. As a result, the Board considered that this goal had exceeded expectations and should be assessed at the maximum level possible, as previously established, at 125%.	8%	10%

	Comments	Target	Criteria evaluation
Operational and financial performance	The operational and financial performance goals set by the Board for the Chairman and Chief Executive Officer are based on nine operational performance indicators, the stabilisation of the Working Capital, the improvement of the gross margin and the share of fixed costs, along with a qualitative appraisal of progress in the most important projects in rolling stock (eLoco in India), systems (Riyad and Dubai metros) and signalling (Lille). The operational performance indicators have been high-performing overall despite a few limited deteriorations in terms of On Time Delivery of certain projects (PRASA delivery schedule in South Africa; approval of locomotives in India). The adjusted gross margin has nevertheless continued to improve, as have the structure costs and Working Capital. As a result, the Board considered that this goal had been partially achieved.	8%	7%
2018/19 OVERALL ANNUAL PERFORMANCE			**35%**

Therefore, at its meeting on 6 May 2019, the Board decided that Mr Henri Poupart-Lafarge's variable compensation for fiscal year 2018/19 would be set at €1,020,975, corresponding to an achievement of 136.1% of his objectives.

Mr Henri Poupart-Lafarge's annual fixed and variable compensation has changed as follows over the past three years:

	Owed for fiscal year 2016/17 *(in €)*	Owed for fiscal year 2017/18 *(in €)*	Owed for fiscal year 2018/19 *(in €)*
Gross annual fixed compensation	750,000	750,000	750,000
Gross annual variable compensation(*)	1,077,750, voluntarily limited to 900,000	1,072,500	1,020,975
(%/fixed)	(120%)	(143%)	(136.1%)
TOTAL	**1,650,000**	**1,822,500**	**1,770,975**

(*) The variable compensation of Mr Henri Poupart-Lafarge is paid during the fiscal year following the one for which it was due and is submitted to shareholders' prior approval.

Grant of performance shares

The Board of Directors, acting under the authority granted at the Annual Shareholder Meeting held on 17 July 2018, and upon the Nominations and Remuneration Committee's recommendation, adopted on 12 March 2019 a long-term incentive compensation plan (the "PSP 2019") benefiting to 820 employees including Alstom's Chairman and Chief Executive Officer.

The grant to the Chairman and Chief Executive Officer concerns a target number of 35,000 shares, ranging from, depending on the achievement level of performance conditions, 0 to 52,500 (in the event of over-performance). The IFRS 2 valuation and the calculation of caps have been established on the basis of the maximum number of shares that may be definitively acquired after the vesting period. This maximum allocation, on the basis of the maximum number of shares, is equal to 0.02% of the share capital.

This plan submits the acquisition of all performance shares (1,080,150 shares, *i.e.* 0.48% of the share capital) upon three performance conditions:

- two internal performance conditions, based on:
  - the level of achievement of the targeted adjusted EBIT Margin of Alstom Group for fiscal year 2021/22 as set by the Board. This indicator represents 40% of the total performance conditions, and
  - the level of achievement of the targeted conversion ratio of the net income into free cash flow set in the budget as decided by the Board of Directors for fiscal year 2021/22. This indicator represents 20% of the total performance conditions; and
- one relative performance condition, assessed on the Alstom's fiscal year 2021/22 end date based on the performance of the Company's share relative to the performance of the STOXX® Europe TMI Industrial Engineering index. This indicator represents 40% of the total performance conditions.

Upon the Nominations and Remuneration Committee's recommendation, the Board of Directors considered that, since the generation of cash flow is a Company priority and represents an important factor of the Company's long-term development, the introduction of a performance criterion based on the conversion ratio of the net income into free cash flow would better align the compensation of the plan's beneficiaries, and in particular the Company's executives, with the performance of the Company in 2021/22.

Applying such conditions, the number of performance shares to be delivered will be determined as follows (internal conditions established on the basis of the accounting standards in force at the time of the grant):

At publication date of 2021/22 results	Minimum required level	Target performance	Maximum level considered
Adjusted EBIT margin 2021/22 (weight: 40%) (1)	≤7.0%	= 7.9%	≥8.5%
	No shares	14,000 shares	21,000 shares
Conversion rate of the net result into free cash flow in 2021/22 (weight: 20%) (2)	< Budget -13.5 bp	= Budget	≥ Budget +15 bp
	No shares	7,000 shares	10,500 shares
TSR at publication of 2021/22 results vs. Index TSR (weight: 40%) (3)	<96% of the index	Level of the index	≥120% of the index
	No shares	14,000 shares	21,000 shares

(1) Between each milestone of the performance conditions, the number of acquired shares will be computed by linear interpolation.
(2) Between the minimum and target levels, the number of definitively acquired shares will be calculated in successive stages. In this way, the performance condition will be considered to have been fulfilled at 10% for a performance at -13.5 points of the budget, at 20% for a performance at -12 points of the budget and so on until 90% for a performance at -1.5 points of the budget. Beyond an on-target performance, the level achieved is calculated by linear interpolation, up to the level of 150%, for a performance at least 15 points above the budget.
(3) Between the minimum and target levels, the number of definitively acquired shares will be calculated in successive stages. In this way, the performance condition will be considered to have been fulfilled at 20% for a performance at 96% of the index, at 40% for a performance at 97% of the index and so on until 80% for a performance at 99% of the index. Beyond an on-target performance, the level achieved is calculated by linear interpolation, with a maximum performance level at 120% of the index.

In line with the compensation policy applicable to the corporate officer, the IFRS 2 value of the grant, *i.e.,* €1,331,153 is lower than the beneficiary's target fixed and variable compensation for one year (compensation obtained when the achievements are strictly in line with set objectives, *i.e.,* €1,500,000 on the date of the grant). The increase in this grant's valuation compared to the valuation of the plan granted in fiscal year 2017/18 is mainly due to the significant rise in the share value during the period and to the reduced weight of the external performance condition in the actuarial calculation. The Board of Directors decided to align the value of this grant with market practices (about €1.4 million per year in groups and companies with comparable activities and of a comparable size on the French and European markets that form the Company's reference panel) by increasing the number of shares granted.

Finally, the Board of Directors confirmed the commitment, in the event of a major change in the Group's strategy or structure, to adapt the performance conditions to future new challenges, in their nature as well as in the level of results to be achieved, while maintaining stringent requirements. Further to a recommendation by the Nominations and Remuneration Committee, and following a detailed analysis, it also decided not to change the internal performance targets of the preceding plans, further to the implementation of the new accounting standards (IFRS 15).

The Chairman and Chief Executive Officer also committed not to use hedging transactions in respect of all the performance shares during the entire term of his mandate.

SUMMARY OF THE EVOLUTION OF THE PERFORMANCE SHARES PLANS DURING THE VESTING PERIOD

The table below shows the level of achievement of each of the performance conditions of the performance share plans under vesting period (PSP 2016, PSP 2017, PSP 2018 and PSP 2019) and the number of confirmed performance shares for Mr Henri Poupart-Lafarge (all unavailable until the end of the related plan):

				FY1			FY2			FY3			
Plan	Initial grant	Performance conditions		Weight	Perfor-mance (%)	Confirmed shares	Weight	Perfor-mance (%)	Confirmed shares	Weight	Perfor-mance (%)	Confirmed shares	Total accrued on March 31, 2019
PSP 2016	36,000	**Fiscal year**			**2016/17**			**2017/18**			**2018/19**		
(delivery on 15 May 2019)		TSR	30%			N/A			N/A	30%	100%	10,800	10,800
		aEBIT Margin	40%	10%	67%	2,400	15%	84%	4,512	15%	100%	5,400	12,312
		Free Cash Flow	30%	10%	81%	2,904	10%	71%	2,568	10%	75%	2,712	8,184
		Total				**5,304**			7,080			**18,912**	**31,296**
PSP 2017	45,000	**Fiscal year**			**2017/18**			**2018/19**			**2019/20**		
		TSR	30%			N/A			N/A	30%	TBD	-	-
		aEBIT Margin	40%	10%	83%	3,750	15%	100%	6,750	15%	TBD	-	10,500
		Free Cash Flow	30%	10%	88%	3,960	10%	92%	4,140	10%	TBD	-	8,100
		Total				**7,710**			10,890			-	**18,600**
PSP 2018	45,000				**2018/19**			**2019/20**			**2020/21**		
		TSR	50%			N/A			N/A	50%	TBD	-	-
		aEBIT Margin	50%			N/A			N/A	50%	TBD	-	-
		Total				-			-			-	-
PSP 2019	52,500				**2019/20**			**2020/21**			**2021/22**		
		TSR	40%			N/A			N/A	40%	TBD	-	-
		aEBIT Margin	40%			N/A			N/A	40%	TBD	-	-
		Cash conversion ratio	20%			N/A			N/A	20%	TBD	-	-
		Total				-			-			-	-

Multi-year compensation

Not applicable.

Exceptional compensation

Not applicable.

Directors' fees

Not applicable.

Benefits-in-kind

The Chairman and Chief Executive Officer has the use of a Company vehicle corresponding to a value of approximately €4,749 per year as well as supplemental health insurance coverage, and a life and disability insurance policy, the costs of which are borne in part by the Company and for the remaining by the Chairman and CEO.

Supplemental retirement scheme

The Chairman and Chief Executive Officer benefits from a supplemental pension plan based on three distinct elements that have not been modified during fiscal year 2018/19:

- A defined contribution pension plan (so-called "Article 83")
  - The contributions paid as part of the defined contributions plan for the fiscal year 2018/19 are equal to €25,555, of which €24,277 are paid by the Company.
- A defined contribution pension plan (so-called "Article 82")
  - The amount paid in November 2018 under this defined contribution pension plan for the fiscal year 2017/18 is equal to €285,792 and corresponds to the acquisition period from 1 April 2017 to 31 March 2018. The corresponding €221,292 accrual accounted in 2017/18 was consequently cancelled.
  - Regarding the fiscal year 2018/19, a provision for such contribution has been accrued, amounting to €220,140, but no payment has been done before the approval by the 2019 Annual Shareholder Meeting of the variable compensation of the Chairman and Chief Executive Officer.

As of 31 March 2019, the total annual pensions resulting from the two defined contribution schemes, and based on the actual contributions paid since Mr Henri Poupart-Lafarge has been appointed as Chairman and Chief Executive Officer, amount to about €17,000 (any potential individual voluntary contributions, not to be known by the Company, being excluded).

- A defined benefit pension plan (so-called "Article 39"), of which entitlements have been frozen since 31 December 2016
  - The rights accrued over the period from 1 January 2004 to 31 December 2016, date on which they were frozen, amount, as of 31 March 2019, to an annual pension of €176,000 (in constant euros) subject to a condition of presence at the time the Chairman and Chief Executive Officer prevails himself from his rights for retirement. No rights were acquired during the fiscal year.
  - Under this defined benefits plan, the amount of the liabilities on the Company's balance sheet that would allow the payment of the previously mentioned pension is equal, as of 31 March 2019, to €5,412,000, including an amount of €1,047,483 for applicable taxes. Changes in the value of these commitments since the end of fiscal year 2017/18 are due to the update of actuarial assumptions by the Group's actuaries.
  - No new rights have been or can be acquired as part of this plan.

Post mandate indemnities or benefits

No compensation due regarding fiscal year 2018/19.

Principles and criteria for determining the short-term incentive granted for fiscal year 2019/20 to Mr Henri Poupart-Lafarge, Chairman and Chief Executive Officer

At its meeting held on 6 May 2019, the Board of Directors, on the recommendation of the Nominations and Remuneration Committee, confirmed that the variable compensation scheme for Mr Henri Poupart-Lafarge for fiscal year 2019/20 would be the same as the one approved at the Board of Directors meeting held on 15 May 2018. The objectives linked to the global performance of the Company will represent 60% of the target variable compensation and will be based on the same financial criteria of adjusted EBIT, free cash flow, gross margin on orders received, on the one hand, and on corporate social responsibility (ethics and compliance, safety, result of the survey "Dow Jones Sustainability Index"), on the other hand. The financial performance indicators will represent 83% of the global performance objectives, *i.e.,* 50 out of 60 points. The targets linked to specific action plans will be based on criteria established by the Board of Directors that are based on quality and are quantifiable, whenever possible. For confidentiality reasons, the details of such objectives cannot be disclosed.

COMPENSATION OF OTHER CORPORATE OFFICERS

The Directors do not receive any compensation other than an attendance allowance ("Directors' fees for Board meetings"). The Chairman of the Board of Directors has waived his Directors' fees.

At the Ordinary and Extraordinary Shareholders' Meeting held on 1 July 2014, the maximum annual amount of Directors' fees which can be distributed among the members of the Board of Directors was set at €1,300,000.

The Board of Directors sets the terms of granting the Directors' fees upon the Nominations and Remuneration Committee's proposal. The principles set in the Internal Rules of the Board of Directors are that the Directors' fees are made up of a fixed part and of a variable part for attending the meetings of the Board of Directors or of the Committees and that the Chairmen of the Committees are paid an additional fixed fee. Half of the fixed and variable parts are paid in the fiscal year concerned, while the balance is paid the following fiscal year.

According to the current terms of granting as modified by the Board of Directors, the Directors' fees provide that the fixed part worth €27,500 is to be paid to each Director. The Chair of the Audit Committee and each Chairman of the Nominations and Remuneration Committee and of the Ethics, Compliance and Sustainability Committee receive an additional amount of respectively €15,000 and €10,000 per year. In addition, each Director is paid €3,500 for attending the meetings of the Board and €3,000 for attending the meetings of the Committees of which she or he is a member. In addition, the Board of Directors decided to fix the annual amount of the Director's fees payable to the Lead Director at €27,500.

Based on these terms, the aggregate amount of Directors' fees paid during fiscal year 2018/19 was €774,916.67 (€860,750 during the previous fiscal year). The amount due in respect of the 2018/19 fiscal year, €959,062.50 (€849,667 in respect of the previous fiscal year), represented approximately 73% (65% for the previous fiscal year) of the maximum annual amount authorised and the variable portion represented around 63% (52.5% for the previous fiscal year) of the corresponding aggregate amount. Half of the fixed and variable parts were paid in fiscal year 2018/19, with the balance paid in fiscal year 2019/20.

TABLES OF THE REMUNERATIONS OF CORPORATE OFFICERS ACCORDING TO THE RECOMMENDATIONS OF THE AFEP-MEDEF CODE AND THE POSITION-RECOMMENDATION OF THE AMF ON THE INFORMATION ON THE COMPENSATION OF CORPORATE OFFICERS IN REGISTRATION DOCUMENTS

TABLE 1 – SUMMARY TABLE OF THE COMPENSATION AND PERFORMANCE SHARES ACCRUING TO EACH EXECUTIVE CORPORATE OFFICER AS OF 31 MARCH 2019

Henri Poupart-Lafarge Chairman and Chief Executive Officer (as of 1 February 2016)	Fiscal year 2017/18 *(in €)*	Fiscal year 2018/19 *(in €)*
Compensation due in respect of the fiscal year (detailed in table 2)	1,826,935	1,775,724
Valuation of the performance shares awarded during the fiscal year(*)	1,043,906	1,331,153
TOTAL	**2,870,841**	**3,106,877**

(*) This amount corresponds to the value of the performance shares as of the granting date pursuant to IFRS 2 after taking into account the discount related to the probability of presence in the Company prior to the spreading effect of the cost.

TABLE 2 – SUMMARY TABLE OF THE COMPENSATION OF EACH EXECUTIVE DIRECTOR AS OF 31 MARCH 2019

	Fiscal year 2017/18 *(in €)*		Fiscal year 2018/19	
Henri Poupart-Lafarge Chairman and Chief Executive Officer (as of 1 February 2016)	Due in respect of the fiscal year *(in €)*	Paid out during the fiscal year *(in €)*	Due in respect of the fiscal year *(in €)*	Paid out during the fiscal year *(in €)*
Fixed gross compensation	750,000	750,000	750,000	750,000
Variable gross compensation (1)	1,072,500	900,000	1,020,975	1,072,500
Extraordinary gross compensation	-	-	-	-
Directors' fees for Board meetings	-	-	-	-
Fringe benefits (2)	4,435	4,435	4,749	4,749
TOTAL	**1,826,935**	**1,654,435**	**1,775,724**	**1,827,249**
Defined Contributions Pension Plans ("Article 82" and "Article 83") *NB: gradual implementation of the Article 82 scheme over the period.*	310,979	96,961	245,695 (accruals)	311,347

(1) The variable compensation owed with respect to a given fiscal year is paid out in the following fiscal year and subject to shareholders' prior approval. The criteria pursuant to which the variable compensation was calculated and the terms and conditions applicable to setting this amount are described above on page 180.
(2) Company car.

TABLE 3 – TABLE OF NON-EXECUTIVE CORPORATE OFFICER'S FEES AND OTHER COMPENSATION AS OF 31 MARCH 2019

Gross Amounts [(1)]	Fiscal year 2017/18		Fiscal year 2018/19	
Non-Executive Corporate officers	Due in respect of the fiscal year *(in €)*	Paid out during the fiscal year *(in €)*	Due in respect of the fiscal year *(in €)*	Paid out during the fiscal year *(in €)*
Candace K. Beinecke	70,500	70,500	67,781	64,500
Olivier Bourges [(2)]	31,250	47,417	-	0
Olivier Bouygues	49,250	58,250	67,781	55,500
Bi Yong Chungunco	64,500	64,500	75,750	58,250
Pascal Colombani [(3)]	-	36,167	-	-
Françoise Colpron [(4)]	43,000	18,750	67,781	55,500
Yann Delabrière [(5)]	100,000	48,000	124,615	111,000
Clotilde Delbos [(6)]	-	-	35,344	6,250
Gérard Hauser	87,500	100,250	92,417	73,250
Sylvie Kandé de Beaupuy [(7)]	74,500	55,417	86,781	74,500
Klaus Mangold	59,417	59,417	70,281	46,917
Géraldine Picaud [(8)]	85,500	83,000	25,500	66,250
Baudouin Prot [(9)]	-	-	51,781	6,250
Sylvie Rucar [(10)]	85,500	82,500	108,250	86,250
Alan Thomson [(11)]	-	13,583	-	-
Bouygues [(12)]	67,500	67,500	85,000	70,500
French State [(13)]	31,250	55,500	-	0
TOTAL	**849,667**	**860,750**	**959,062**	**774,917**

(1) Gross amounts. The Non-Executive Corporate officers do not receive any other compensation from the Company or companies of the Group.
(2) Director who resigned on 9 January 2018.
(3) Director who resigned on 17 March 2017.
(4) Director appointed on 4 July 2017.
(5) Director being co-opted to fill vacancy on 17 March 2017 following departure of Mr Pascal Colombani.
(6) Director appointed on 17 July 2018.
(7) Director being co-opted on 30 January 2017 following the departure of Mr Alan Thomson and who became chairwoman of the Committee for Ethics, Compliance, and Sustainability following the departure of Mr Pascal Colombani.
(8) Director who resigned on 30 July 2018.
(9) Director appointed on 17 July 2018.
(10) Director who became Chairwoman of the Audit Committee following departure of Ms Géraldine Picaud.
(11) Director who resigned on 08 November 2016.
(12) Director, the permanent representative of which is Mr Philippe Marien.
(13) Director who resigned on 17 October 2017, the permanent representative of which was Mr Pascal Faure, (appointed by Order dated 25 July 2016).

The difference between the amounts due and actually paid for a full fiscal year is explained by the fact that half of the Director's fees distributed among the Non-Executive Directors are paid during the fiscal year (fees in respect of the first half of the fiscal year) and the remaining part during the following fiscal year (fees in respect of the second half of the fiscal year).

TABLE 4 – STOCK OPTIONS AWARDED DURING THE FISCAL YEAR 2018/19 TO EACH EXECUTIVE CORPORATE OFFICER AS OF 31 MARCH 2019 BY THE COMPANY OR BY EACH COMPANY OF THE GROUP

No options were granted to Mr Henri Poupart-Lafarge during the 2018/19 fiscal year.

TABLE 5 – STOCK OPTIONS EXERCISED DURING FISCAL YEAR 2018/19 BY EACH CORPORATE OFFICER AS OF 31 MARCH 2019

Options exercised by the Corporate officers (nominative list)	Number and date of the plan	Number of options exercised during the fiscal year	Exercise price *(in €)*
Henri Poupart-Lafarge Chairman and Chief Executive Officer	2010 plan No. 13 (LTI No. 13)	45,980	28.83
	2011 Plan No. 14 (LTI No. 14)	32,183	22.96

The summary of the total number of stock options granted to Mr Henri Poupart-Lafarge in respect of his past functions, as of 6 May 2019, is the following:

	Number of options initially granted(*)	Number of exercisable options as of 31 March 2019(*)	Unit exercise price *(in €)*(*)	Maturity date of options
2012 plan No. 15 (LTI No. 15)	45,976	22,988	24.10	9 December 2020
2013 plan No. 16 (LTI No. 16)	34,480	34,480	23.44	30 September 2021

(*) Figures adjusted to take into account the share capital reduction carried out on 28 January 2016 following the public share buy-back offer (OPRA).

The summary of all stock options plans appears on page 193 of the Registration Document.

TABLE 6 – PERFORMANCE SHARES AWARDED DURING THE FISCAL YEAR 2018/19 TO EACH CORPORATE OFFICER AS OF 31 MARCH 2019 BY THE COMPANY OR THE GROUP

52,500 performance shares were granted by the Company to Mr Henri Poupart-Lafarge over the course of the 2018/19 fiscal year (PSP 2019, implemented on 12 March 2019).

The total of performance shares held by Mr Henri Poupart-Lafarge as of 6 May 2019 is as follows:

Plan	Number of rights to performance shares initially granted (1)	Number of outstanding performance shares	Valuation of the share at the time of the grant *(in €)* (2)	Date of final delivery of the shares
Plan 2016 (PSP 2016)	36,000	31,296 (3)	15.58 (4)	15 May 2019
Plan 2017 (PSP 2017)	45,000	43,350 (5)	19.72 (6)	Fifth business day following the date of publication of the 2019/20 consolidated accounts
Plan 2018 (PSP 2018)	45,000	45,000	23.20 (7)	Fifth business day following the date of publication of the 2020/21 consolidated accounts
Plan 2019 (PSP 2019)	52,500	52,500	25.36 (8)	At the latest, on the twentieth business day following the date of publication of the 2021/22 consolidated accounts

(1) The granting is entirely conditional on the obligation to hold a percentage of the shares until the expiration of his functions with the Company based on reaching a target level of held shares
(2) The performance shares are valued on their grant date according to IFRS 2, after taking into account a discount associated with the probability of continued employment within the Company and before taking into account the spread-out effect of the liability.
(3) Initial grant of 36,000 performance shares. By application of the performance conditions relating to results for fiscal year 2016/17, fiscal year 2017/18 and fiscal year 2018/19, 4,704 performance shares, *i.e.*, 13.07% of the initial grant, were cancelled, and 31,296 shares, *i.e.*, 86.93% of the initial grant, are finally vested. These performance shares were delivered on 15 May 2019.
(4) 70% are valued at €19.48 and 30% at €11.78 before taking into account a discount linked to probability of presence.
(5) Initial grant of 45,000 performance shares. By application of the performance conditions relating to results for fiscal year 2017/18 and fiscal year 2018/19, 1,650 performance shares, *i.e.*, 3.67% of the initial grant, were cancelled, and 18,600 shares, *i.e.*, 41.33% of the initial grant, are finally vested subject to presence condition within the Company the day when (included) the 2019/20 consolidated accounts are published.
(6) 70% are valued at €25.31 and 30% at €13.41 before taking into account a discount linked to probability of presence.
(7) 50% are valued at €32.59 and 50% at €18.58 before taking into account a discount linked to probability of presence.
(8) 60% are valued at €35.97 and 40% at €18.34 before taking into account a discount linked to probability of presence.

TABLE 7 – PERFORMANCE SHARES THAT HAVE BECOME AVAILABLE DURING THE FISCAL YEAR FOR EACH EXECUTIVE DIRECTOR

No performance shares were made available during the fiscal year.

TABLE 11 – SUMMARY OF THE STATUS AND THE TERMINATION BENEFITS FOR EACH EXECUTIVE CORPORATE OFFICER

Executive Corporate Officers as of 31 March 2019	Employment Agreement	Supplemental retirement scheme	Indemnities or advantages owed or potentially owed in case of termination of change of executive position	Indemnities related to a non-compete covenant
Henri Poupart-Lafarge Chairman and Chief Executive Officer	Yes (suspended) (1)	Yes (2)	Yes (3)	No (4)

(1) Mr Henri Poupart-Lafarge will terminate his employment agreement at the end of the 2019 Annual Shareholder Meeting.
(2) The supplemental retirement regimes to which the executive corporate officer subscribes are described in the compensation policy described above.
(3) The severance indemnity which could be owed to the Executive Corporate Officer are related to his employment agreement and his corporate officer mandate. Since Mr Henri Poupart-Lafarge will terminate his employment agreement at the end of the 2019 Annual Shareholder Meeting, he will no longer be entitled to the corresponding severance indemnity. He will also forgo the severance indemnities under the terms of his corporate office and, consequently, will not be entitled to any severance indemnities of any kind.
(4) Subject to shareholders' prior approval, at the end of the 2019 Annual Shareholder Meeting, Mr Henri Poupart-Lafarge will be bound by the non-compete covenant described in the compensation policy described above.

IMPLEMENTATION OF THE AFEP-MEDEF CORPORATE GOVERNANCE CODE FOR LISTED CORPORATIONS

The Company has chosen to refer to the AFEP-MEDEF Code of Corporate Governance for Listed Companies (the "AFEP-MEDEF Code") which, at the time of publication of the present Registration Document, was last updated in June 2018. This document is available on the websites of the AFEP (www.afep.com), the MEDEF (www.medef.com) and the Company.

Following the annual review of the corporate governance practices of the Company, the Board of Directors considers that the Company applies the recommendations of the AFEP-MEDEF Code with the exception of the items set forth in the table below. For each item, an explanation is provided.

Article of the AFEP-MEDEF Code	Explanations
ARTICLE 9.2 **(ASSESSMENT OF THE BOARD OF DIRECTORS)** The code recommends: *"The assessment covers three objectives: (…) – to measure the effective contribution of each Director to the work of the Board".*	An annual assessment by the Board of Directors looks, in particular, into its own composition, and that of its Committees, its workings and the subjects addressed in the meetings. In the course of the fiscal year 2019/20, a formal assessment will be made with a specialised service provider, including, in keeping with the recommendations of the AFEP-MEDEF Code, a measurement of the individual contribution of each member of the Board of Directors.
ARTICLE 13.2 **(STAGGERING OF TERMS)** The code recommends: *"Terms should be staggered so as to avoid replacement of the entire body and to favour a smooth replacement of Directors".*	No staggering of terms has been formalised in the Articles of Association since, in practice, the renewals are spread over three consecutive years.
ARTICLE 21 **(TERMINATION OF EMPLOYMENT CONTRACT IN CASE OF APPOINTMENT AS CORPORATE OFFICER)** The code recommends: *"(…) when an employee is appointed as corporate officer, it is recommended to terminate his or her employment contract with the Company whether through contractual termination or resignation".*	In order to take into account the duration of the career as a salaried employee of Mr Henri Poupart-Lafarge before he became an executive officer (18 years), the Board of Directors, on the recommendation of the Nominations and Remuneration Committee, approved the suspension, and not the termination, of his employment agreement with Alstom Executive Management SAS, a 100% subsidiary of the Company, for the duration of his activities as a corporate officer. In case of removal from his position as corporate officer, his employment agreement will be reactivated. Mr Henri Poupart-Lafarge has announced his decision to terminate his employment agreement after the 2019 Annual General Meeting.
ARTICLE 24.6.2 **(DEFINED BENEFIT SUPPLEMENTAL RETIREMENT SCHEME)** The code states: *"(…) in order to benefit from the services of a defined benefit pension plan, the beneficiaries must satisfy reasonable conditions of employee seniority within the Company, as set by the Board of the Directors. Such seniority cannot be less than two years."*	Even though the defined benefit plan does not set any minimum seniority requirement to be met in order to benefit from it, this plan remains compliant with the intention behind the AFEP-MEDEF Code recommendation to the extent that Mr Henri Poupart-Lafarge already meets this condition of reasonable seniority (*i.e.* he has a 20-year seniority with the Group). In addition, this plan was closed and the rights acquired under this plan were frozen on 31 December 2016. There is no longer any new beneficiary and any rights' acquisition. (See paragraph "Supplemental pension plans" page 179.)

PARTICIPATION AT ANNUAL GENERAL MEETINGS

Pursuant to Article L. 225-37-4 of the French Commercial Code, information on the conditions for shareholders to attend a Shareholder Meeting is part of the Board of Directors' report. It is described on page 273 of this Registration Document.

Any shareholder has the right to attend Shareholder Meetings under the conditions set forth by law and in article 15 of the Company's Articles of Association. The provisions of article 15 of the Articles of Association appear on page 273 of this Registration Document. The Company's Articles of Association are published on the Company's website. The members of the Board of Directors are generally present at Shareholder Meetings.

ELEMENTS WHICH COULD HAVE AN IMPACT IN THE EVENT OF A PUBLIC OFFER

Pursuant to Article L. 225-37-5 of the French Commercial Code, information on these elements is part of the Board of Directors' report. It is described on page 287 of this Registration Document.

SUMMARY TABLE OF DELEGATIONS OF AUTHORITY REGARDING SHARE CAPITAL INCREASES CURRENTLY IN FORCE

Pursuant to Article L. 225-37-4 of the French Commercial Code, this table is part of the Board of Directors' report. It is described on page 278 of this Registration Document.

EXECUTIVE **COMMITTEE**

ROLE

The Executive Committee, chaired by the CEO, comprises regional leaders, with all regions being represented, as well as leaders with functional expertise. Finance, Human Resources, Legal and Operations are the functions permanently sitting at the Executive Committee.

The CEO leads the Executive Committee in its overall management of the Company to achieve its performance goals and objectives.

More specifically, the role of the Executive Committee is to implement the Financial and Strategic directions provided by the Board of Directors. Formally gathering once a month, this Committee engages in decision-making, supporting the CEO in the following areas:

- strategic matters within the framework set by the Board;
- industrial footprint and geographical expansion;
- capital allocations;
- organisational and staffing needs;
- product portfolio evolution through new developments and rationalisation;
- Company policies and critical processes.

It systematically reviews Company financial and operational performance, discusses and validates staffing for key positions, seeks insights into various ongoing legal Company matters and fosters the implementation of legal best practices.

The Executive Committee endorses the product, marketing and commercial plans and reviews the budget orientations prior to validation by the Company Board of Directors.

The internal audit and internal control management provides regular updates to the Executive Committee, assessing progress towards reaching the objectives set forth by the Audit Committee. The Executive Committee, on a regular basis, reviews the performance of Platform and Operational functions during specific sessions whereby the respective leaders report out on their product development roadmaps and operational improvement initiatives.

The Executive Committee met 12 times during the 2018/19 fiscal year, as was the case during the 2017/18 and 2016/17 fiscal years.

MEMBERS

The Executive Committee is composed of the following persons on 6 May 2019:

	Main responsibility	Seniority with the Committee	Age
Henri Poupart-Lafarge	Chairman and Chief Executive Officer	October 2004	50
Thierry Best	Chief Operating Officer	November 2015	59
Laurent Martinez	Chief Financial Officer	July 2018	50
Pierrick Le Goff (1)	General Counsel	November 2015	52
Thierry Parmentier (2)	Senior Vice President – Human Resources & Environment, Health, Safety and Sustainable Development	April 2017	54
Didier Pfleger	Senior Vice-President – Middle East and Africa	July 2017	54
Jean-Baptiste Eyméoud	Senior Vice-President – France	November 2015	51
Gian-Luca Erbacci	Senior Vice-President – Europe	November 2015	57
Michel Boccaccio	Senior Vice-President – Latin America	November 2015	58
Jean-François Beaudoin	Senior Vice President – Alstom Digital Mobility	July 2016	41
Jérôme Wallut	Senior Vice-President – North America	November 2015	55
Ling Fang	Senior Vice-President – Asia-Pacific	July 2018	53

(1) Ms Emmanuelle Petrovic replacing Mr Pierrick Le Goff on 7 May 2019.
(2) Ms Anne-Sophie Chauveau-Galas replacing Mr Thierry Parmentier on 7 May 2019.

The quest for a balanced representation of men and women within the Group is notably reflected within the Executive Committee where the proportion of women increased from 8% to 25% on 7 May 2019.

Moreover, on 31 March 2019, 16.4% of the most senior positions within the Group were held by women, while women represented 18.1% of the total number of employees on this same date.

COMPENSATION OF THE MEMBERS OF THE EXECUTIVE COMMITTEE

The financial elements accounted for in the 2018/19 fiscal year and corresponding to the compensation and benefits granted to members of the Executive Committee are described in Note 36.3. to the Consolidated Financial Statements for the 2018/19 fiscal year.

The compensation of the Executive Committee members, *i.e.*, currently 11 persons excluding the Chairman and Chief Executive Officer, is decided annually by the Chairman and Chief Executive Officer and reviewed by the Nominations and Remuneration Committee. It consists of a fixed component and a variable component tied to the realisation of performance objectives determined at the beginning of the fiscal year. It is supplemented by a grant of free shares subject to performance conditions.

For fiscal year 2018/19, variable compensation is linked to:

- on one hand, meeting Company global performance objectives in terms of adjusted EBIT, free cash flow, margin on orders received, and frequency rate of workplace accidents with medical leave, the attendance rate of managers at the Ethics and Compliance training and the result of the Dow Jones Sustainability Index survey; and
- on the other, reaching specific individual objectives.

All members of the Executive Committee share the same global objectives, irrespective of Region or Function. These objectives represent 60% of the target variable compensation for each Committee member, with a possibility of variation within a range of 0% to 120%. The specific individual objectives refer to specific action plans included in the budgets and strategic plans. These objectives represent 40% of the variable compensation target for each Committee member, with the possibility of variation within a range of 0% to 50%. The measurement of their achievement is decided by the Chairman and Chief Executive Officer and reviewed by the Nominations and Remuneration Committee.

The variable compensation level is based on best practices within the industry, compensation surveys and advice from specialised international consultants.

The overall amount of the gross compensation paid from 1 April 2018 to 31 March 2019 to the members of the Executive Committee, excluding the Chairman and Chief Executive Officer's whose remuneration is set forth on page 180, by the Company and the companies controlled by the Company within the meaning of Article L. 233-16 of the French Commercial Code, amounted to €5,867,775.

For fiscal year 2018/19, the fixed part represented €3,563,985. The variable component linked to the results of fiscal year 2018/19 represented €2,303,790 (excluding the Chairman and Chief Executive Officer).

Certain members of the Executive Committee benefit from supplementary pension plans (defined contribution plan and defined benefit plan). The total amount of the defined benefit obligation accounted for the eligible members of the Executive Committee (excluding the Chairman and Chief Executive Officer) was €1,143,582 as of 31 March 2019, including the provision for legal retirement indemnities and for taxes applicable to supplemental retirement schemes. The total amount of contributions assumed by the Group (paid or accrued), in connection with the defined contribution plans (excluding the Chairman and Chief Executive Officer) for the fiscal year was €658,651.

Members of the Excutive Committee, out of the Chairman and CEO, were granted 153,000 performance shares in fical year 2018/19 for an IFRS2 value of €3,879,315.

They collectively held, on 31 March 2019, 9,143 shares of the Company.

INTERESTS OF THE OFFICERS AND EMPLOYEES IN THE SHARE CAPITAL

STOCK OPTIONS AND PERFORMANCE SHARE PLANS

Granting policy

Generally every year, the Company sets up a Long Term Incentive Plan in France and outside France within the framework of the authorisation granted at the General Shareholders' Meeting, pursuant to Articles L. 225-177 *et seq.*, and Articles L. 225-197 *et seq.* of the French Commercial Code. The Board of Directors grants these plans upon the proposal of the Nominations and Remuneration Committee, which reviews all terms, including the granting criteria. The awards are made with a regular frequency. Since 2016, the Board of Directors has decided to modify the period of grant in order to ensure that the grant date occurs closer to the beginning of the fiscal year. As such, a plan was granted on 12 March 2019 ("PSP 2019"). In the context of the Long-term Incentive Plans that were put in place starting in the 2007/08 fiscal year, the Board of Directors wanted to combine the allocation of stock options with the grant of free shares. Since 2016, the Board no longer plans to use stock options for these plans and will condition delivery of all shares to internal and external performance conditions and continued employment requirements (please refer to the characteristics of these plans, as set forth in subsequent pages).

The grants of performance shares vary according to beneficiaries' level of responsibility and performance, their number increasing as responsibility and performance levels increase. Beneficiaries of performance shares are generally selected among the executives of profit centres, functional executives, country presidents, managers of large projects and, more generally, holders of key salaried positions in Alstom, which have made a significant contribution to the Group's results.

Since 2004, the number of beneficiaries totals approximately 2% of total Group employees.

Individual grants to members of the Executive Committee are based on the level of responsibilities and are in line with market practice. They are granted under the terms of the plan and implemented annually; the characteristics of the performance shares granted to members of the Executive Committee are similar to those of all the other grants.

The PSP 2019, granted on 12 March 2019, concerned a number of performance shares corresponding to 0.48% of the share capital as of the grant date. For information on the grants awarded to the Chairman and Chief Executive Officer over the course of previous fiscal years, please refer to the section on the Compensation of Executive and Non-Executive Corporate Officers in the Board of Directors' report (see page 182).

Main characteristics of the performance shares

- Frequency: Annual grant. Since 2016, the allocation has been completed in March in order to be closer to the beginning of the following fiscal year.
- Performance conditions Yes. For the plans granted until 2017, the vesting of all performance shares is subject to internal Group performance conditions to be met over a period of three fiscal years following the grant date and to an external performance requirement to be met on the third fiscal year following the grant date of the performance shares. Since the grant of 2018, both internal and/or relative performance conditions will be assessed at the end of the third fiscal year following the grant date.
- Date of delivery: once in full at expiration of a period of around three years for all beneficiaries.
- Holding requirement: none.
- Specific holding requirement for members of the Executive Committee: yes, since fiscal year 2007/08.

For all beneficiaries, the shares are acquired following a vesting period of around three years following the date upon which the Board of Directors granted the performance shares, subject to satisfying internal performance condition(s) linked to the Company and, since 2016, a relative performance condition based on the performance of the Company's share price.

The definitive acquisition is also subject to conditions of continued employment within the Group, except in exceptional cases as provided for in the plan.

Requirement to hold the shares applicable to members of the Executive Committee – Rules of conduct

For each plan since the 2007 plan (LTI No. 10), the Board of Directors has set retention requirements applicable to beneficiaries who are members of the Executive Committee.

They must hold, for the entire period of time during which they serve on the Committee, in registered form, a number of shares resulting from the free allocation granted in the context of these plans and corresponding to 25% of the definitive allocation of performance shares.

Moreover, rules of conduct applicable within the Group where inside information is held prevent any sale of shares during periods preceding the approval of the Group's results and more generally when inside information is held. In addition to this lock-up requirement applicable only to insiders, specific legal obligations are also applicable to all recipients of performance shares, irrespective of whether or not they hold the status of insider. Such obligations preclude them from selling any performance shares during certain periods determined by law.

Summary of the main characteristics of the stock options plans granted and outstanding at the end of fiscal year 2018/19

The total number of options that could be exercised according to the outstanding plans corresponds to 0.23% of the share capital as of 31 March 2019. The main characteristics of all stocks option plans implemented by the Company and outstanding as of 31 March 2019 are summarised below. No other company of the Group has implemented stocks option plans giving right to the Company's shares.

	Plan No. 14 included in plan LTI No. 14 (conditional options)	Plan No. 15 included in plan LTI No. 15 (conditional options)	Plan No. 16 included in plan LTI No. 16 (conditional options)
Date of Shareholders' Meeting	22 June 2010	22 June 2010	2 July 2013
Date of Board meeting	4 October 2011	4 November 2012	1 October 2013
Initial exercise price (1)	€26.39	€27.70	€26.94
Adjusted post-OPRA exercise price (2)	€22.96	€24.10	€23.44
Beginning of stock options exercise period	4 October 2014	10 December 2015	3 October 2016
Expiry date	3 October 2019	9 December 2020	30 September 2021
Initial number of beneficiaries	514	538	292
Total number of options (2)	1,573,723 (4)	1,508,777 (5)	771,997
Total number of exercised options (adjusted)	784,119	529,278	519,353
Total number of cancelled options	638,291	806,630	72,625
Number of remaining options to be exercised as of 31 March 2019 (2)	151,313	172,869	180,019
Percentage of capital as of 31 March 2019 that may be issued	0.07%	0.08%	0.08%
Number of shares that may be subscribed as of 31 March 2019 by members of the Executive Committee (2) (3)	3,702	27,781	38,503
of which number of shares that may be subscribed by Mr Henri Poupart-Lafarge as of 31 March 2019	0	22,988	34,480

(1) Undiscounted price corresponding to the average opening price of the share during the twenty French stock market trading days preceding the Board of Directors' meeting that granted the plan.
(2) Stock option plans were adjusted on 28 January 2016 to take into account the share capital reduction following the public share buy-back offer (OPRA).
(3) Refers to the members of the Executive Committee as of 31 March 2019 and not to those who were members of such Committee at the time of the grant.
(4) 30% of the stock options initially granted under LTI Plan No. 14 were cancelled based on the application of the performance condition linked to the results of the 2011/12, 2012/13, and 2013/14 fiscal years.
(5) 50% of the stock options initially granted under LTI Plan No. 15 were cancelled based on the application of the performance condition linked to the results of the 2012/13 and 2013/14 fiscal years.

TERMS OF EXERCISE/PERFORMANCE CONDITIONS (6)

Plan No. 14 included in plan LTI No. 14 (conditional options)	Plan No. 15 included in plan LTI No. 15 (conditional options)	Plan No. 16 included in plan LTI No. 16 (conditional options)
• The percentage of options which can be exercised from 4 October 2014 will vary according to predetermined levels of the Group's operating margin for the 2011/12, 2012/13 and 2013/14 fiscal years (the "Margins"). • 100% of options can be exercised if the Margins are equal or above 7.5%. • No option can be exercised if the Margins are below 6.5%. • For more details, refer to Note 23 to the consolidated financial statements for the 2014/15 fiscal year. **Achievement of performance conditions:** 70% of the options initially granted are exercisable since 4 October 2014.	• The percentage of options which can be exercised from 10 December 2015 will vary according to predetermined Group's operating margin levels for the 2012/13, 2013/14 and 2014/15 fiscal years (the "Margins") and requires a free cash flow ("FCF") above or equal to 0 for each fiscal year. • 100% of options can be exercised if the Margins are equal or above predetermined levels and the FCF is above or equal to 0 for each fiscal year. • No option can be exercised if the Margins are below 7% or the FCFs are negative. • The performance conditions relative to the 2014/15 fiscal year have been fulfilled as a result of the completion of the transaction with General Electric. • For more details, refer to Note 23 to the consolidated financial statements for the 2014/15 fiscal year. **Achievement of performance conditions:** 50% of the options initially granted are exercisable since 10 December 2015.	• The percentage of options which can be exercised will vary according to predetermined Group's operating margin levels for the 2014/15 and 2015/16 fiscal years (the "Margins") and requires a free cash flow ("FCF") above or equal to 0 for each fiscal year. • 100% of options can be exercised if the Margins are equal or above predetermined levels and the FCF is above or equal to 0 for each fiscal year. • No option can be exercised if the Margins are below 7.2% for fiscal year 2014/15 or 7.4% for fiscal year 2015/16 or the FCFs are negative. • The performance conditions relative to the 2014/15 and 2015/16 fiscal years have been fulfilled as a result of the completion of the transaction with General Electric. **Achievement of performance conditions:** 100% of the options initially granted are exercisable since 3 October 2016.

(6) The exercise of the options is also subject to presence condition in the Group except as explicitly set forth in the plan.

Only 70% of the stock options granted under LTI plan No. 14 and 50% of the options granted under LTI plan No. 15 became exercisable upon application of these plans' performance conditions.

Following the completion of the transaction with General Electric, 100% of the grant under LTI plan No. 16 became exercisable.

LTI plan No. 13 expired on 12 December 2018. A total of 840,501 options were exercised in title of this plan.

Conditional stock options granted to Alstom's Executive and Non-Executive Corporate Officers *(mandataires sociaux)* during fiscal year 2018/19 and options exercised by them

No option was granted by the Company during fiscal year 2018/19 to Mr Henri Poupart-Lafarge, the Chairman and Chief Executive Officer and the only Executive Officer of the Company.

The Company did not grant any stock options to other Corporate Officers during 2018/19 fiscal year.

Conditional stock options granted during fiscal year 2018/19 to the ten employees who are not Alstom's Executive or Non-Executive Corporate Officers and who received the largest number of options

No stock options were granted to employees, either Corporate Officers or not, during 2018/19 fiscal year.

Stock options exercised during fiscal year 2018/19 by the ten employees who are not Alstom' Corporate officers and who exercised the largest number of options

	Number of shares subscribed(*)	Average share price(*)
Total number of options exercised during the fiscal year by the ten first employees who are not Corporate Officers and who exercised the largest number of options	46,610	€25.86

(*) Related to exercise of options of LTI No. 13, 14, 15 and 16 plans. Adjusted to take into account the share capital reduction following the public share buy-back offer (OPRA).

Summary of the main characteristics of the outstanding plans of free grants of performance shares as of the end of fiscal year 2018/19

The total number of performance shares that could be created in connection with the free allocation of performance shares that have not yet been fully granted represents 1.67% of the share capital as of 31 March 2019 (subject to achievement of the performance conditions, as assessed by the Board of Directors held on 06 May 2019).

	Plan 2016 (PSP 2016) (performance shares)	Plan 2017 (PSP 2017) (performance shares)	Plan 2018 (PSP 2018) (performance shares)	Plan 2019 (PSP 2019) (performance shares)
Date of Shareholders' Meeting	18 December 2015			17 July 2018
Date of Board meeting	17 March 2016	17 March 2017	13 March 2018	12 March 2019
Initial number of beneficiaries	737	755	732	820
Number of performance shares initially granted	957,975 (4)	1,022,400 (5)	1,016,025	1,080,150
Outstanding performance shares as of 31 March 2019 (5)	754,983	911,905	990,150	1,075,650
Date of delivery of the shares (based on performance conditions)	15 May 2019	The fifth business day following the date on which the consolidated financial statements for FY 2019/20 are published	The fifth business day following the date on which the consolidated financial statements for FY 2020/21 are published	At the latest on the twentieth business day following the date on which the consolidated financial statements for FY 2021/22 are published
Percentage of share capital which could be issued (calculated according to the share capital on 31 March 2019)	0.34%	0.41%	0.44%	0.48%
Number of shares as of 31 March 2019 that may be delivered to members of the Executive Committee (1) (3)	130,500	183,000	205,125	205,500

	Plan 2016 (PSP 2016) (performance shares)	Plan 2017 (PSP 2017) (performance shares)	Plan 2018 (PSP 2018) (performance shares)	Plan 2019 (PSP 2019) (performance shares)
Performance conditions [(2)]	The percentage of shares definitively delivered varies based on: • two internal performance conditions: the recurrent adjusted EBIT (Margin) and Free Cash Flow (FCF). These two conditions will be assessed at the end of FY 2016/17, 2017/18 and 2018/19 fiscal year-end. In order for 70% of the shares to be delivered, the Margins and the FCF must be higher than or equal to predetermined levels for each fiscal year; • additionally, an external performance condition, assessed on the date of publication of the financial results for the 2018/19 fiscal year, based on the performance of the Company's shares, calculated as the percentage change between the share price at the grant date and the share price on the publication date, corrected to reflect any potential dividends paid out during the vesting period ("Total Shareholder Return"), compared with the performance of the STOXX® Europe TMI Industrial Engineering Index (hereinafter the "Index") during the same periods. In order for 30% of the shares to be delivered, the performance of the share price cannot exceed or fall below the Index by more than a predetermined number of points over three years.	The percentage of shares definitively delivered varies based on: • two internal performance conditions: the recurrent adjusted EBIT (Margin) and Free Cash Flow (FCF). These two conditions will be assessed at the end of FY 2017/18, 2018/19 and 2019/20 fiscal year-end. In order for 70% of the shares to be delivered, the Margins and the FCF must be higher than or equal to predetermined levels for each fiscal year; • additionally, an external performance condition, assessed on the date of publication of the financial results for the 2019/20 fiscal year, based on the performance of the Company's shares, calculated as the percentage change between the share price at the grant date and the share price on the publication date, corrected to reflect any potential dividends paid out during the vesting period ("Total Shareholder Return"), compared with the performance of the STOXX® Europe TMI Industrial Engineering Index (hereinafter the "Index") during the same periods. In order for 30% of the shares to be delivered, the performance of the share price cannot exceed or fall below the Index by more than a predetermined number of points over three years.	The percentage of shares definitively delivered varies based on: • one internal performance condition: adjusted EBIT of the Group. This condition will be applied as of the 2020/21 financial year. For a grant of 50% of the shares, the Margin must be higher than or equal to the levels set for the financial year; • additionally, an external performance condition, assessed on the date of publication of the financial results for the 2020/21 fiscal year, based on the performance of the Company's shares, calculated as the percentage change between the share price at the grant date and the share price on the publication date, corrected to reflect any potential dividends paid out during the vesting period ("Total Shareholder Return"), compared with the performance of the STOXX® Europe TMI Industrial Engineering Index (hereinafter the "Index") during the same periods. For a grant of 50% of the shares, the performance of the share value must be higher than or equal to the levels set for the Index.	The percentage of shares definitively delivered varies based on: • two internal performance conditions: Adjusted EBIT of the Group and the conversion ratio of the net result into cash These two conditions will be assessed as of the end of the 2021/22 fiscal year. In order that 60% of the shares be delivered, the Margin and the conversion ratio must be higher than or equal to predetermined levels for this fiscal year; • one relative performance condition, assessed on 31 March 2022, based on the performance of the Company's shares, calculated as the percentage change between the share price at the grant date and the share price on the publication date, corrected to reflect any potential dividends paid out during the vesting period ("Total Shareholder Return"), compared with the performance of the STOXX® Europe TMI Industrial Engineering Index (hereinafter the "Index") during the same periods. In order that 40% of the shares be delivered, the performance of the share value must be higher than or equal to the levels set for the Index.

	Plan 2016 (PSP 2016) (performance shares)	Plan 2017 (PSP 2017) (performance shares)	Plan 2018 (PSP 2018) (performance shares)	Plan 2019 (PSP 2019) (performance shares)
Performance conditions (2)	**Achievement level of the performance conditions:** The delivery of 14.73% of the initial grant is acquired (subject to presence condition until the end of the vesting period) and 5.27% of the initial grant is cancelled based on the performance conditions linked to the results of fiscal year 2016/17. The delivery of 19.67% of the initial grant is acquired (subject to presence condition until the end of the vesting period) and 5.33% of the initial grant is cancelled based on the performance conditions linked to the results of fiscal year 2017/18. The delivery of 52.53% of the initial grant is acquired (subject to presence condition until the end of the vesting period) and 2.47% of the initial grant is cancelled based on the performance conditions linked to the results of fiscal year 2018/19.	**Achievement level of the performance conditions:** The delivery of 17.13% of the initial grant is acquired (subject to presence condition until the end of the vesting period) and 2.87% of the initial grant is cancelled based on the performance conditions linked to the results of fiscal year 2017/18. The delivery of 24.20% of the initial grant is acquired (subject to presence condition until the end of the vesting period) and 0.86% of the initial grant is cancelled based on the performance conditions linked to the results of fiscal year 2018/19.		
Shares retention period	None (3)	None (3)	None (3)	

(1) Refers to the Executive Committee as of 31 March 2019. The number of rights to which Mr Henri Poupart-Lafarge is entitled is presented in the section on the Compensation of Executive and Non-Executive Corporate officers of the Board of Directors' report (see page 188).

(2) Final acquisitions are also contingent upon a condition of presence within the Group, unless an exception is made within the plan.

(3) A specific holding requirement applies to the beneficiaries who are members of the Executive Committee (see page 177 for the Chairman and Chief Executive Officer and see page 192 for the other members of the Executive Committee).

(4) Following the financial results of fiscal year 2016/17, fiscal year 2017/18, and fiscal year 2018/19 approved by the Board of Directors on 6 May 2019, 13.07% of the performance shares initially granted under PSP 2016 were cancelled and 86.96% are acquired. They were delivered on 15 May 2019.

(5) Following the financial results of fiscal year 2017/18 and fiscal year 2018/19 approved by Board of Directors on 6 May 2019, 3.67% of the performance shares initially granted under PSP 2017 were cancelled and 41.33% are vested (subject to presence condition). The remaining will depend on the financial results of fiscal year 2019/20.

Free grants of performance shares to Executive and Non-Executive Corporate Officers *(mandataires sociaux)* during fiscal year 2018/19

Over the course of the 2018/19 fiscal year, 52,500 rights to performance shares were granted to Mr Henri Poupart-Lafarge, the Chairman and Chief Executive Officer and the only Executive Corporate Officer of the Company as of 31 March 2019.

No performance shares were delivered during the 2018/19 fiscal year.

Free grants of performance shares during fiscal year 2018/19 to the ten employees who are not Executive or Non-Executive Corporate Officers and who received the largest number of performance shares

Over the course of the 2018/19 fiscal year, the ten largest allocations of performance shares represented an aggregate amount of 168,000 performance shares.

No performance shares were delivered during fiscal year 2018/19.

FREE SHARES PLAN

In accordance with the authority granted at the General Shareholders' Meeting held on 18 December 2015 (second resolution), on the recommendation of the Nominations and Remuneration Committee, the Board of Directors, on 23 September 2016, approved an equal grant of 30 free shares to all of the Group's employees under the "We are Alstom 2016" plan.

It was also decided that, in countries where, for tax and/or legal reasons, a grant of free shares would be difficult or impossible, the equivalent in cash to such thirty shares would be paid in the future to the employees.

In accordance with applicable law, the shares were fully and finally granted at the end of two years, *i.e.,* on 23 September 2018.

A total of about 21,300 people in the Group in 16 countries received these free shares on 25 September 2018, or 638,430 shares created on their definitive grant by drawing on reserves. About 3,400 people in 45 countries received the equivalent in cash of these 30 shares, or an amount of €1,170.30, as valuated on the date when the shares were delivered.

EMPLOYEE INVESTMENT, PROFIT SHARING, AND SAVINGS PLAN

Employee investment

All the French subsidiaries of the Group to which the French law of 7 November 1990 applies have entered into employee investment and profit sharing agreements. An exceptional profit-sharing scheme *(accord de participation dérogatoire)* benefiting at least 90% of the employees of the French companies of the Group took effect on 30 September 2011. No amounts paid in respect of the French statutory employee profit sharing agreements over the past three years.

Specific profit sharing

More than 98% of employees in the Group's French subsidiaries benefit from a specific profit sharing plan *(accord d'intéressement)*. The amounts paid in respect of fiscal year 2018/19 are not yet known to date, because they depend on a series of criteria defined in profit sharing plans applicable for each subsidiary, the final results of which are known within six months following the end of fiscal year, *i.e.* 30 September of each year, at the latest. The amounts paid in respect of specific profit sharing plans for the past three fiscal years are as follows:

Fiscal year ended 31 March *(in € million)*	2016	2017	2018
Specific employee profit sharing plans	16.3	16.1	16.6

Employee savings plan and retirement savings plan

Alstom's French employees can invest their savings resulting from profit-sharing, specific profit-sharing, or voluntary savings in the Group Savings Plan not invested in the Company securities or in a collective savings and retirement plan ("PERCO"). The Company adds a maximum amount of €500 for €1,500 paid during the year. In 2018, this maximum amount was increased to €800 per €1,500 paid for non-executive employees. Engineers and managers benefited from the creation of a Company pension savings plan (Article 83).

In 2018, the French employees contributed €6.5 million to the Group Savings Plan and €3.6 million to the PERCO savings plan. These contributions to the PERCO triggered an employer matching contribution of €1.1 million paid by Alstom.

Employee shareholdings within the Group savings plan

Within the Group Savings Plan, employee savings can also be invested in the Company securities.

Since its initial public offering and first listing, the Company implemented has five share capital increases reserved for the employees participating in the Group Savings Plan. No share capital increase was carried out in the context of the Group's savings plan over the course of the 2018/19 fiscal year. The most recent capital increase was carried out over the course of the 2008/09 fiscal year in the context of the "Alstom Sharing 2009" shareholding plan reserved for current employees (and retired employees) of the Group with at least three months seniority, and was offered in 22 countries including France, *via* a "Two for One 2009" offering and a "classic" offering. Approximately 28% of the Group's eligible permanent staff as of that date (or approximately 18,400 employees) subscribed to this capital increase.

As of 31 March 2019, the Group's employees and former employees held 1.22% of the Company's share capital, either directly or through a fund ("FCPE") (see page 282).

SUMMARY OF TRANSACTIONS OF EXECUTIVE AND NON-EXECUTIVE CORPORATE OFFICERS OR PEOPLE MENTIONED IN ARTICLE L. 621-18-2 OF THE FRENCH MONETARY AND FINANCIAL CODE ON THE SECURITIES OF THE COMPANY CONDUCTED DURING FISCAL YEAR 2018/19

As of 6 May 2019, the following transactions were registered with the AMF:

Notifying person	Financial instrument	Type of transaction	Number of transactions	Value of transactions *(in €)*
Sylvie Kandé de Beaupuy	Shares	Acquisition	600	23,208
Henri Poupart-Lafarge	Shares	Subscription	45,980	1,325,603.40
Henri Poupart-Lafarge	Shares	Pledge	45,980	N/A
Henri Poupart-Lafarge	Shares	Sale	25,728	949,798.89
Henri Poupart-Lafarge	Shares	Subscription	32,183	738,921.68
Henri Poupart-Lafarge	Shares	Sale	2,743	102,725.35

STATUTORY AUDITORS' SPECIAL REPORT ON RELATED-PARTY AGREEMENTS AND COMMITMENTS

(Annual General Meeting for the approval of the financial statements for the year ended 31 March 2019)

This is a free translation into English of the Statutory Auditors' special report on related-party agreements and commitments issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Shareholders,

In our capacity as Statutory Auditors of Alstom, we hereby present to you our special report on regulated agreements and commitments.

It is our responsibility to report to shareholders, based on the information provided to us, on the main terms and conditions of agreements and commitments that have been disclosed to us or that we may have identified as part of our engagement, without commenting on their relevance or substance or identifying any undisclosed agreements or commitments. Under the provisions of Article R. 225-31 of the French Commercial Code (*Code de commerce*), it is the responsibility of the shareholders to determine whether the agreements and commitments are appropriate and should be approved.

Where applicable, it is also our responsibility to provide shareholders with the information required by Article R. 225-31 of the French Commercial Code in relation to the implementation during the year of agreements and commitments already approved by the Annual General Meeting.

We performed the procedures that we deemed necessary in accordance with professional standards applicable in France to such engagements. These procedures consisted in verifying that the information given to us is consistent with the underlying documents.

AGREEMENTS AND COMMITMENTS SUBMITTED FOR THE APPROVAL OF THE ANNUAL GENERAL MEETING

Agreements and commitments authorized during the year

We were not informed of any agreements and commitments authorized and signed during the year and requiring the authorization of the General Meeting in accordance with article L. 225-38 of the French Commercial Code.

Agreements and commitments authorized and signed since the closing

We were informed of the following agreements and commitments, authorized and signed since the closing of the financial year, which have been subject to prior authorization by your Board of Directors of 6 May 2019.

Non-competition covenant between the Company and Mr. Henri Poupart-Lafarge as Chairman and Chief Executive Officer of Alstom

Directors concerned:

Mr. Henri Poupart-Lafarge, Chairman and Chief Executive Officer of Alstom.

Nature and purpose:

During its meeting of 6 May 2019, your Board of Directors authorized the signature of a firm and irrevocable non-competition covenant with Mr. Henri Poupart-Lafarge, considering the duties entrusted to him.

By the end of the Annual General Meeting for the approval of the financial statements for the year ended 31 March 2019, this covenant shall forbid the Chief Executive Officer, following the termination of his mandate (for any cause and at any time), from taking any interest, part, partnering in any way or committing, directly or through a legal entity, as corporate officer , employee, or consultant for any company, anywhere in the world, of which a significant share of their activity (15% of its turnover or at least €1 billion) relates to railway equipment or systems. Transportation operators themselves are excluded from the scope of this non-compete covenant.

This non-compete covenant is limited to a two-year period, starting from the termination date of his mandate as Chairman and Chief Executive Officer.

In exchange for this covenant, the Chairman and Chief Executive Officer shall receive a total gross indemnity equal to 1.5 times his average gross annual fixed and variable compensation, excluding performance shares, received over the three fiscal years prior to the termination date of his mandate, this indemnity being paid monthly, in twenty-four equal payments, over the non-competition covenant period.

In the case of breach, at any time, of the non-competition covenant by the Chairman and Chief Executive Officer:

- The Company shall be freed from its commitment to pay the financial consideration; and,
- The Chairman and Chief Executive Officer shall be obligated to repay the Company any sums already received in exchange of this non-compete covenant.

The Company, through its Board of directors, retains the right, in particular in the event of gross misconduct or major financial issue to unilaterally waive this covenant at the end of the Chairman and Chief Executive Officer's mandate, in which case he will be freed from any commitment and no indemnity shall be owed for this covenant.

In any case, the present non-competition covenant shall not be applicable in the event the Chairman and Chief Executive Officer retires at the end of his mandate. In this event, no indemnity would be owed.

Motivations justifying the interest of such commitments for the Company:

The Board of Directors (M. Henri Poupart-Lafarge not taking part in the vote and in the discussions) underlined the importance of this firm and irrevocable non-compete covenant, at the end of his mandate due to the comprehensive knowledge of the rail transport market acquired by Mr. Henri Poupart-Lafarge. As a consequence, his expertise should not benefit any competitor of the company. This transaction is, as a result, designed to protect the interests of the Company.

Continuation of the commitments between the Company and the Chairman and the Chief Executive Officer relating to the defined contribution pension plans under "Article 82" and "Article 83" of the French general tax code

Director concerned:

Mr. Henri Poupart-Lafarge, Chairman and Chief Executive Officer of Alstom.

Nature and purpose:

During its meeting of 8 November 2016, your Board of Directors authorized the terms and commitments made to Mr. Henri Poupart-Lafarge, Chairman and Chief Executive Officer of Alstom and motivated the interest of such commitments for the Company, in accordance with Articles L. 225-38 and L. 225-42-1 of the French Commercial Code. These commitments have also been approved during the General Meetings of 4 July 2017.

In the context of the renewal of the mandate of Chairman and Chief Executive Officer of Alstom of Mr. Henri Poupart-Lafarge in accordance with article L. 225-42-1 of the French Commercial code, your Board of Directors of 6 May 2019 approved once again these commitments.

Supplemental retirement schemes ("Article 82")

At its meeting of 8 November 2016, the Board of Directors authorized, upon the recommendation of the Nominations and Remuneration Committee, the closure and freezing, as from 31 December 2016 of rights cumulated under a defined benefit pension plan ("Article 39") as well as the implementation of a supplementary defined contribution pension plan ("Article 82") in accordance with articles L. 225-38 and L. 225-42-1 of the French Code of Commerce.

All the former beneficiaries of the defined benefit pension plan ie the Executive Committee members with a French employment contract and whose annual base remuneration is eight times above the Annual Social Security Ceiling, are the beneficiaries of this new pension plan.

As a consequence, the Board of Directors decided:

- to close, starting 31 December 2016 of the defined benefit pension plan (Article 39) attributable to the Chairman and Chief Executive Officer and the freeze of the cumulative rights, on the same date, representing an annual pension of €176,000 (constant euros) subject to the presence condition at the time the Chairman and Chief Executive Officer asserts his pension rights. No new rights shall be acquired in relation to this plan;
- to implement, starting 1 January 2017, an annual contribution dedicated to retirement paid to a third-party organization (Article 82). The calculation of this gross annual contribution is based on the total annual remuneration (fixed and variable remuneration in cash) of Mr. Henri Poupart-Lafarge according to the following methods:
  - 10% of his gross fixed remuneration between eight and twelve Annual Social Security Ceilings and 20% of his fixed remuneration in excess of twelve Annual Social Security Ceilings,
  - 20% of his annual variable remuneration as determined by the Board of Directors,
  - The reference remuneration (fixed and variable in cash) for calculating the contribution cannot, in any case, be greater than €2 million,
  - No contribution will be paid if the calculation of the variable compensation is zero.

In accordance with article L. 225-42-1 of the French Commercial code, the benefit of this measures is subject to performance conditions.

The Chairman and Chief Executive Officer undertook, once the tax and social obligations relating to these contributions are satisfied, to keep the amount paid on the dedicated retirement savings vehicle at least for the duration of his mandate.

Supplemental retirement schemes (Article 83)

In addition, the Chairman and Chief Executive Officer, also benefits from an Article 83 collective supplemental pension plan of which beneficiaries are corporate officers of Alstom SA and Alstom Executive Management SAS. The contributions that finance this plan amount to sums which correspond to 1% of Tranche A, 1% of Tranche B, 4% of Tranche C and 11% of Tranche D of the base remuneration of Mr. Henri Poupart-Lafarge and are borne up to 95% by the company. For fiscal year 2018/2019, Mr Henri Poupart-Lafarge benefited from contributions up to €25,555 borne up to 95% by the company, *i.e.* €24,277.

Motivations justifying the interest of such renewed commitments for the Company:

The Board of Directors (Mr. Henri Poupart-Lafarge not taking part in the vote and in the discussions), at its meeting of 6 May 2019, confirmed the interest to maintain these commitments. As an executive corporate officer of the group and as all the other executives of Alstom SA and Alstom Executive Management SAS, Mr. Henri Poupart-Lafarge is the beneficiary of a collective supplemental pension plan ("Article 83"), which allows them to benefit from a minimum social protection. Furthermore, the interest of the defined contribution pension scheme ("Article 82") is that it is significantly less costly for the Company than a defined benefit pension plan.

AGREEMENTS AND COMMITMENTS ALREADY APPROVED BY THE ANNUAL GENERAL MEETING

Agreements and commitments approved by the Annual General Meeting in previous years

a) which execution continued during the year

In accordance with article R.225-30 of the French Commercial Code, we were informed that the execution of the following agreements and commitments, which were already approved by the General Assembly in previous years, continued during the year.

Defined benefit pension plan: terms related to the liquidation of acquired rights by Mr. Henri Poupart-Lafarge

Director concerned:

Mr. Henri Poupart-Lafarge, Chairman and Chief Executive Officer of Alstom.

Nature and purpose:

Since 1 January 2004, Mr. Henri Poupart-Lafarge benefited from a defined benefit pension plan under Article 39of the French general tax code. As mentioned above, as of 31 December 2016, this pension plan was terminated and the related accrued pension entitlements were frozen. The rights accrued over the period starting 1 January 2004 to 31 December 2016, the date on which they were frozen, amount to, as of 31 March 2019, an annual pension of €176,000 (in constant euros) subject to a condition of presence at the time Mr Henri Poupart-Lafarge asserts his rights to retire.

Under the defined benefits plan, the amount of the commitments that would have allowed the payment of the previously mentioned pension, is equal, as of 31 March 2019, to €5,412,000, including an amount of €1,047,483 of applicable taxes to supplemental pension.

Starting from 31 December 2016, no new rights can be or have been acquired as part of this plan.

Given the intention of Mr. Henri Poupart-Lafarge to terminate his employment contract as of the end of the 2018/2019 Annual General Meeting and starting from that date, in order to comply with the AFEP-MEDEF Code's recommendations and the market best practices, given the definitive acquisition of entitlements under the Article 39 defined benefits pension plan as part of his employment contract (under a presence condition) and in the context of the implementation of the EU Directive 2014/50/on minimum requirements for enhancing worker mobility between Member States by improving the acquisition and preservation of supplementary pension rights, the Board of Directors of 6 May 2019, upon the recommendation of the Nominations and Remuneration Committee, has taken note of the final closeout of the "Article 39" pension plan starting from the end of the 2018/2019 Annual General Meeting, under the following rules:

- Mr Henri Poupart-Lafarge will no longer have any employment contract with Alstom Executive Management SAS as of the end of 2018/2019 Annual General Meeting;
- The final liquidation of the supplementary defined benefit pension plan, including the other beneficiaries, will lead to a reduction of the Company's commitments;
- The offset the loss of the entitlements acquired between January 1, 2004 and December 31, 2016 through the payment of a balance on the defined contribution pension plan, named "Article 82", to be paid annually in thirds over three years, beginning the first anniversary of the date of resignation from his employment contract, and subject to a condition of presence within the Company at each date on which payment of the amounts falls due. The amount of this balance takes into account an individual discount as regards the recorded liabilities based on proposal by external actuaries taking into account several criteria and hypothesis:
  - Rules of the initial "Article 39" plan;
  - Age and potential turnover of the beneficiaries;
  - Life tables; and
  - Implementation of the European Directive 2014/50/EU of 16 April 2014;
- The amount of this balance amount, assessed by the consulting actuary, amounts, at the present date, to €3,375,000 (gross). This balance will be subject to social security contributions and taxes according to applicable law on each payment. The balance amount includes a 20% discount compared to the value of its engagements (excluding tax) as of 31 March 2019, in order to take into account the impact of the transformation entitlements submitted to presence requirements into a definitively acquired pension capital, ie an overall saving of more than one million euros for the company;
- The definitive closing of the "Article 39" plan will come into effect for all its beneficiaries;
- The undertaking of Mr. Henri Poupart-Lafarge, after payment of the related social security and tax obligations, to maintain these amounts under this pension plan, at least until the end of the corporate mandate.

b) without execution during the year

We have been informed of the continuation of the following agreements and commitments, which have already been approved by the General meeting of previous financial years, and have not led to execution during the year.

Commitments falling within the scope of article L. 225-42-1 of the French Commercial Code with Mr. Henri Poupart-Lafarge, Chairman and Chief Executive Officer of Alstom, starting 1 February 2016

Director concerned:

Mr. Henri Poupart-Lafarge, Chairman and Chief Executive Officer of Alstom, starting 1 February 2016

Nature and purpose:

Your Board of Directors of 28 January 2016 authorized the terms of severance payments of Mr. Henri Poupart-Lafarge, Chairman and Chief Executive Officer of Alstom starting 1 February 2016, and motivated the interest of such commitments for the Company, in accordance with Articles L. 225-38 and L. 225-42-1 of the French Commercial Code. This agreement was approved by the Annual General Meeting of 5 July 2016.

As regards the length of Mr. Henri Poupart-Lafarge's career as employee before being appointed as Chairman and Chief Executive Officer (18 years), the Board of Directors, upon the recommendation of the Nominations and Remuneration Committee, authorized the suspension (and not the resiliation) of his contract of employment during his Corporate Office. The Board of Directors, upon the recommendation of the Nominations and Remuneration Committee, decided that in the event of revocation of his Corporate Office, his contract of employment with Alstom Executive Management SAS would be reactivated. In the event it would not be possible to propose to Mr. Henri Poupart-Lafarge a position corresponding to his level of responsibility, he would benefit from a severance payments which cannot exceed two years of his target remuneration as Corporate Officer and is subject to the following performance condition: application of a coefficient corresponding to the average level of attainment of targets applicable to his variable remuneration for the three years preceding his departure to two years of his target remuneration, fixed and variable. It would include and could not be lower than the severance payment to which Mr. Henri Poupart-Lafarge is eligible in the frame of his suspended employment contract with the company Alstom Executive Management SAS as at January 31st, 2016, that would amount to €1,856,000.

Terms:

Mr. Henri Poupart-Lafarge has undertaken to resign from his employment contract with Alstom Executive Management SAS as from the 2018/2019 Annual General Meeting and starting from that day. Mr. Henri Poupart-Lafarge will not receive any severance payment on that occasion.

The Board of Directors of 6 May 2019, upon the recommendation of the Nominations and Remuneration Committee, has noted Mr. Henri Poupart-Lafarge renunciation of any severance payments of any kind related to his corporate office and/or to his employment contract, by the end of the 2018/2019 Annual General Meeting and starting from that day.

This agreement will therefore end as from the end of 2018/2019 Annual General Meeting.

Neuilly-sur-Seine and Paris La Défense, 24 May 2019

The Statutory Auditors

PricewaterhouseCoopers Audit	Mazars
Édouard Demarcq	Cédric Haaser

STATUTORY AUDITORS

STATUTORY AUDITORS

PricewaterhouseCoopers Audit
represented by Mr Édouard Demarcq

63, rue de Villiers
92200 Neuilly-sur-Seine, France

Mazars
represented by Mr Cédric Haaser

61, rue Henri-Regnault
92400 Paris La Défense, France

The Statutory Auditors were appointed by the Ordinary General Meeting held on 30 June 2015 for six fiscal years expiring at the end of the Ordinary Shareholders' Meeting called to approve the financial statements for fiscal year 2020/21.

PricewaterhouseCoopers Audit and Mazars belong to the "Compagnie régionale des Commissaires aux comptes de Versailles".

DEPUTY STATUTORY AUDITORS

Mr Jean-Christophe Georghiou
Deputy Statutory Auditor of PricewaterhouseCoopers Audit

63, rue de Villiers
92200 Neuilly-sur-Seine, France

Mr Jean-Maurice El Nouchi
Deputy Statutory Auditor of Mazars

61, rue Henri-Regnault
92400 Paris La Défense, France

The Deputy Statutory Auditors were appointed by the Ordinary General Meeting held on 30 June 2015 for six fiscal years expiring at the end of the Ordinary Shareholders' Meeting called to approve the financial statements for fiscal year 2020/21.

STATUTORY AUDITORS' FEES FOR FISCAL YEAR 2018/19

The Statutory Auditors' fees for fiscal year 2018/19 are included under Note 35 to the consolidated financial statements for fiscal year 2018/19.

STATUTORY AUDIT CHARTER

In May 2016, Alstom and its Statutory Auditors formalised, following the Audit Committee's approval, the new Audit Charter applicable until 31 March 2021 when the current Statutory Auditors' engagement comes to an end.

This Charter defines the Group's statutory audit process under the various applicable laws and rules. By formalising it, the parties officially commit themselves to respecting the said charter and to aiming for more transparency and efficiency.

The main rules defined apply to the following topics:

- principles on fee and assignment split between both auditing firms;
- work process between the two audit firms and relationship with Alstom, notably with the Internal Audit function;
- relationship between the Statutory Auditors and the Audit Committee;
- defining the allocation principles of assignments accessory to the audit mandate;
- reminder of pre-approval procedure of these assignments and of pre-approved assignments;
- reminder of prohibited assignments.

This Charter was updated after it was approved by the Audit Committee.

6

SUSTAINABLE DEVELOPMENT: CORPORATE SOCIAL RESPONSIBILITY AFR

VP The content relating to the Vigilance plan is identified in the summary table and in the text with the help of this pictogram

AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram

EXTRA-FINANCIAL PERFORMANCE DECLARATION

This section is part of Alstom's management report and presents the Company's sustainable development strategy, action plans and achievements as well as its environmental, social and societal information, as requested by the ordinance No. 2017-1180 of 19 July 2017 implementing the directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 on the publication of non-financial information, as well as by its implementing decree No. 2017-1265 of 9 August 2017 on the publication of non-financial information.

A PROACTIVE POLICY OF CORPORATE SOCIAL RESPONSIBILITY

Global and local challenges bringing strategic opportunities

The world is facing strong, rapidly evolving demographic, environmental and economic dynamics, resulting in growing environmental and social challenges.

Mobility growth and global environmental impacts

- The latest United Nations projections estimate that the world's population is growing rapidly and it is expected to reach more than 9.8 billion people in 2050 (1). Due to demographic and economic growth, the mobility needs will increase. The International Transport Forum (ITF) forecasts that global demand for passenger traffic could more than double between 2015 and 2050, generating a significant rise for all transport modes. On current trend, the number of cars worldwide could reach 2 billion well ahead of 2050 (2).
- The Paris Climate Change Agreement adopted in 2015 at COP 21 (3) aims to limit global warming well below 2°C compared to pre-industrial levels. At COP 24 in Katowice (4) in 2018, countries agreed on a set of guidelines for its implementation at the national level. In this context, States are currently reviewing their national contributions, in which transport should play a significant role. Many countries are raising their level of ambition by aiming for carbon neutrality by 2050. Greenhouse gas emissions from transport continue to increase in developing countries as in most developed countries. Therefore, it is essential to succeed in decoupling the increase in mobility from carbon emissions by favouring the modes with the lowest carbon footprints, *i.e.* shared modes and electric transport. The transport decarbonisation trajectory remains complex to implement. However, the precursor countries are beginning their energy transition, as in Norway, where the share of electric vehicles stands at 58% in sales. In parallel, hydrogen is emerging as an increasingly credible long-term alternative to fossil fuels for applications requiring a high degree of autonomy.
- In addition, the focus of public authorities on air quality and its potential health impacts has never been so high, while over 90% of the world's population now lives in locations where pollution levels exceed the limits set by the World Health Organisation (5). Air emissions from road transport – especially fine particles resulting from diesel combustion – contribute significantly to the poor air quality in big cities. The pursuit of environmental objectives should lead to the development of regulatory and normative constraints in many countries such as legislation on the medium-term stop of sales of combustion vehicles (*e.g.* France, UK or India).

Cities at the forefront of sustainable development

- Cities alone account for about two thirds of energy consumption and more than 70% of CO_2 emissions worldwide (6). They are now emerging as major players in environmental policies. The most advanced ones are showing their ambitions in terms of carbon neutrality, setting up restricted or low-emission traffic zones, encouraging the use of shared mobility solutions or the transition to electric power. For example, the Fossil-fuel free streets initiative of the C40 Cities Climate Leadership Group (7) now brings together 27 cities committed to zero emission mobility to promote the abandonment of fossil fuels and the development of soft and shared modes (*e.g.* Los Angeles, Cape Town, Mexico City, Paris, London or Milan).
- Over 60% of the world's population will live in urban areas by 2050 (8). This pressure requires careful planning of urban areas and infrastructure to deal with collective mobility needs in densified areas. By 2050 (9), the hours of delay caused by congestion is predicted to almost double with substantial economic consequences resulting from this loss of useful time for the travellers. In cities well equipped with public transport and favouring soft modes, transport costs for the community can indeed be cut by half (10). Wherever public space is scarce, ability to deliver high capacity of transport within minimum space use will continue to drive demand for shared mobility solutions.

(1) UN, *World Population Prospects: The 2017 Revision,* June 2017.
(2) Baseline scenario. See OECD/ITF, *ITF Transport Outlook 2017,* OECD Publishing, 2017.
(3) The 21st yearly session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) was held in Paris (France) from 30 November to 12 December 2015.
(4) The 24th yearly session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) was held in Katowice (Poland) from 2 to 15 December 2018.
(5) World Health Organisation, *Ambient Air Pollution: A Global Assessment of Exposure and Burden of Disease,* September 2016.
(6) UN-Habitat, *Urbanization and Development: Emerging Futures,* World cities report 2016.
(7) C40 Cities, C40 Fossil-Fuel-Free Streets Declaration.
(8) UN, *World Urbanization Prospects: The 2014 Revision,* Highlights, 2014.
(9) EY – *Deploying Autonomous Vehicles: Commercial Considerations and Urban Mobility Scenario,* 2014.
(10) According to the International Organisation for Public Transport (UITP).

- Cities are more and more becoming providers of global mobility services (public transport, bike rental, car sharing, etc.). In this field, digitalisation is a powerful optimisation tool that will allow real-time adaptation of the offer to the demand, quick reaction to emergency situations, and optimised use of vehicles and infrastructure through intelligent multimodal systems.

Evolving social expectations

- The social gaps remain high, both in cities subject to unprecedented urban sprawl and in rural areas where poverty is still largely concentrated and where populations are isolated. In France, about 20% of the working population has difficulty accessing transport [(1)], while in emerging countries this percentage can be higher than 80% [(2)]. Socio-economic development strategies must encompass the improvement of fundamental service delivery, including transport systems.
- Social expectations of citizens are evolving: environmental quality (noise, air pollution), well-being, safety, continued access to public transport, connectivity, participation in decision making processes for transport planning, are emerging challenges. As efficient applications to optimise multimodal journeys in big cities become available, urban youth from mature economies yearn as much for efficient and connected multimodal transport services as to own a vehicle themselves. The level of development of soft modes and public transport in cities becomes a major factor of attractivity.
- Digitalisation is bringing new opportunities to transport and impacting traditional business models. Data is becoming money. Consumers also become service providers for example through car sharing which is developing more and more in cities completing public transport for enhanced global efficiency and service to passengers.
- Safety in transport is attracting renewed attention with a specific focus on the protection of women that represent more than half of the passengers. Ensuring the security of all passengers is a key concern of transport operators which are developing communication campaigns on this topic while deploying specific technology solutions to address it.

Alstom's sustainable development strategy fully integrates these trends and challenges.

Alstom's mission: contribute to the transition towards sustainable transport systems

As a historical player in the field of sustainable mobility, Alstom considers that access to transport is an essential factor of social progress and economic development and that it is its mission to support the transition to sustainable transport systems that are inclusive, environmentally-friendly, safe and efficient.

Indeed, Alstom offers innovative capacitive solutions that are attractive throughout their entire life cycle, based on electric and shared mobility, and responsive to social expectations.

Every day, everywhere in the world, Alstom's trains transport more than 40 million passengers, making it possible for each of them to access work, medical services, education, culture and leisure activities.

- For the daily journeys within expanding urban and suburban areas, Alstom's trains offer comfortable and reliable high-capacity public transport solutions. Regional trains provide efficient daily commuting services between new urban areas. Intercity and high-speed trains link the very hearts of cities while providing an unrivalled level of comfort. By connecting urban and interurban territories, Alstom's rail solutions thereby contribute to their economic growth.
- Urban projects, where the Group is involved actively, contribute to the sustainable development of cities by providing access to transport to all and optimising transport capacity in dense areas with solutions ready to accommodate their future growth. These projects often provide the opportunity to enhance the urban landscape promoting soft mobility modes for an increased attractivity of the territory.
- The advantages of rail systems, the core of Alstom's portfolio, in terms of air quality, use of space, safety, energy efficiency and CO_2 emissions no longer need to be demonstrated. The potential for electrical mobility to curb CO_2 emissions and air pollution should still improve in the future with the development of clean and renewable energy sources.
- Major transport projects are also an opportunity to develop territories through the implementation of new industrial sites, the development of local supply-chains and the creation over the mid-term of a qualified labour employment market. This is the case, for example, of the current project under execution by Alstom's Joint Venture Gibela in the Gauteng province of South Africa, where 21,900 people are expected to be trained by 2028. The project's total contribution to the South African GDP is estimated at approximately €5 billion between 2017 and 2028, in addition to the value of the 600 new trains.
- In addition to rail solutions, Alstom also intends to capitalise on its expertise in sustainable mobility to position itself on an extensive portfolio of sustainable mobility solutions, particularly in the service of electric urban transport and long-distance freight. Beginning 2019, Alstom won its first contract for the supply of electric buses, Aptis™, for the city of Strasbourg, France.

Our value creation model

As a promoter of sustainable mobility, Alstom designs and offers systems, equipment and services for the transport sector. Alstom offers a complete range of solutions (from high-speed trains to metros, trams and e-buses), personalised services (maintenance, modernisation) as well as offers dedicated to passengers, infrastructure solutions, digital mobility and signalling.

Our business model is at the heart of our mission: to support the transition to more sustainable transport systems around the world, through inclusive, environment-friendly, safe and efficient transport, promoting a social and responsible business model. As the world leader in sustainable mobility, Alstom fully assumes its corporate responsibility towards its customers, partners, employees, passengers and society as a whole.

(1) *Laboratoire de la Mobilité Inclusive,* 2017.

(2) FIT, Highlights of the International Transport Forum 2011: Transport for Society, OECD, 2011.

ALSTOM

"from train manufacturer to sustainable mobility maker"

OUR RESOURCES

FINANCIAL CAPITAL
- €40.5 billion order backlog
- Equity of €4.2 billion

INDUSTRIAL CAPITAL
- 105 sites in 60 countries
- 100% of the industrial sites more than 200 employees ISO 14001 certified

INTELLECTUAL CAPITAL
- 6,500 patents
- More than 7,000 engineers

NATURAL CAPITAL
- 40% electricity of renewable origin
- 90% of waste recovery

HUMAN CAPITAL
- 36,300 employees
- ISO 37001 certification regarding anti-bribary

SOCIETAL CAPITAL
- more than 280 cities, operators and authorities of transport clients
- Alstom Foundation supporting 15 to 20 projects per year

OUR VALUE

36,300

Americas
5,200 employees

Europe
21,400 employees

OUR VALUES

TEAM, TRUST, ACTION, ETHICS AND COMPLIANCE

OUR STRATEGY

1. Customer-focused organisation
2. Complete range of solutions
3. Value creation through innovation
4. Operationnal & environmental excellence
5. Diverse and entrepreneurial people

CREATION MODEL

employees

Middle-East & Africa
4,500 employees

Asia Pacific
5,200 employees

OUR VISION: BECOME THE PREFERED PARTNER OF MOBILITY SOLUTIONS

OUR BRANDING
DESIGNING FLUIDITY

ROLLING STOCK

43% OF SALES 2018/19

SIGNALING **SERVICES** **SYSTEMS**

57% OF SALES 2018/19

VALUE CREATED FOR TAKEHOLDERS

EMPLOYEES
- 87.2% of trained employees
- IFR at 1.1

CUSTOMERS
- Customer satisfaction at 8.1
- 50% orders from new solutions
- Energy consumption of solutions reduced by 17%

PASSENGERS
- 17,000 cars subway in use
- +40 million people daily transported by Alstom trains

SOCIETY
- 77,000 benefiaries of community initiatives
- 28 eco-designed solutions
- 6.5 gCO_2 / pass.km

SUPPLIERS
- Long-term partnerships with suppliers of quality *via* Alstom Alliance
- Near 60% of Alstom cost of products purchased

SHAREHOLDERS
- Share evolution over 2 years: +37.85%
- Net income: €681 million

Additional information on the Company and its business, the markets in which it operates and its positioning, as well as its competitive and regulatory environment, are available in chapter 1 describing the Group's activity (page 3), chapter 4 concerning risk factors (page 129), chapter 5 presenting corporate governance (page 151), and finally chapter 7 related to the Company's history and organisation chart (page 271).

Alstom's Sustainability and Corporate Social Responsibility policy

Alstom's Sustainability strategy reflects primarily its ambition to facilitate transition towards global sustainable transport systems. The Group is also convinced that anticipating environmental and social challenges and managing the risks and opportunities they entail is important for operational efficiency in the short-term and will deliver its long-term growth whilst contributing to the development of its employees and society as a whole.

Hence, Alstom's Sustainability and CSR policy is at the heart of the Company's 2020 strategy. Its most recent update in January 2018 identified it as the over-arching Policy, linking the five other policies (Quality & Railway Safety, EHS, Ecodesign, Ethics & Compliance, Security). Sustainability is now fully integrated into the strategy and all Alstom's processes.

The policy deployment is guided by quantified and assessed objectives and cascaded throughout Alstom's operations, through a set of action plans, which are outlined throughout the different sections of the chapter.

Materiality analysis of sustainable development issues

Alstom considers it is important that its sustainable development actions take into account the expectation of its main stakeholders: customers (increasing importance of Corporate Social Responsibility criteria in calls for tenders), employees, public authorities (emergence of new CSR regulations), shareholders and potential investors, civil society, etc.

In order to clarify these expectations and to assess the relevance of Alstom's Sustainability and CSR policy, the Company updated in 2016 its materiality matrix.

Among many potential issues classified in five areas (Governance, People, Operations, Products and Services, and Society), 16 were identified as the most relevant to the sector, to the Company strategy, and to the mapping of internal risks. The evaluation was based on interviews conducted by a consultant with internal and external stakeholders (including customers, shareholders, industry associations, suppliers, NGOs, partners, representatives of media, public authorities). This assessment allowed the identification of the priority issues to be considered, the reinforcement of the main axes of Alstom 2020 strategy and the adjustment of the action plans.

More details on Alstom's sustainable development materiality matrix – and the related methodology – are available on www.alstom.com.

Alstom's contribution to the United Nations Sustainable Development Goals

As a signatory member of the United Nations Global Compact, Alstom supports the Sustainable Development Goals (SDGs) that aims at ending extreme poverty, protecting the planet and ensuring prosperity for all. Alstom bases its value system and business approach on the 10 principles of the Global Compact and submits its Communication of progress (COP) each year [(1)].

Considering that its sustainable development policy is a lever for the SDGs implementation, Alstom has identified the SDGs to which its new Sustainability and Corporate Social Responsibility policy has a direct contribution through Alstom's daily activities, core business and initiatives.

(1) More information available on the website: www.unglobalcompact.org.

As a result of its activity, Alstom considers that three objectives in particular are at the heart of Alstom's mission: *Industry, innovation and infrastructure* (SDG 9), *Sustainable cities and communities* (SDG 11), *Climate action* (SDG 13). In addition, the Company's activities also contribute to nine other objectives, illustrated below.

Sustainability and CSR policy	Main objectives	SDG	Examples of programmes and results
To act as a stakeholder-oriented organisation			
• adapting our offering and delivering our projects in line with evolving customer expectations; • supporting improvement in the lives of local communities; • assessing and managing all risks to the business and securing financial stability; • securing recognition as a responsible company.	• tailor-made offer and customer satisfaction index at 8 • Community Action Plan for all countries of more than 200 persons • 15-20 Alstom Foundation projects funded per year • presence in DJSI indices	4	Supporting educational establishments in the promotion of STEM (science, technology, engineering and mathematics) topics such as through the partnership with *"Elles Bougent",* promotion of scientific careers for girls in France and Spain.
		9	Metro Lucknow and Kochi entirely designed in Bangalore and manufactured at Sri City in India in line with the national "Make in India" initiative that encourages companies to design and manufacture their products in India.
		10	Alstom Foundation with a budget of €1 million/year.
		11	27 Country Community Action plans implemented.
		17	Participation in multi-stakeholder partnerships in support of the SDGs: Alstom is a founding member of the Transport Decarbonisation Alliance launched in November 2017.
To develop solutions for sustainable mobility			
• promoting electrical and shared transport; • deploying ecodesign processes to ensure environmental performance; • embedding in our solutions the highest levels of safety, quality, reliability and availability; • integrating green innovation to optimise energy efficiency.	• main solutions covered by ecodesign approach • -20% energy consumption in solutions by 2020 *versus* 2014	9	Promotion of creativity and entrepreneurship through the annual innovation programme I NOVE YOU™.
		11	Commissioning of line 2 of the Nice tramway operating with batteries and the new SRS ground charging system for electric buses and trams in cities.
		12	Definition of environmental objectives and performance documentation for ecodesigned products (*e.g.* Sydney metro).
		13	17% achieved energy consumption reduction of the portfolio (and associated CO_2 emissions) *vs.* 2014.
To manage our operations in a responsible way			
• ensuring safety excellence with and for our employees and contractors; • protecting our employees, assets and data from intentionally malicious actions; • continuously reducing the environmental footprint of our operations; • developing a sustainable supply-chain.	• 0 occupational fatalities • IFR1(*) at 1 by 2020 • -10% energy intensity in operations by 2020 *versus* 2014 • 100% electricity from renewable sources by 2025 • 80% purchase value with potentially high-risk suppliers covered by assessment by 2020	3	Alstom Zero Deviation Plan (AZDP) Health and Safety policy and health management plan.
		12	88% of employees working in a unit already certified ISO 14001 – other units in progress. -12% energy intensity in operations *vs.* 2014 already delivered through energy saving plan targeting main consumers.
		7	40% of the electricity consumption of industrial sites covered by a certificate of renewable energy.
		8	Development of a strong Sustainable Sourcing approach (*e.g.* the Sustainable Development Charter) updated in 2017, to be signed by all new Suppliers and for all new contracts.
To build a culture of diversity and integrity			
• enforcing the highest ethical standards; • promoting and implementing diversity in its various forms; • acting against discrimination; • respecting human rights.	• zero deviation from the Code of Conduct • 25% women in managers & professionals by 2020 • nationalities of managers to reflect activities by 2020 • anticipating risks of human rights violations	16	Strong ethics and compliance policy, rigorously applied.
		5	Deploying local plans to achieve challenging targets. Proportion of women managers and professionals in the Company raised from 18% in 2014 to 20.7% in March 2019.
		8	Human rights policy and action plans under implementation to anticipate risks of human rights violations.

(*) Lost time injury frequency rate.

A dedicated organisation at all levels of the Company

The implementation of Alstom's Sustainability and CSR policy is monitored by the Sustainability and CSR team. This Department is under the responsibility of the Senior Vice President Human Resources on the one hand and of the Chief Performance Officer on the other hand, placing sustainable development at the heart of the organisation. Sustainable Sourcing, Ecodesign, Social, Environment Health and Safety, and the Integrity programmes are deployed in the corresponding functions of the organisation and are consistent with the global sustainable development approach.

Within the Board of Directors, the Ethics, Compliance and Sustainability (ECS) Committee is reviewing and assessing the Company's strategy, policies and procedures on topics related to sustainable development and CSR. This Committee meets three times a year (see also page 173).

The sustainable development three-year action plan is submitted and reviewed twice a year by the management.

The Sustainability and CSR Steering Committee, comprised of members from Human Resources, Sourcing, Marketing, Innovation, Sustainable Development, Environment Health and Safety and Communication Departments, meets on a quarterly basis to oversee and monitor progress on the initiatives, and coordinate deployment of transverse activities. In 2018, this Sustainability Steering Committee was enlarged to ensure the appropriate monitoring and deployment of the Vigilance plan.

Alstom's sustainable development approach is implemented through a set of programmes that combine general and specific objectives, whilst leaving room for local initiatives. Implementation of the CSR policy in regions is deployed by the local network which has been systematically developed over last fiscal year. Its role is to locally implement Alstom policies and process, to represent the Company and to develop relations with local organisations and communities. In all the Company's main countries of operation (27 countries) the Country Managing Director is assisted by a CSR champion.

The role and tasks of the CSR Champions are clearly defined and formalised. As the CSR central contact point in each country, CSR Champions manage some local CSR initiatives, develop and maintain the Country Community Action Plan and contribute to report and communicate on CSR initiatives, good practices and the Foundation. A survey conducted in 2018 demonstrated the high level of support received by the teams from local management.

Moreover, since 2018, Alstom employees are being aware of sustainable development topics thanks to the deployment of a Sustainability and CSR e-learning in English and in French. This e-learning is mandatory for all newcomers and recommended for specific teams: Engineering, CSR & Sustainability, EHS, Communication, Sales & Marketing and Sourcing. 9,798 people have been trained so far.

Evaluation of the Company's Sustainability & CSR performance by independent third parties

Alstom's Corporate Social Responsibility performance is regularly measured by various rating agencies with different methods and criteria. These evaluations help to identify and analyse areas of improvement.

- In September 2018, Alstom was selected to be part of the Dow Jones Sustainability Index (DJSI), World and Europe for the eighth consecutive year and was, for the second time, awarded the Bronze Class distinction of RobecoSAM. The rating agency attributed the rating of 81 out of 100 to the sustainability performance, a score well above the average of the global electrical equipment sector. Alstom has improved its ranking among the 3,500 companies invited to participate in the assessment and is among the top 5% of the most successful companies assessed. This year, Alstom made particularly good progress in innovation management, supply chain management, environmental policy and management systems, as well as human capital development.
- The sustainable development performance of Alstom was also assessed by EcoVadis in 2018. The Company obtained a score of 73 and the highest possible recognition, a "Gold" status. It was among the top 3% rated companies on the platform.
- In January 2019, Alstom scored "A-" at the CDP's climate change questionnaire. Going from "B" to "A-", this score recognises Alstom as a proactive company to effectively reduce its emissions, which indicates an advanced environmental management.
- At the beginning of 2019, the Group was also named one of the "100 most sustainable companies in the world" by Corporate Knights, demonstrating Alstom's commitment to sustainable mobility.
- Through local community activities and those of the Alstom Foundation, Alstom seeks to act and to be recognised locally as a responsible company. For instance, in 2019 and for the sixth year running, the Company received the Distintivo ESR® 2018 – Socially Responsible Company award from the Mexican Centre for Philanthropy (CEMEFI) and the alliance for corporate social responsibility in Mexico (AliaRSE).
- Alstom Hong Kong received the 2018/19 Caring Company logo from the Hong Kong Social Services Council (HKCSS) in recognition of its commitment to respect the community, employees and the environment, following a series of actions launched in 2018, including volunteering in canteens to serve low-income employees ("Lunch Club" initiative), or fundraising for charity.

ALSTOM SUSTAINABILITY AND CSR RISK AND OPPORTUNITY MAPPING

As part of the new French legal and regulatory provisions related to the disclosure of extra-financial information (law No. 2017-1180 of 19 July 2017, called "Extra-financial Performance Declaration" and its application decree No. 2017-1265 of 9 August 2017), Alstom established this year a mapping of Sustainability and CSR risks. Information on the main risks and how they are managed is presented in detail in the following sections.

Identifying a potential list of non-financial risks and opportunities for Alstom

To ensure that sustainability and CSR risk mapping is consistent and comply with regulation, Alstom established a preliminary list of 31 risks to be assessed by taking into account the following aspects:

- the methodological Guide on CSR reporting – Extra-Financial Performance Declaration, edited by the employers' organisation MEDEF [(1)] regarding the new French regulation;
- the list of 42 indicators provided in Article R. 225-105 of the Commercial Code;
- its 2016 materiality matrix, integrating the expectations of our internal and external stakeholders.

Risks are formulated as challenges and cover both the risks as such and the opportunities, while the inability to seize an opportunity is being considered as a risk.

Ensuring consistency with internal processes

The Sustainability and CSR risk and opportunity mapping is built in accordance and consistency with the Group's global risk mapping. Each risk or opportunity identified is associated with a corresponding risk in the Alstom global risk mapping (see chapter 4, "Risk Factors, internal Control and Risk Management") and assessed, according to the same methodology and the same criteria, especially in terms of:

- Risk likelihood – four levels from "Improbable" to "Probable";
- Impacts – Profit and loss, operational, human and environmental, image and reputation impacts.

Risk criticality (likelihood multiplied by impact) is scored from 1 to 10.

Additionally, for environmental indicators, Alstom also ensures consistency with its ISO 14001 environmental risk mapping.

Assessing the risks and opportunities

Risks and opportunities are assessed by the teams in charge of each risk management in the Sustainability and Corporate Social Responsibility steering committee: Sustainability and CSR, Sourcing, Human Resources, Marketing, R&D, Environment Health and Safety, Ecodesign, Communication, Ethic and Compliance as well as by the Risk Department.

Consolidated results are discussed during a specific workshop including all functions to ensure consistency of understanding and validate final results. The risk and opportunity mapping is then presented and validated by the Ethics, Compliance and Sustainability Committee.

Selecting main non-financial risks and opportunities

The main non-financial risks and opportunities selected are those with a criticality score equal to or greater than six.

14 main risks or opportunities have been identified: low carbon solutions (p. 214), adaptation to climate change (p. 217), ecodesign & circular economy (p. 218), energy performance of operations (p. 220), employees health and safety (p. 223), attractivity and retention (p. 226), people development (p. 232), ethics and compliance (p. 235), railway safety (p. 239), sustainable sourcing (p. 240), respect of human rights (p. 243), relationship with customers (p. 245), encouraging local development (p. 246), relationship with local population (p. 247).

The following risks are common between the chapters 4 and 6: Attractivity and Retention [(2)], Ethics and Compliance [(3)], and Railway Safety [(4)].

The main policies, action plans, results and performance indicators associated to these risks are presented in this chapter.

Information related to other risks

Alstom considers that the information regarding the fight against food waste and food insecurity, respect for animal welfare and responsible, fair and sustainable food is not relevant with regard to the main activities of the Company. Since the Company's food waste is only linked to meals taken in the canteens, it is part of non-hazardous waste and is not specifically monitored.

Tax evasion risk is included in the Sustainability and CSR risk mapping and does not stand out as one of the Company's major risks, however the related information can be found in annex, page 265.

Information related to collective agreements, employees' working conditions and actions against discriminations and promoting diversity, also integrated in the Company's risk mapping, are described in pages 226 and 263. Measures taken in favour of people with disabilities are included in the section "Attractivity and Retention", page 226.

Finally, additional information on other risks and issues of interest to stakeholders is presented on page 256.

(1) *Mouvement des Entreprises de France.*

(2) "Attractivity and Retention" corresponds to the section "Recruitment and Retention" in chapter 4 (*Risk Factors, Internal Control and Risk Management*).

(3) "Ethics and Compliance" corresponds to the section "Compliance" in chapter 4 (*Risk Factors, Internal Control and Risk Management*).

(4) "Railway Safety" corresponds to the section "Accidents" in chapter 4 (*Risk Factors, Internal Control and Risk Management*).

LOW CARBON SOLUTIONS

CO_2 emissions are one of the main key drivers of Climate Change. Despite the efforts made to reduce them worldwide, emissions from fuel combustion continue to rise, in particular due to the contribution of the transport sector. Indeed with 8 Gt emitted in 2015, transport represented 25% of world-wide emissions from fuel combustion [1]. It is one of the only sectors where emissions are still growing, even in developed countries.

In this context, the implications of the United Nations Paris Agreement on Climate Change (2015) are clear: in order to limit temperature rise to well below 2°C by the end of the century, it is paramount to achieve carbon neutrality by 2050. In this sense, a major transition is currently on-going in the transport sector where the move away from fossil fuels is gathering pace. Some important ambitions have been set at the political level with countries announcing a halt to sales of new cars equipped with combustion engines *e.g.* Norway (2025), Sweden (2030), Denmark (2030), India (2030), France (2040), United Kingdom (2040), Spain (2040).

To drive transformation in transport, most international actors acknowledge that the "Avoid Shift Improve" approach, which defines the priorities for action, should be the way to decouple mobility needs from CO_2 emissions generated by transport. Therefore, the Rail Sector will be a key contributor to reduce greenhouse gases (GHG). It is indeed already largely electrified and provides motorised transport services with CO_2 emissions per passenger-kilometer amongst the lowest of the various transport modes [2].

Alstom strongly believes that carbon neutrality in transport will be achieved through the transfer of significant flows to cleaner modes (electrical and shared transport), enhanced energy efficiency and optimised multimodality supported by smarter transport systems. It is likely that different routes to neutrality will emerge depending on local conditions. In any case, Alstom is a world leader in sustainable mobility solutions and is globally well prepared to benefit from new opportunities arising from the reinforcement of public policies around Climate Change.

In rail, diesel-powered passenger services still represent 25% of the worldwide total. Diesel operations are mainly concentrated on regional passenger services and freight transport. Considering the reinforced pressure on diesel for environmental and public health reasons, Alstom expects to see a progressive phasing out of diesel on the markets it is serving in this segment, mainly in Europe, in the medium term.

Today electrical rail solutions and systems represent most of the Company's orders. The supply of diesel rolling-stock (locomotives or trains, including bimode) represented less than 5% of Alstom's orders over the last three years. This includes 144 trains and locomotives, 50% of which for Germany and the rest for France, Senegal and Switzerland.

The reinforced need to decarbonise transport and to favour low carbon emission modes through public policies, regulations and increased financing capacities is an important market driver pushing the demand for electrical rail solutions. Therefore, the main risks and opportunities the Company could face in relation to demand for low carbon solutions would be the following:

- major business opportunities to provide customers with competitive sustainable and low-carbon solutions to mitigate and/or adapt to Climate Change (less GHG, extreme weather adaptability);
- reduced orders for diesel Regional trains, as countries progressively phase-out diesel;
- the inability of customers to decarbonise their energy mix which would ultimately impact the good environmental performance of electrical rail.

Strategy and policies

The Company acknowledges its responsibility to decarbonise both its operations and its product and service offerings.

Alstom is committed to supporting carbon neutrality in transport and has defined its Corporate Climate and Energy Transition strategy covering all its activities along three axes, based on its analysis of the sector and the Company's challenges:

- placing energy-efficient electrical rail solutions at the heart of its portfolio – Alstom has set a target to reduce the energy consumption of its portfolio of solutions by 20% by 2020 compared to 2014;
- enabling energy transition for sustainable mobility solutions;
- decarbonising operations (for objectives see the section on Energy performance of operations, page 220).

In this context, Alstom intends to limit the development of diesel solutions and to focus on the environmental performance of its existing trains (such as upgrades to comply with the latest air emissions standards) or new hybrid solutions.

The Sustainability & CSR function coordinates the transversal deployment of the Climate and Energy Transition Strategy. It is deployed operationally through a large number of internal actors involving Engineering, Ecodesign, Marketing and Strategy, Energy Efficiency, Environment Health and Safety teams.

The Group supports the Science-Based Targets initiative principles. This year, it has completed a feasibility study to assess methodologies applicable to rail sector and plans to complete a more extensive analysis of potential long-term targets. In addition, Alstom has joined a group of 12 companies working with the French Organisation AFEP (Private French Companies Association – *Association Française des Entreprises Privées*) to assess long-term carbon scenarios available in the market (IEA, IPCC, IDDRI) and determine good practices on the use of such scenarios for strategic planning and reporting.

(1) IEA – UIC, Energy Consumption and CO_2 Emissions: focus on passenger rail services, Railway Handbook 2017.
(2) IEA, The Future of Rail: Opportunities for energy and the environment, 2019.

Processes and action plans

In order to identify priorities for action, the Company conducted several assessments of its carbon footprint considering direct and indirect emissions including emissions from the use of its products and services, which represent the largest share of the Group's carbon footprint.

Alstom established a method to assess CO_2 emissions from the use of its products and services, as well as emissions related to the materials needed for their construction. These emissions were evaluated for all products and services sold during the year, over their whole lifetime, and taking into account normalised conditions of use (*e.g.* nominal capacity of transport, energy mix in the country of operation). A detailed analysis of the expected evolution of emission factors for electricity was also completed for countries where Alstom has developed projects, based on the national commitments under the Paris Agreement (NDCs).

Placing energy-efficient electrical rail solutions at the heart of the portfolio

Alstom's customers often rank amongst the top electricity consumers in their respective countries and therefore energy efficiency is a key market differentiator. This is the reason why Alstom's design activities are strategically focused on delivering energy-efficient solutions that can be improved for even greater efficiency.

Standardised methods to determine energy consumption of solutions have been defined whilst the consolidated performance of the solutions portfolio is regularly assessed through a specific KPI. Thanks to its permanent focus on innovation, Alstom is pursuing its objectives to enhance efficiency through improved traction systems, weight reduction, improved aerodynamics and heating/air conditioning systems, ecodriving, braking energy recovery and storage, and optimisation at system level.

Innovation is a key driver for improving the energy efficiency of solutions. Alstom strives to deploy the best available technologies across its entire portfolio where relevant. In terms of energy efficiency, innovation is managed under the Company's R&D and Innovation processes and is positioned as a System approach in order to ensure the performance of the entire network instead of "only" one sub-system alone. This activity is structured around four axes:

- "Design, lifecycle and impacts" looking to improve intrinsic behavior, performance and impact of products and solutions.". This includes mass reduction programmes using composite materials and re-designed parts; the optimisation of aerodynamics; improved efficiency of electric or diesel traction systems (permanent magnet motors, optimised engine block control systems, new traction chains, powerful traction auxiliaries); and low consumption auxiliary comfort equipment (lighting, heating, and air conditioning). This systematic and systemic approach to energy balance analysis in the design phase applies to all materials in the portfolio;
- "Energy sources and renewables", looking at the optimisation of sources, conversions, transformations and transport of energy. The objectives here include identification and selection of the most adequate energy sources; reduction of losses and wasted energy;
- "Operations, recovery and storage", focusing on the efficiency at point of use and optimised operations. Here the focus is on operations' optimisation, such as time table synchronisation, running profile modifications, braking efforts, line receptivity that will generate energy savings while maintaining the performance of the network. Efforts are made to minimise energy losses and maximise its reuse through electric braking until full stop in order to capture the available energy locally (*e.g.* through photovoltaic panels) thus avoiding the need to transport it over substantial distances, which usually results in losses and lower efficiency. A key factor of optimum energy use is the maximisation of braking energy recovery and its use. Finally, storage, autonomy and hybridation subjects for rolling stock and the entire system will support specific missions and improve further energy efficiency;
- "Smart grid & smart charging" exploring benefits from mutualisation of several networks, looks at energy flows beyond a single network and optimises energy and power of multiple systems using the same energy resource.

In 2018, Alstom was awarded a contract to develop and supply the trains for metro lines 15, 16 and 17 of the Grand Paris Express. These trains will benefit from the latest traction technology and auxiliary converters developed by the Company, thereby guaranteeing optimised energy consumption. Electric braking will operate to a very low speed, allowing full recovery of the braking energy, which will be then used for charging the batteries or supplying power to the general electricity network.

This year Alstom put into commercial service its tramway solutions in Nice using the latest on-board battery technologies that can be recharged in 20 seconds at the station/during stops.

The Hesop™ reversible substation developed by Alstom for urban and suburban networks also makes it possible to achieve significant energy savings. Indeed, almost all the electrical energy that can be recovered on trains equipped with a regenerative braking system can be reinjected into the network. Hesop™ reduces heat dispersion and therefore the associated ventilation requirements in underground operations. To date, 128 Hesop™ converters have been ordered or delivered for projects such as the Riyadh subway (Saudi Arabia), the Sydney tramway (Australia), the Panama subway and the Dubai subway (United Arab Emirates). In 2018, Hamburg metro also signed a letter of intent to test Hesop™ substation on its network.

Enabling the energy transition towards sustainable mobility solutions

Moving away from diesel in rail

More and more operators are taking measures to reduce the environmental impact of diesel operation by specifying severe emissions requirements for motors, favouring diesel-electric traction that provides more flexibility and efficiency, or by using hybrid solutions (such as diesel and batteries) and alternative fuels.

The Group is ready to accompany its clients in this major transition by offering efficient alternatives to diesel trains, such as: electrification, hybrid traction and hydrogen trains. Ultimately, decarbonisation will involve electrical traction, which is the core of the Company's expertise.

Alstom has developed the knowledge and the expertise to deliver a full range of electrification services. For instance, the Company is currently providing the electrification system for the 343-kilometer-long Eastern portion of the Dedicated Freight Corridor in India.

The Company developed a large range of Hybrid solutions including the Prima™ locos H3 and H4 and continues to develop its range of hybrid solutions for projects. For example, in 2018, jointly with SNCF and the French Regions Grand Est, Nouvelle-Aquitaine and Occitanie, Alstom announced the development of a hybrid version of the regional train Coradia™ Polyvalent. This should be submitted to the first tests in 2020 and allow a 20% reduction in energy consumption. On this train, two diesel power blocs will be replaced by batteries in order to optimise energy consumption, greenhouse gases emissions, traction and maintenance costs.

Alstom also signed an agreement with Abellio Rail Mitteldeutschland, Nahverkehrsservice Sachsen-Anhalt GmbH (NASA) and Rolls-Royce to conduct technical feasibility studies on the integration of hybrid engines into Coradia Lint™ Regional trains and their use on Dieselnetz Sachsen-Anhalt routes (a diesel-powered rail network in Germany operated by Abellio). This letter of intent includes the rehabilitation of three initial trains. Besides, the deployment to the entire fleet of 54 Coradia Lint™ is under consideration. The hybrid engine combines a modern diesel engine with an electric motor as well as batteries to recover braking energy, reducing fuel consumption and CO_2 emissions by up to 25%.

To fully decarbonise operations on non-electrified lines, Alstom has become the first manufacturer in the world to offer regional trains powered by hydrogen fuel cells. In November 2017, Alstom signed its first contract to provide 14 Coradia iLint™ trains to the region of Lower Saxony, Germany and around 50 trains are subject to letters of intent from other German regions. In September 2018, two pre-series trains homologated by the German Federal Railway Association have entered the commercial service between the cities of Cuxhaven, Bremerhaven, Bremervörde and Buxtehude.

Alstom closely monitors the market for trains operating on non-electrified lines in order to determine the need for further development of alternatives to diesel.

Expanding the range of solutions for low carbon mobility

Beyond rail, Alstom, as a worldwide leader in electrical traction and complex transport systems, seeks to position itself as a global provider of sustainable mobility solutions in the following fields:

- Smart cities – as public authorities and transport operators henceforth target clean mobility services and ensure coordination between several mobility services (*e.g.* public transport, car-sharing, urban logistics, bike renting), Alstom is developing:
  - systems to analyse and manage multi-modal flows of transport such as its Mastria™ platform. This platform facilitates the supervision and optimisation of public transport flows in real time whilst allowing a quick reaction to incidents. Since September 2018, the Mastria™ solution has been under test in Paris-La Défense district with a group of partners including RATP, to establish traffic forecasts for multimodal operations and manage incidents,
  - new mobility solutions to support the energy transition to electrical and shared mobility. The Aptis™ solution combines the flexibility of a bus with a level of comfort similar to that of a tram for an improved passenger experience with excellent operational efficiency. Alstom signed its first contract in March 2019 to deliver 12 buses to the city of Strasbourg. In addition, Alstom is working to enhance its capability in the field of autonomous transportation;
- Long-distance road transport – long-distance transport for freight is likely to be the most difficult segment to decarbonise in the future as the power requirements and distances involved for this segment imply a high level of energy supply. Alstom is developing an innovative infrastructure solution for dynamic charging (e-highways), based on its proven APS (ground level power supply) technology that has been adapted with Volvo and is currently under test at Volvo's headquarters in Sweden. The next stage will be to implement demonstrator projects and then full-scale pilot projects. This technology will enable electricity to be supplied to any type of vehicle, no matter what its height may be, which is a key differentiator.

Decarbonising operations

Alstom has been driving the reduction of the environmental footprint of its operations over the last 10 years with significant progress made. The Group aims to reach carbon neutrality through a step by step approach. Indeed, Alstom committed to reduce the CO_2 emissions intensity of its operations by 10% by 2020 *vs.* 2014 and has already delivered this objective (cf. page 222); the Company has also set a target to switch to 100% electricity supply from renewable sources by 2025.

Other sources of emissions (gas consumption, logistics or business travelling) will be targeted at later stages so as to progress towards decarbonisation by 2050.

Joining the public debate and common initiatives

Alstom fully supports the deployment of the United Nations Paris Agreement on Climate Change (2015) and the strategy of the Global Climate Action Agenda on Transport. Therefore, the Company follows closely the United Nations Framework Convention on Climate Change (UNFCCC) negotiation process. Alstom has also participated in the UNFCCC's Conferences of the Parties (COPs) since 2015 in Paris (France) including, most recently, in Katowice (Poland) in 2018. In particular, the Company has contributed to the visibility of transportation issues and the promotion of sustainable mobility through its support to the Paris Process on Mobility and Climate (PPMC). Alstom also promotes its contribution to the transition towards sustainable and low-carbon transport systems through its efficient, environment-friendly and attractive solutions and initiatives.

Currently, almost 75% of the Nationally Determined Contributions (NDCs) established by countries under the Paris Agreement already identify transport as a key mitigation source and 19% make a specific reference to rail. Alstom plans to continue bringing its contribution to the public debate in order to support a larger focus on transport emissions targets and roadmaps integration in the process of updating the NDCs.

Moreover, since 2014, the Group has been a member of the Sustainable Low Carbon Transport Partnership (SLoCaT), which promotes the integration of sustainable transport in global policies on sustainable development and Climate Change. Since 2017, Alstom has also been active as a founder member of the Transport Decarbonisation Alliance (TDA) which gathers countries, cities, regions and companies into an eco-system of frontrunners to deploy roadmaps for the decarbonisation of transport.

The Company continues to support sectorial initiatives such as the Low Carbon Rail Transport Challenge presented by the International Railway Union (UIC) which targets, *inter alia*, to reduce average CO_2 emissions from train operations by 50% by 2030 and by 75% by 2050, compared to 1990 as a baseline year. To date, specific CO_2 emissions from passenger rail traffic are showing a decrease of about 40% compared to 1990 levels.

Main results and performance indicators

GHG emissions related to products and services sold (Indirect GHG emissions – Scope 3)

In the fiscal year 2018/19, the carbon footprint of products and services sold by the Company was estimated at approximately 18 million tons of CO_2 over an average lifespan of 30 to 40 years.

A significant part of these emissions (around 40%) is related to the Locomotives activity which provides transport solutions for heavy freight. Moreover, Alstom provides electrical solutions all over the world, including in countries where energy mixes are still largely carbon-based (India, Kazakhstan or South Africa). In this context, Alstom's first priority is to reduce these emissions by continuing its efforts to improve the energy performance of its solutions. Opening the dialogue with its clients concerning the options for supplying trains with electricity from renewable energy sources is also essential.

Regarding passenger transport solutions, emissions amount to an average of 6.5 g CO_2/passenger-km for a total transport capacity of around 16,000 billion passengers-km. This confirms that Alstom's solutions rank amongst the most efficient in the transport sector for low-carbon mobility.

Percentage energy consumption reduction

Alstom has set a key performance indicator to monitor its solutions' energy efficiency. The indicator consolidates the global energy reduction of its portfolio based on a weighted average of the consumption reductions from standardised trains and systems products- so called "reference solutions" – as well as from the projects which represent more than €1 billion in sales.

Today, Alstom is able to offer to its clients electrical rail solutions that are 17% more energy efficient on average than in 2014.

Other indicators

Next year, Alstom plans to consolidate a new indicator on its contribution to energy transition towards sustainable mobility solutions.

Emissions from operations are described in detail in the section "Energy performance of operations", page 220.

ADAPTATION TO CLIMATE CHANGE

With the average temperature of the earth having risen by about +1°C since the 1960s, climate change is starting to generate an increasing number of exceptional weather events such as floods, heat waves or typhoons. Despite efforts made by countries, companies and civil society under the Paris Agreement, it is estimated that the number of events will continue to increase in the future.

The main risks from Climate Change to Alstom's business include:

- the risk of destruction of installations and supply chain and/or the inability to perform if Alstom's assets are not adapted to new weather conditions resulting from climate change;
- the risk of product damage on site during the execution of contracts in the context of exceptional events;
- liability risks in projects if solutions are unable to withstand future evolving weather conditions.

Strategy and policies

Protection of assets from natural disasters is part of the Sustainability & CSR policy and is under the responsibility of the Environment Health and Safety Department for prevention measures and the Operations Legal Department for insurance.

The objective is to anticipate risks by taking prevention measures in order to avoid severe impacts from such extreme natural events. Initially the approach was covering mainly permanent facilities but it is now expanded to cover construction project sites.

Prevention and protection measures are integrated in the environmental management system which is certified ISO 14001.

Adaptation of the solutions to specific climate conditions is integrated in their design. Alstom ensures solutions delivered to customers are able to meet specifications as per requirements in compliance to Alstom Quality & Railway Safety policy.

Processes and action plans

Alstom manages separately the adaptation of assets and the adaptation of solutions to Climate Change.

Ensuring resilience of operations

A Group annual risk assessment review is performed as part of the annual budgeting and three-year plan process to identify, analyse and anticipate the significant internal and external risks to the Company. This risk mapping has integrated specifically over the past several years a review of Climate Change risks. The risk is assessed by taking into account the potential impact of extreme weather conditions – such as tropical cyclones, extra-tropical cyclones, hail storms, storm surges, flash floods and tsunamis – on the manufacturing activities, sites and buildings of the Company. It also takes into account geographical risk indices and probability ratios provided by insurance companies in order to identify the most exposed company facilities.

In fiscal year 2017/18, Alstom mandated its insurance company Allianz to complete a specific analysis of its exposure to natural disaster risks, taking into account the evolution of climate data and its activity perimeter. This analysis allowed to identify which events generate the highest risk for the Company, such as flooding in the United Kingdom or large storms in Europe.

Moreover, on-site inspections are performed on an annual programme by Allianz to ensure that appropriate prevention and protection measures are in place. Based on the results, improvement actions are deployed as necessary. For example, the Savigliano site in Italy prepared a flooding plan as part of its business continuity plan followed by a specific external analysis leading to further mitigation measures being proposed. Similarly, the Warrensburg site in the United States, which is exposed to tornado risk, is equipped with an alert system to trigger specific protection measures (*e.g.* the use of a storm shelter) when facing exceptional weather conditions.

In order to expand the perimeter of activities covered by the review process, Alstom launched early 2019 an analysis of exposure to natural risks of its main project sites. The results will be used for permanent sites to support improvement in the future.

The priority for the years to come will be to ensure that all appropriate prevention measures are in place at the most exposed sites and start to integrate climate impact risk analysis in the assessment of the Company's supply-chain and investment strategy.

Developing resilient solutions

Finally, in terms of adaptation, Alstom is able to propose resilient solutions to climate change. Besides, it is an important topic for the rail industry. In Europe alone, it has been estimated that the annual cost of damage from climate events on rail infrastructure amounted to about €300 million, about 80% of which was as a result of floods [1].

Having years of experience in demanding projects at many sites exposed to exceptional weather conditions, Alstom has the ability to supply trains and systems that are resilient to climate change.

Alstom already supplies rail solutions operating in very different conditions from the desert in Dubai to the steppes of Kazakhstan and considers that technical solutions do exist to operate in potentially more stringent environmental conditions.

This expertise includes, *inter alia*, enhanced heating/ventilation/air conditioning functions, power supply sub-stations resilient to high temperatures and equipment designed to resist corrosion from saline atmospheres. Alstom is also able to undertake a complete assessment of the resistance capacity of its transport system when faced with extreme weather conditions, to validate its resilience to climate change, as was done for the Sydney tramway project.

Main challenges in the future could come from the evolution of technical specifications in projects. Until now only limited evolutions have been noted.

Main results and performance indicators

The main Key Performance Indicator followed is the number of natural catastrophes generating more than €2 million in product damage and business interruption. In FY 2018/19, one event was recorded in Kochi (India) on a project site as a result of exceptional flooding. This triggered the analysis of risk exposure for project sites which is currently in progress.

No other event was recorded in previous years.

ECODESIGN & CIRCULAR ECONOMY

Alstom consistently applies a life-cycle approach to its products and services in order to maximise the environmental and economic benefits over time. This approach allows the Company to benefit from new opportunities and to limit the ecodesign and circular economy risks, such as:

- the commercial opportunities relating to Alstom capability to provide its customers with ecodesigned and low environmental footprint solutions;
- the commercial opportunities linked to the reuse and recovery of materials through products and services integrated circular economy processes;
- the risk related to non-compliancy of products & solutions, especially relating to REACH [2], F-Gases [3] and similar existing provisions (TSCA [4] in the United States or China REACH in China [5]).

Strategy and policies

In terms of products and services, Alstom favours a life cycle approach to select the main levers of environmental performance and ensure an effective way to control and reduce the footprint of its solutions. This approach covers the different aspects of the solutions, including environmental aspects related to circular economy principles, *i.e.* those related to resources and their efficient management.

Alstom's ecodesign approach is based on three essential elements: life-cycle thinking, consideration of customer and stakeholder expectations, and continuous improvement.

The priorities set in Alstom's ecodesign policy focus on the:

- energy efficiency of rail transport systems;
- reduction of noise and vibrations;
- use of greener, recyclable, and natural materials;
- reduction of air emissions;
- end-of-life management of products, particularly in maintenance activities.

This policy, applicable to the whole Group, is embedded in its design activities as well as in its environmental management system (ISO 14001). It is being promoted by the Chief Technology Officer (CTO) and the Vice President Engineering, and is aligned with the ecodesign referential, supported by a network of more than 100 experts (ecodesigners, acoustics experts, materials experts or energy engineers).

(1) Project WEATHER, 2014.

(2) Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals.

(3) Regulation (EU) No. 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases.

(4) Toxic Substances Control Act, codified as 15 U.S.C. 2601-2671.

(5) China MEP Order 7 – Measures for Environmental Administration of New Chemical Substances issued in January 2010 by the Chinese Ministry of Environmental Protection, known as China REACH.

Based on environmental assessments including life cycle assessments, Alstom identified its environmental priorities and decided to follow the deployment of its ecodesign activities on its solutions using two indicators:

- the energy consumption reduction of its solutions (refer to the section on Law Carbon Solutions, page 214);
- the ecodesign coverage of its solutions, including the circular economy aspects.

Processes and action plans

In order to deploy its policy, Alstom has set up and maintains:

- a three-year work plan which is updated every six months and approved by the top management;
- a referential defining the ecodesign process along with instructions, standards, and competency assessment.

Ecodesign work plan

The Alstom ecodesign work plan has three steps and is based on the principle of continuous improvement. This work plan is also integrated in the Alstom environmental program and is part of the ISO 14001 environmental management system. Updated regularly, it addresses seven strategic axes:

- the coverage of the solutions portfolio. This year, Alstom covered its "on board" signalling solution for high-speed lines; its hybrid regional train; its high-speed train Avelia Liberty™; and its 25kV electrification for high speed lines;
- the operational performance. Early in 2019, an informatic tool was launched to capitalise on and fluidify environmental data management, such as recyclability, material composition and emissivity. In particular, it ensures consistency with other tools such as PLM (Product Life Management);
- the environmental assessment. In this sense, a dedicated road map for life-cycle analysis was implemented;
- the environmental risks and opportunities linked to solutions and products. For example, the presence of nano-materials and their associated risks have been evaluated;
- the standards and regulations. This year, Alstom has defined its plan for refrigerants – fluids used in heating and air conditioning systems – and has taken the lead of the UNIFE [(1)] "Chemical Risks" group;
- the communication. This axis is dedicated to the choice of programmes used for environmental declarations;
- the human resources and competencies. In 2018, the ecodesign assessment grid was updated. All ecodesign engineers and experts were assessed.

Starting 2018, each Alstom site with development and design activities is required to define its yearly ecodesign objectives. At solutions level, specific and relevant objectives are captured in the ecodesign dashboard.

Processes and way of working

Alstom's ecodesign process is based on a set of management practices. It is gradually being deployed to all solutions for which the approach is relevant.

The referential ensures the coverage of different needs, including:

- enrolling ecodesign and the circular economy philosophy in the Company's DNA. For example, all engineers follow an e-learning on sustainability and CSR. To date almost 60% of engineers have done it. Some training modules as "Ecodesign for All" were delivered at Barcelona, Madrid, Sao Paolo, Savigliano and Charleroi sites and adapted to functions such as Engineering, EHS and Sourcing. New ecodesigners have been trained on modules such as "Recyclability and End of life", "Life Cycle Assessment", "Regulations on dangerous substances" and "Emissions and air quality";
- integrating the environmental dimension in the development of solutions and delivering products that meet customer expectations and requirements. For all new developments, performance and market elements are assessed in order to determine how best to implement the ecodesign concept. Besides, during the year, 23% of Alstom's instructions and standards were updated (the documentation contains more than 60 documents);
- ensuring compliance with standards and regulations;
- promoting responsible solutions and communicating on environmental performance through Environmental Product Declarations.

Within this framework, Alstom is continuously improving its competencies, practices and standards in respect of:

- the circular economy, lifetime, end-of-life management, and recyclability of systems and subsystems. With a complete portfolio of renovation and modernisation solutions, Alstom offers customers the ability to extend the lifetime of their systems whilst allowing for an upgrade of comfort and services. Alstom also delivers end of life manuals geared to optimised and safe recycling. For example, the dismantling manual for X'trapolis suburban trains specifies how the 240 tons of train should be dismantled in order to achieve 93% of recyclability and 99% of recoverability. Moreover, the Sydney Metro has a recyclability rate of 95% while the recoverability rate is of 98.5%;
- the use of recycled materials in the new rolling stock has also improved. The new tyred metro contains more than 30% of recycled content;
- the efficient use of resources. For the new Driver Machine DMI ACE Driver System Interface, the ecodesign process, implemented in collaboration with the supplier, reduced the use of natural resources by 62% compared to the previous solution. Urbalis Fluence™ is a signalling solution that allows the trackside equipment to be reduced by 20%. Alstom also offers, for the rolling stock seats, the ability to repair them instead of scrapping them involving a simple replacement of foam and fabric while the metal frames can be reused;

(1) The Union of European Railway Industries.

- limitation of hazardous substances (in particular the so-called Substances of Very High Concern (SVHC) according to the REACH Regulation). The pro-active approach has allowed a lot of components containing candidate substances to be detected and secured. By this means, 100% of the cases concerned by Annex XIV are substituted before legal deadlines;
- greener, responsible and renewable materials. For balises distributed along the track for signaling purposes, Alstom has developed a solution that contains bio-based material. This solution allows significant savings in terms of resources depletion (>90%), air pollution (>10%) and water depletion (>70%);
- energy efficiency. With its future Avelia Horizon[(1)] high-speed train, Alstom has decreased energy consumption per passenger by 15% to 35% depending on the usage scenario while energy consumption was decreased by close to 20% for the new Coradia iLint™ regional trains powered by hydrogen fuel cells;
- emissions and air quality. Optimised electrical braking allows several tons of emissions per year and per fleet to be avoided;
- noise emission reduction for new and for modernised rolling stocks. A 10 dB improvement in metro gearbox noise was achieved after an optimisation of the gear micro-geometry. Furthermore, a 5 dB noise level reduction related to the heating and air conditioning system, was achieved during the modernisation of the Los Angeles Metro;
- life-cycle and environmental assessment (LCA). Two years ago, an internal verification panel was set up in order to improve accuracy and standardise Group practices. Through this, the most important studies are reviewed critically before any use or publication. As an example, the LCA of Sydney Metro's interlocking system Smartlock™ 400 underwent this process this year.

Main results and performance indicators

By end of March 2019:

- the average energy consumption reduction is 17% compared to 2014 (refer to the section "Law Carbon Solutions", page 214);
- 28 solutions – components (bogies, power station), rolling stock (locomotive, tramway Citadis™, metros, High Speed trains), infrastructure solutions (electrification metro, concrete track) and signalling solutions (Atlas™ 200, Urbalis Fluence™) – are classified as "ecodesigned", *i.e.* submitted for environmental footprint reduction with targets, objectives and a follow up of environmental performance. The number of solutions classified as "ecodesigned" was of 25 in March 2018.

Within its life cycle analysis Road map, Alstom undertakes diagnostics based on LCA. These diagnostics allow significant environmental aspects to be determined, thereby giving the opportunity of improvement and guiding technical choices. During the fiscal year, seven of these key studies were submitted to internal critical review. Furthermore, Alstom confirms its willingness to communicate transparently the environmental performance of its solutions by publishing Environmental Product Declarations. Such publications offer an extended view of environmental impacts along the life cycle. In 2018/19, Alstom published four Environmental Product Declarations: Metro Sydney, On-board Atlas™ 200, Metro Electrification with rigid catenary, Concrete track for mainlines.

ENERGY PERFORMANCE OF OPERATIONS

The Company can be exposed to different environmental risks, including pollution or the loss of environmental certifications and operating permits. However, Alstom considers that one of its main challenges is related to the consumption of electricity, because of the risk of important increase in energy costs depending on evolution of electricity prices and energy performance.

Moreover, the goal of reducing the intensity of greenhouse gases is directly linked to the goal of reducing energy intensity.

Strategy and policies

Environmental commitments are made at the highest level of the Company and are implemented in an Environment, Health and Safety (EHS) policy signed by the Senior Vice President of Human Resources. The scope of application of the policy is described in an internal standard that also defines the applicability criteria. It includes the main activities, such as manufacturing sites for rolling stock and components, infrastructure and systems projects, service activities and permanent offices. Consequently, Alstom has made a commitment to:

- cause no harm to the environment;
- continually improve its environmental performance;
- maintain an environmental management system;
- strengthen the environmental culture of its employees and subcontractors;
- maintain high levels of environmental skills and offer training at every level of the organisation.

This policy is reviewed on a regular basis and is distributed to all parties concerned. It is displayed on every Alstom site and published on the Company's website.

(1) Avelia Horizon is Alstom's high-speed train solution for SNCF's "TGV du futur". TGV is a SNCF brand.

Environmental management, including energy, is based on an environmental programme, which encompasses the Energy Plan covering the following aspects:

- consideration given to environmental issues at all levels of the Company;
- definition of environmental objectives in the organisation and periodical results reviews at the same frequency and in the same internal governance committees as for financial results reviews;
- implementation of an environmental programme: development and deployment of internal standards, assessment tools, targeted training actions that involve employees, communication and awareness-raising actions;
- an EHS ("Environment, Health & Safety") organisation managed in the Regions and coordinated centrally.

The Alstom Management System includes the requirements of ISO 14001, which contribute to the process of environmental improvement of the sites.

Processes and action plans

On the basis of its environmental risk mapping, Alstom has set three main goals to improve the energy performance of its sites, namely:

- reduce energy intensity by 10% compared to the baseline year 2014;
- reduce the intensity of GHG emissions by 10% compared to 2014 as a baseline year;
- use 100% of electricity from renewable energy sources by 2025.

Energy intensity

Energy intensity is defined by the quantity of energy consumed related to Alstom's activity. Activity is measured in hours worked. The quantity of energy consumed is recalculated in order to integrate the climate factor. Consequently, the share of energy used for heating is corrected to take into account the impact of winter temperatures on heating energy consumption. This correction is made on a monthly basis using the "Unified Degree Day" factor that estimates daily the difference (by geographical zone) between a baseline temperature and the average of the measured temperatures.

The Group's energy consumption increased slightly over the last year. For instance, gross consumption of natural gas (which is the main source of heating and energy for the painting booths) increased by 3.6%. Consumption of electricity was stable.

These increases in consumption are mainly driven by the increase in production and the integration of new entities in the applicability scope.

At the end of 2018, energy intensity (due to the correction made to the climate factor) had dropped by 3.2% compared to 2017 and by 12.6% compared to the baseline year (2014). Therefore, Alstom is on the track to reach its 2020 target.

Indeed, in 2016, a five-year energy plan was launched, targeting the 20 largest consumers. The deployment and monitoring of action plans as well as the sharing of best practices are overseen by a three-level governance structure (central, regional, site). The regions Europe and France set up energy working groups this year. This initiative has generated a strong dynamic to make progress in these areas and to share best practices. For example, the Charleroi site in Belgium managed to drop its energy intensity by 12% in one year after installing a cogeneration plant, combined with a central building management system that supplies the exact amount of electricity and heat that the site needs. The Valenciennes site in France also acquired a cogeneration plant while another project is under way in Savigliano, Italy.

Finally, it should be noted that more energy-savings should be made in 2019 thanks to the Group-wide initiative to deploy LED lighting.

Greenhouse gases emissions related to operations (Scopes 1 & 2)

As it has been emphasised above, the intensity of greenhouse (GHG) gases is directly linked to the goal of reducing energy intensity. Indeed, the intensity of greenhouse gas emissions is defined by the quantity of greenhouse gases released by energy consumption, expressed in kilogrammes CO_2 equivalent, in relation with Alstom's activity, which is measured in hours worked. The goal of reducing the intensity of greenhouse gases is directly linked to the goal of reducing energy intensity. The quantity of greenhouse gases produced by energy consumption takes into account the climate factor.

Greenhouse gases produced by energy consumption make up the vast majority of GHG in this area and therefore the Group measures them separately from fugitive emissions of hydrofluorocarbons (HFCs). Consequently, only the greenhouse gases produced by energy consumption are included in the intensity indicator.

At the end of 2018, the intensity of GHG emissions from energy consumption had decreased by 12% compared to 2017 and showed a 27% decrease compared to 2014. The share of green electricity in energy supply was taken into account for the first time in 2018, thus reducing equivalent net CO_2 emissions (for the share of electricity from renewable sources, a zero-emission factor is taken into account).

Use of renewable energies

The Group has made an ambitious commitment to use 100% of electricity from renewable energy sources by 2025, as part of its global initiative for the environment.

In this sense, the Company has signed contracts for the supply of electricity from renewable energy sources where it was economically viable. For example, all of Alstom's electricity supplies come from green sources in Belgium, the Netherlands and the United Kingdom, and on its Santa Perpetua site in Spain. In France, the share of electricity from renewable energy sources in 2018 is 50%, (excluding the Belfort site where Alstom does not manage directly the electricity contract). In Germany, all sites are powered by 45% of green energy. Finally, the Hornell site in the United States was been supplied with green electricity since January 2018 through the purchase of green certificates.

Besides, initiatives have been launched in Italy and India to install solar panels to self-generate green electricity.

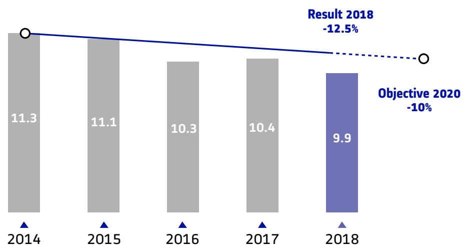
In total, in 2018, 40% of electricity supplies were green.

Main results and performance indicators

ENERGY INTENSITY

(in kWh/hours worked)

2020 Goal: Reduce the energy intensity by 10% compared to 2014 as a baseline year.



Details of energy consumption

(in GWh – gross values)	2015	2016	2017	2018
Natural gas	245	231	223	231
Butane, propane and other gases	7	8	8	8
Domestic heating oil	10	6	5	6
Steam/heat networks	35	42	41	42
Electricity	175	181	184	187
Coal, heavy fuel oils and other fuels	0	0	1	1
TOTAL ENERGY CONSUMPTION	**472**	**468**	**462**	**475**

Source: Alstom Teranga.

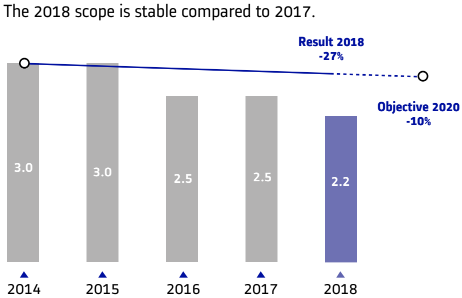
	2017	2018
Share of electricity from renewable sources	New indicator	40%

GREENHOUSE GASES EMISSIONS INTENSITY

(in kg CO_2 equivalent/hours worked)

2020 Goal: Reduce the intensity of GHG emissions by 10% compared to 2014 as a baseline year.

The 2018 scope is stable compared to 2017.



Greenhouse gases emissions details

(in kilotonnes CO_2 equivalent – gross value)	Alstom 2015	2016	2017	2018
Direct CO_2 emissions related to the consumption of natural gas, butane, propane, coal and oil [(1)]	54	50	48	50
Indirect CO_2 emissions related to the consumption of steam, heat network and electricity [(2)]	69	62	65	65
Gross total CO_2 emissions related to energy consumption	**123**	**112**	**113**	**115**
Avoided emissions thanks to the supply of green electricity [(3)]				14
Net total CO_2 emissions related to energy consumption [(4)]	**123**	**112**	**113**	**101**
Other direct CO_2 emissions related to fugitive emissions of HFC	1	1	1	1
TOTAL CO_2 EMISSIONS RELATED TO ENERGY CONSUMPTION AND OTHER DIRECT EMISSIONS	**124**	**113**	**114**	**102**

Source: Alstom Teranga.
(1) Source: as regards natural gas, butane, propane, CO_2 emissions factors come from "IPCC Guidelines for National Greenhouse Gas Inventories" (2006).
(2) Source: as regards electricity, for the years 2014 et 2015, CO_2 emissions factors come from the study "The Climate Registry Default Emission Factors" while for the years 2016 to 2018, data comes from the International Energy Agency (2016 data for 2018).
(3) The CO_2 emission factors for electricity from renewable sources are considered to be zero.
(4) Including the use of renewable energy.

Alstom direct CO_2 emissions linked to energy consumption fell slightly in 2018. For the first time direct CO_2 emissions take into account the supply of green electricity, which explains the decrease recorded in 2018 compared to previous years.

EMPLOYEES HEALTH AND SAFETY[VP]

Alstom operates in various working environments:

- in its own production and testing facilities;
- in customer premises where Alstom teams are working on maintenance, commissioning or testing activities;
- on project/construction sites with strong interactions with clients and partners.

Due to Alstom activities, its employees and subcontractors are exposed to a health and safety risk: anything that can cause harm to a worker in the working environment, such as mechanical, electrical or chemical hazards, inappropriate employee behaviour, or other factors, is regarded as a risk factor.

The level of risk is impacted by several parameters such as:

- geographical footprint – the value of a human life, and the Environment, Health and Safety (EHS) knowledge and culture, are not at the same level across all countries of the world;
- the level of Health and Safety culture and knowledge of the Company's Partners (consortia & JVs);
- customer EHS policies – as some Alstom activities take place on its customers' sites, the Group is impacted by the way they address the EHS topic;
- the performance of contractors – Alstom sub-contracts certain activities; as a consequence, the EHS performance of its contractors directly impacts the Company itself.

Safety is considered to be a critical success factor for the performance of projects.

Strategy and policies

Alstom's EHS policy, updated in July 2018, highlights its strong leadership and commitment in this area. It covers all Alstom entities and applies to all employees, temporary workers and contractors. As expressed in the policy, the Group aims to be recognised as the best EHS player in the Railway sector.

By implementing "Alstom Zero Deviation Plan" (AZDP), Alstom aims to create a safer environment by controlling its High Risk Activities. Moreover, through the Health and Wellbeing Program, the Company pays particular attention to the health and wellbeing of employees. The Company's Trust, Team & Action values helps to meet the collective EHS challenge and to leverage the EHS culture in throughout the organisation.

The Health and Safety commitments are:

- zero severe accident;
- particular attention for people's Safety and Health.

As part of the Alstom 2020 plan, the target in terms of injury frequency rate has been set at 1.0.

The Health and Safety strategy supports a pro-active approach based on:

- visible and active EHS Leadership under the responsibility of the EHS operational management;
- driving continuous improvement of EHS Performance through measurable objectives;
- an EHS Management System which uses internal processes to ensure compliance with applicable standards and regulations;
- the assessment of EHS risks and the taking of proactive measures for the prevention of incidents and occupational diseases as well as for the continuous improvement through return of experience;

- workforce engagement (a reinforced EHS culture for both employees & contractors);
- a network of competent and shared EHS professionals acting locally and supported by region and *"métier"* expertise which ensures a high level of EHS competency and training at all levels of the organisation.

Process and action plans

Main Identified risks[VP]

High-risk activities

Based on the analysis of main safety risks, Alstom has identified the high-risk activities related to the broad spectrum of work that it performs. These activities are defined in the "Alstom Zero Deviation Plan" (AZDP), whether executed directly by Alstom or indirectly by a subcontractor.

The high-risk activities are as follows:

- works for which Lockout Tagout must be performed;
- works involving a risk of interference from moving vehicles, whether on site or on rail;
- lone working;
- working at height;
- lifting operations;
- hot working;
- working in an explosive atmosphere;
- work exposed to electrical risks;
- working in a confined space;
- erection, modification and dismounting of scaffolds;
- excavation works;
- work with exposure to radiation (ionising or non-ionising);
- installing, servicing and operating machines.

Exposition to hazardous chemical substances

Concerning hazardous chemical substances, one of the main risks for Health is linked with carcinogenic, mutagenic or reproductive effects on persons who are, or have been, exposed (so called "CMR"). Asbestos has been identified as the chemical substance which presents the highest risk of serious and irreversible consequences on the health of Alstom's employees and subcontractors.

Assessment, mitigation and prevention measures, follow-up and monitoring system[VP]

AZDP plan

The AZDP plan is applied to all Alstom employees and subcontractors. This plan includes risk assessment and the application of mitigation and prevention measures to all high-risk activities. It is based on 11 directives which describe mandatory requirements to be applied for the whole scope of Alstom. These requirements are related to activities defined as high risk and help to mitigate and prevent serious and irreversible occurrences. In order to support the plan, Alstom implemented a "zero deviation tolerance" policy.

Each Alstom entity regularly undertakes a self-assessment of its compliance with the directives and manages its continuous improvement plans.

A three-year centrally-managed audit program is deployed in the Group, both at large industrial sites and at smaller locations such as depots or construction sites, with the target of carrying out more than 60 audits per fiscal year.

64 formal AZDP audits were undertaken during this fiscal year.

Safety Training

In addition to the training required by the various regulations, Alstom designs and deploys safety training modules to meet its specific needs and continuously adapts its internal training offer.

A dedicated training course has been created for employees at construction sites in order for them to have a better understanding of all the risks inherent in working in such a complex railway environment. This training has been deployed and will continue next year.

There are seven training programs delivered by Alstom University, two of which are e-learning programs (EHS Fundamentals and High-Risk Activities).

Exposition to hazardous chemical substances

The use of asbestos and material containing asbestos is strictly prohibited in Alstom's products. Risk management of asbestos exposure at operational sites has been an integral part of the Group's policy for many years, even in countries where asbestos is permitted: this includes such aspects as asbestos diagnosis of buildings (rented or purchased) and equipment and the implementation of risk-based asset retirement plans. Alstom also applies instructions to frame the monitoring process and workers' protection; they are updated and improved regularly. Within this framework, the Company retains the ambition to eradicate asbestos in its buildings as far as is reasonably and economically practicable.

Health and occupational disease

Alstom aims to reduce the risk of occurrence of occupational diseases. On top of preventive or protective measures resulting from work place risk assessments, Alstom seeks to take full account of ergonomics in the design of workstations: each year Alstom industrial teams conduct audits in accordance with the APSYS ("Alstom Production SYStem") referential in production sites to measure the progress made in respect of Alstom's operational requirements. The ergonomics of workstations is one of the assessed criteria in these audits. In fiscal year 2018/19, 22 APSYS audits were conducted. A central working group has been set up to test solutions based on CoBots as well as physical assistance devices such as exoskeletons to assist operators in their daily tasks.

Main results and performance indicators[VP]

AZDP plan

	2015/16	2016/17	2017/18	2018/19
Number of formal AZDP audits conducted during the fiscal year	61	62	66	64

Source: Alstom (EHS Library).

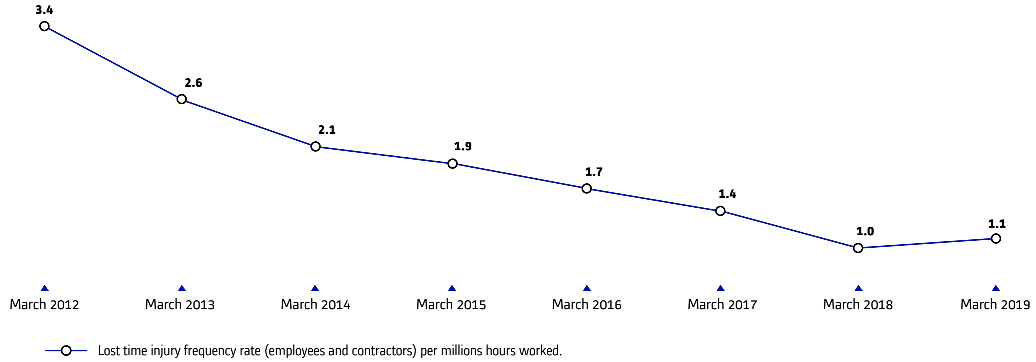
Safety training

	2016	2017	2018
% of Alstom employees trained using the e-learning module on High Risk Activities(*)	80%	81%	77%

Source: Alstom HRIS.
(*) Alstom deploys an e-learning programme about high risk activities targeting all employees. The table gives the percentage of employees present in the Group who have followed the training course as at the end of the calendar year.

Frequency rate of occupational injuries of employees and contractors

The frequency rate is stable at 1.1. However, this represents a decrease of more than three times compared to the previous years, aligned with the ambition of Alstom 2020 of 1.0.



Nevertheless, Alstom regrets three fatal accidents during the year. A fatality occurred involving a contractor during the renovation of a site in South Africa and two Alstom employees died in a car accident in Algeria during a mission.

	2016/17	2017/18	2018/19
Number of fatalities at work (Alstom employees and contractors) (1)	0	1	3
Number of travel fatalities (Alstom employees) (2)	0	0	1
Number of occupational severe accidents (3)	6	8	9
Lost time injury frequency rate (employees and contractors) – IFR1 (4)	1.4	1.0	1.1

Source: Alstom Teranga.
(1) Includes all accidental fatalities at the workplace and on the way between two workplaces.
(2) Includes all accidental fatalities on the way from home to work or work to home. Before 2018/19, only accidental fatalities on the way from home to work or from work to home, when Alstom was directly or indirectly involved in the travel organisation were counted.
Starting with 2018/19, all accidental fatalities on the way from home to work or from work to home are calculated, whether Alstom participated in the travel organisation or not.
(3) Occupational severe accident: fatal accident and any accident resulting in permanent consequences (either in permanent disfigurement, or permanent disability such as amputation of any digit or part of a digit) whatever the length of the medical leave, as well as any accident causing fracture requiring surgery, whatever the length of the medical leave. Severe accidents between two workplaces are included, severe accidents on the way from home to work or from work to home are excluded.
(4) IFR1: Number of work-related injuries, which prevents the injured person from carrying out work for a period of at least one full day, per million of hours worked. Accidents on the way from home to work or from work to home are excluded from the calculation of the indicator.

Health and occupational diseases

	2016/17	2017/18	2018/19
Number of recognised occupational diseases during the calendar year for the Alstom perimeter	26	39	37

Source: Alstom Teranga.

ATTRACTIVITY AND RETENTION

"Attractivity and Retention" relates to the section "Recruitment and Retention" in chapter 4.

Alstom's Human Resources (HR) strategy aims to support the Company's success by attracting, rewarding and retaining employees leveraging the management ability to develop all talents. It is based on its key values – Team, Trust & Action and Ethics & Compliance – and its Leadership dimensions – Entrepreneurship, Collaboration, Agility & Global vision – and is embedded in the Group's Strategy.

Alstom's commitment is to ensure consistency and fairness for all employees. These values bring all Alstom employees together in a shared culture and aim to create a strong feeling of belonging to a single unified organisation working towards success collaboratively.

The value Alstom adds to its customers strongly relies on the skills and competencies of its workforce, both at the Engineering and Execution phases of projects. Developing the workforce is a strategic objective of the Company (for more information see the section on People development, page 232). Therefore, the development, attraction and retention of the right people are essential to ensure the Company's success. Alstom acts to guarantee:

- an Employer of choice image, with a diverse and inclusive environment in the current and planned future Employment markets in which it operates;
- an attractive workplace and working conditions, in order to attract and retain talents;
- an attractive compensation, benefits and reward programs to attract and retain the right talents to serve its customers;
- a reasonable resignation rate to avoid a degradation of key competencies, an increase in cost of employment (including cost to hire), and ultimately a diminished ability to serve customers (quality and on-time delivery).

Strategy and policies

In order to proper support the Company on its strategic success, the HR organisation is built around two central teams, namely Talent Management & Organisation Development and Total reward & HR Intelligence. These teams are working together with seven Regional HR teams, including the Alstom Headquarters.

The Talent Management & Organisation Development team aims at enabling Alstom to attract, develop and grow diverse and entrepreneurial leaders and a sustainable talent pool for now and the future. The team facilitates the acquisition and the management of talent pipelines, the anticipation of successions, the management of performance, the development of organisation, competencies and leadership through continuous learning embedded in the People Management Cycle processes (for more information see the section on People development, page 232).

Total Reward & HR Intelligence aims to design and implement compliant, fair, motivating and efficient HR policies, processes, tools and practices, and provide powerful HR data to support the development of Alstom business and teams.

HR teams in Regions are in charge of supporting business operations by:

- ensuring workforce planning and adequate staffing, project mobilisation and demobilisation activities;
- driving the people management cycle;
- ensuring people development and career management initiatives;
- supporting organisation design and change management, employee administration and payroll and relations with employee representatives.

Talent Acquisition & Employer Branding

With 36,270 employees at end of fiscal year 2018/19, effective Talent Management is at the heart of Alstom's identity. Recruiting, engaging, developing and retaining talented people are key elements to maintain the Group's leadership in global markets and in growing its business in the future. Alstom would need to better know and develop its people to fill vacancies internally, motivate, engage and retain talent, and develop talent pools to support ongoing and future business requirements. The People Management Cycle through "People review" process, as well as internal mobility management helps the Company manage collectively and share talent across Units, Businesses, Sectors and Functions to put the right person in the right place at the right time.

In this perspective, the mission of Alstom Talent Acquisition and Employer Brand is to enable business success by attracting the right talent at the right time using efficient processes, effective tools, robust governance and a solid Employer Brand.

The Alstom Talent Acquisition objectives include to:

- maintain a globally attractive and locally relevant employer brand leveraging the best channels to engage talent for a career at Alstom, encouraging our employees to serve as Alstom brand ambassadors;
- foster strategic collaborations with universities through innovation and education programs;
- find and cultivate the right talent through strong internal and external talent pipeline strategies;
- establish Alstom as an employer of choice for diverse candidates, building the best teams by attracting diverse candidates that reflect the markets we serve.

Diversity and inclusion

Diversity is one of the five pillars of the Alstom 2020 Strategy (see the section "Strategy" on chapter 1 describing the Group activities, page 7). Alstom aims to create an inclusive culture in which diversity is recognised and valued. Common objectives and Key Performance Indicators have been set for the whole Group around gender and multicultural diversity. By 2020, Alstom is targeting to reach 25% of women amongst managers & professionals (compared with 20.7% today and 18% in 2014) and to ensure that the nationality of management and the talent pool reflect Alstom's business worldwide.

Alstom Diversity Charter is available on Alstom website: https://www.alstom.com/commitments/diversity-and-inclusion.

Compensation and benefits

Alstom has designed global Compensation and Benefits policies to ensure that a consistent approach is used across the whole Company.

Therefore, the remuneration structure and the related reward programs should encourage and reward individual performance and commitment to Alstom on a fair and equitable manner across regions, trades and levels of responsibilities. In this sense, they should be designed to meet business needs taking into consideration market prevalence while complying with local regulations. Their design should embed the following principles:

- respect fairness of treatment;
- ensure competitive level of compensation;
- keep a long-term view;
- share the success of the Company;
- allow individual differentiation;
- base reward decisions on a structured position grading approach;
- acknowledge Alstom's commitment towards Corporate Social Responsibility.

Regarding benefits, Alstom policies state that Benefits programs should be competitive in each specific market enabling the Company to attract and retain key required talented employees. Benefits should be designed taking into account the total compensation package. The Company acknowledges that the lifestyle of employees is continuously evolving and strongly encourages countries to implement adaptable and flexible programs after consideration of any increased administrative costs or risk of significant evolution of costs over the long-term. Therefore, the Company pushes for limited Defined Benefits obligation and strictly controls any evolution of an existing Defined Benefit plan.

Process and action plans

Talent Acquisition & Employer Branding

Global Talent Acquisition Procedure

To further ensure consistency and effectiveness in Alstom Talent Acquisition, the Alstom Talent Acquisition Procedure has been under revision and finally updated in 2019. The objective is to continue to provide a global framework for the recruitment & candidate selection process. The procedure update is focused on improving candidate experience and selection of the right talent. It is based on the principle that all recruitment & selection processes must reflect Alstom's commitment to offering equal employment opportunities to all qualified applications based solely on job-relevant qualifications. The Alstom recruitment & selection process shall comply with all laws and regulations forbidding any discrimination with respect to age, race, gender, ethnic origin, nationality, religion, health, disability, marital status, sexual orientation, political or philosophical opinions, trade union membership or other legal provisions.

Alstom's talent attraction strategy has constantly evolved. In 2018 Alstom deployed a social media training and handbook for employees to leverage their professional networks to share Alstom positions to increase the talent pipeline. Alstom has also started creating employee testimonials for use on various channels and has deployed new and improved employee referral incentive programs to attract talent referrals coming from its employees.

In addition, in 2018/19, the Group reviewed its external careers website to create a more attractive channel for both experienced and early career candidates. Alstom has improved its social media messages for talent attraction, highlighting corporate social responsibility initiatives. At the same time, the Company has invested in the improvement of the candidate relationship management system, including the ability to integrate job advertisements on various channels both globally and in local-specific markets, and video interviewing tools.

Developing active relationships with universities and a young talent value proposition

Alstom's 2020 strategy aims for a more diverse workforce, representative of its organisation, values, territorial demographics, societal views and customer base. As the diverse workforce must also include young talents, this is being accomplished globally through several initiatives, such as:

- in India, the Young Engineering Graduate (YEG) Program was implemented in 2015 to hire graduate engineering trainees from engineering colleges across the country. YEGs benefit from a detailed introduction that an overview of the Organisation, activities and functions that help them better understand the Company and make the transition from campus to business successful. In addition, YEGs have the opportunity to interact with the senior management of the Company, to learn and be inspired by them. The program ends with the participation of YEGs in an innovation workshop and a presentation to the senior leadership team on the last day. In 2018, in India, 40 Engineering graduates joined the program and it is planned to have more than 100 engineering graduates joining the program in 2019;
- in France, Alstom also continues to focus on early career talent through the engagement of apprentices and trainees. Partnerships have been set up with key engineering schools in order to develop close relationships (participation in R&D programs, targeted presentations to the students, priority access to trainee positions at Alstom). In 2018, Alstom was awarded the label "happy trainees", attributed to the best companies for doing an internship/work-linked placement;
- in France, for the third year in a row, Alstom partnered with Lyon University Innovation Factory to host around 40 students from Engineering, Design, Marketing, Humanities and Social Sciences at Alstom Villeurbanne site for a creation challenge to help them think, develop, model and pitch new ideas to a jury of Alstom professionals. The 2019 challenge focused on solutions to boost the Company's attractiveness and generating new innovations in managing the integration and professional development of employees;
- in the United States, the first cohort of LEAD (Leadership Excellence and Development) program members have graduated this year. The LEAD program hires new university graduates for a multi-year development programme that includes several rotations in various parts of the business in order to accelerate their professional growth in Alstom;
- in Italy, unemployed members of the local community received vocational training within the Company and received job offers from Alstom after obtaining their specialisation in aluminum welding. In addition, new graduates have been selected throughout Italy for testing technician positions and, before being hired by Alstom, have received specialised technician training.

Integrating new employees

Welcoming new employees within Alstom is a key priority for the Group's talent strategy. Its goal is to create a climate of trust that encourages new employees to develop a sense of belonging to the

Corporation's organisation and culture, and to provide them with the tools and training they need to succeed in their new roles. Onboarding & induction processes are in place at all Alstom sites, which include a globally consistent framework that can then be added on locally based on business needs and site-specific elements. The global framework includes orientation (facilities, tools, team, business strategy & goals), Health & Safety, Ethics & Compliance, details of Alstom's organisation, solutions, culture and values, a clear outline of the job requirements and performance expectations, and awareness of critical site, or regulatory policies/requirements.

Global training requirements for new professionals include amongst other Ethics and Compliance with the Alstom Alert Procedure, High Risk Activities, and Railway Safety Awareness.

Internal mobility

At Alstom, employees are encouraged to take ownership of their development and to manage their career in collaboration with their managers and Human Resources. Employees are treated equally on the basis of their skills, especially with regard to employment, recruitment, talent identification, mobility, training, remuneration, health and safety, through the implementation of consistent processes and common policies across Alstom.

To enhance internal mobility and stimulate employee applications, Alstom provides a platform where employees can view vacant internal positions and apply for them. In addition, Alstom organises periodically, through the talent network, various local and central forums to match the available competencies with the business needs and to facilitate cross-functional and cross-regional moves.

Being in an environment where international careers are sought and encouraged, and given the international nature of the Group, international mobility plays an important part in meeting Alstom's business and customer needs. Indeed, on 31 March 2019, Alstom had around 750 employees on international assignments. During the 2018/19 fiscal year more than 550 employees moved from one country to another. Alstom also encourages cross-function mobility: 4% of its employees have changed their area of activity during the year (around 1,400 employees).

Diversity and inclusion

Equal opportunity

Country-specific diversity action plans are being implemented, integrating nationality or gender and others such as: age/generations, educational background, social status and ability/disability are also included in local action plans.

The global initiatives to promote a more diverse and inclusive workplace during the 2018 have been:

- the Diversity & Inclusion (D&I) Discovery Week – a digital week where, every day, through Alstom I-Learn Portal each employee received a video-learning on different topics around Diversity & Inclusion; the availability on the I-Learn Portal of a D&I Programme where the employees can find learning resources around these subjects;
- the WADA Week, that aims to raise awareness around the disability topic, set up a challenge between the countries to identify and to reward the three best practices to promote the most differently abled workplace;
- following the last year set up of a Diversity & Inclusion Governance, the D&I Champions from the Regions and from the different countries attended the same D&I Skill Building Workshop.

Promoting gender equality

The question of professional equality between women and men has been part of Alstom's Social and Human Resources policy for many years. Nevertheless, it should be noted that the Education path leading to the skills required for most Alstom positions primarily attracts men. The proportion of women in those training courses is about 15% to 20%, which prevents meaningful quantitative comparison. Therefore, Alstom focuses particularly on optimising the integration of women in its activities and offering them career opportunities.

Today the Operational Functions with the highest presence of women in the Company are: Supply Chain & Planning, Sourcing, Quality and EHS. During the last 12 months, the most significant progress has been done in the following functions: Installation (+1.1%), Sourcing (+1.4%), Informatics (+1.1%), Strategy and Sales (+2.4%).

In France, where gender equality has been a concern for Alstom for many years, Alstom has reached 95 points (out of 100) on the new gender equality index recently deployed by the French government. Details on the index and the rating assigned to Alstom are available on the Group's website.

Supporting initiatives dedicated to the promotion of women

Several initiatives under the global framework "Tell" "Train" "Track", to promote gender equality and women's opportunities in the Company, have been undertaken. With "TELL" Alstom communicates internally and externally about the positive impact of Diversity & Inclusion *via* all communication channels, events & programs. With "TRAIN" Alstom raises awareness on its Managers & Professionals of the importance of Diversity & Inclusion by training and various other means. With "TRACK" Alstom measures regularly its global Diversity & assess Inclusion.

At country/regional level the support to women is mainly implemented through the existence of Alstom Women Network (to name some: in North America is called AWE – Alstom Women of Excellence, in Italy *Valore D* Community, in Brazil *"Mulheres em foco",* in UK "Women in Rail"). The belonging to these networks provides training opportunities around women leadership, work effectiveness, personal branding. The Mentoring is another development initiative widely implemented to support Alstom's women in their career advancement (in some countries cross companies mentoring are organised as well to offer a broader knowledge of leadership styles).

Most of women working for Alstom are involved in initiatives concerning the attractiveness of girls towards STEM (Science, Technology, Engineering, Mathematics) studies. Many countries organise visits in schools (in Italy and in the UK initiatives called "Inspiring Girls") or visits for girl students in Alstom factories and participate in external dedicated events (for example, with the association *Elles Bougent*) or welcome young girl students for a training period (as in Australia the "Lucy Mentoring Program").

Worldwide, Alstom has put in place a mentoring program called "WILL" (Women In Leadership Levels). The Executive Committee members become, for six months, mentors of a selected number of women with the potential to grow in senior leadership roles in the future.

This initiative has inspired a local one in the Asia Pacific Region, where the members of the Management Committee have mentored some women with the potential to grow in the organisation.

Promoting cultural diversity

Alstom is fully aware of the strength resulting from the large number of nationalities, cultures and approaches that its employees represent. Specific action plans have been developed at local level to take advantage of this asset.

During the last year, the promotion of cultural diversity focused on two axes:

- promote a more international Headquarter to represent the multicultural footprint of the Company: on 31 December 2018 the percentage of employees with a different country of birth compared to the one country where our Headquarter is located was 24%;
- encourage to have more local leaders nominated in Countries and Regions Leadership Roles: all the Regions have made progress in the last 12 months, on top of it, the ratio of French nationals, home country of the Company, among internationally mobile employees has significantly evolved: from more than 70% to less than 50%, while the number of such internationally mobile employees has strongly increased, showing the capacity of the Company to locally nurture its leadership teams.

Employment and inclusion of disabled people

It has been a continuous guideline within Alstom to develop and support the integration and employment of disabled people. This enables those employees to work in a challenging environment while following the Alstom Code of Ethics – which strictly prohibits any discrimination based on health or disability – and the local regulations.

Regarding disability, Alstom focuses on five complementary areas: job access, maintaining employment, raising awareness, accessibility to premises and information, and partnership with the sheltered work sector. Each entity is encouraged to integrate them into its process. Each year, Alstom organises internal training sessions to help Human Resources team members better understand the various situations relating to disability and to help prepare job interviews and the integration of people with disabilities.

Regulations regarding the employment of disabled people are very different from one country to another. Action plans to promote the integration of people with disabilities in the Company are therefore conducted at local level.

Last year, for the first time the Disability Employment topic has moved to a global dimension at Alstom. With the organisation of the "We Are All Differently Abled Week" (WADA), sites were encouraged to promote the professional integration of people with disabilities and report their good practices. Three of them received an award from the Diversity & Inclusion (D&I) steering committee:

- "Extraordinary@work" project – inspired by similar initiatives led by tech companies across the Atlantic, Signalling Italy decided to explore the opportunity to work with people with autism in collaboration with the Local Public Health Authority. The Validation and Verification team at the Bologna site took on five trainees with Asperger's Syndrome to work as test engineers;
- "Plan Familia" – the mission is to provide support to Alstom employees whose children have a disability. Families are seen by independent medical experts to provide tailored solutions facilitating the children's social and professional integration. Today, 15 families benefit from the program at the Madrid, Barcelona and Toledo sites in Spain;
- *"Atelier protégé":* The Reichshoffen site in France was already used to working with structures known in France as *Entreprises Adaptées,* production units that employ at least 80% disabled workers. Today, the site hosts the workshop of the Sonnenhof Foundation and its eight workers. Their mission: to produce equipment for Alstom's pre-assembly workshops. The employees of the sheltered workshop took advantage of this on-site integration to deepen their understanding of how Alstom works and produces better quality work more quickly.

In France, the percentage of people with disabilities is regularly increasing: 7.31% in 2015, 7.37% in 2016, 7.81% in 2017, and 7.88% in 2018 (1).

Compensation and benefits

Remuneration schemes

Remuneration evolution

Due to Alstom's presence in numerous countries, the influence of local inflation or other economic factors, no comprehensive indicator can be developed. Alstom's policy is to review the employees' base salaries every year, with a specific attention given to gender equity, and to have open negotiations with employee representatives where they exist. In each country in which Alstom operates, remuneration surveys are conducted through dedicated external providers in order to ensure that remuneration evolves according to local market practices.

Experts and Inventors' remuneration

The Company has completely renewed its Inventors' remuneration in 2018 with the implementation of a worldwide policy, based on a structured recognitions process, under the leadership of a dedicated Intellectual Property Committee. It aims at encouraging employees, especially from Engineering Departments, to propose innovation for patents and recognise each step of the patenting process.

Regarding Experts, recognised in Engineering and Manufacturing by a solid governance process, a specific monitoring on their remuneration is put in place, both on base pay and long-term incentive.

Performance linked to remuneration schemes

Short-term incentive scheme

Alstom's annual short-term incentive scheme is based on two performance factors: collective performance (60% of the incentive target) and individual performance (40% of the incentive target). The target incentive is the incentive payment that is received when 100% of the financial goals and individual objectives are met. If the financial results and/or the employee performances exceed the goals, the incentive paid out may exceed the target incentive.

(1) See DOETH – French mandatory declaration of disabled workers.

Eligibility and incentive target rates are linked to the job grading and influenced by local market practice in each country. More than 10,000 employees were eligible for this remuneration scheme on 31 December 2018.

Several indicators based on Corporate Social Responsibility are used in this Short-Term Incentive program based on the Group performance in line with the Alstom strategy:

- Safety at work – the individual performance targets of a number of the top management teams also include related indicators; over more, the Injury Frequency Rate is considered as one of the Top collective Performance indicators of the Company and is part of the collective targets of the Short-Term Incentive;
- Ethics & Compliance – in 2018/19, an objective based on the awareness of Managers and Professionals around the Alert procedure implemented throughout the Group;
- Dow Jones Sustainability Index – in 2018/19, Alstom included in the Group global performance objectives to remain in the DJSI World Index.

Profit-sharing

Alstom's policy aims to recognise collective performance. Profit-sharing schemes are in place in various countries (such as France, Brazil, Egypt, Germany, Mexico or Italy) covering more than almost 12,000 members of the Group headcount.

The profit-sharing schemes are often calculated on agreed criteria, including the injury frequency rate reduction or other safety-related indicators. These schemes may also include business-related indicators such as the reduction of waste or quality-related points.

Employee shareholding & long-term incentive scheme

Since the reorientation of Alstom on its Transport activities, the Senior Management of the Company has proposed to its shareholders to relaunch Employee Shareholding plans. As a consequence, the Extraordinary General Meeting held on 18 December 2015 approved the principle of a capital increase dedicated to employees of up to 5,000,000 shares over a period of 38 months, including up to 2,000,000 shares to be dedicated to democratic free share distribution plans. This authorisation was renewed in July 2018 by the General Meeting of Shareholders.

Subsequent to this authorisation, the Board of Directors approves every year, during its March meeting, new performance share programmes. Accordingly, over the past four years, 957,975; 1,022,400; 1,016,025 and 1,080,150 performance shares have been granted to around 800 employees around the world, with a vesting period of three years and based on internal and external performance conditions, thereby allowing the alignment of shareholders' and employee's interests.

In parallel, a distribution of 30 free Alstom shares (or their cash equivalent in countries where legally impossible or too complex) to all employees (31,693) with a two-years vesting period, known as "We are Alstom – Plan 2016", was implemented on 23 September 2016. The related shares have been finally delivered to beneficiaries in September 2018 and the cash equivalent have been paid.

On 31 March 2019, current and former Alstom employees held 1.22% of the Alstom share capital, either directly or through mutual funds.

Health and life insurance

According to the Global Benefit and Corporate Social Responsibility policies and guidelines of the Company, a minimum level of benefits shall be provided to all employees in terms of:

- life insurance coverage, particularly for accidents at work;
- health coverage.

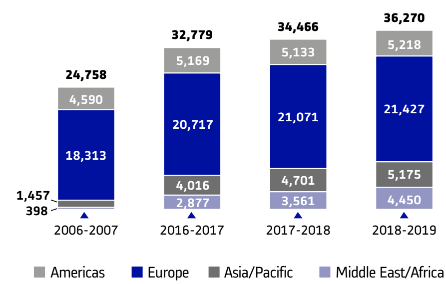
In terms of life insurance, the aim is that all employees should be covered by a life insurance in case of accidental death amounting to at least one year of salary.

In some countries, such as Poland, employer contributions to insurance policies are considered as a taxable benefit, leading some employees to decline this offer.

Alstom's Global Benefit policy states that, in countries where the statutory health coverage does not provide adequate benefits or where there are long waiting-lists for treatment, a supplementary healthcare plan can be implemented, or at least a Group plan is negotiated with a local provider as an option for employees to join on a voluntary basis. Preventive care should be encouraged. In countries where inadequate statutory health benefits are provided, then all employees must be covered by a supplementary scheme.

Main results and performance indicators

Total headcount: Workforce breakdown by region (employees)



Source: Alstom HRIS.

Retention Indicators

Resignation rate

The resignation rate, which also reflects the general employment situation in each geographical area where the Company operates, is one of the criteria used to determine the level of satisfaction of the Group's employees. The rates are closely monitored at both global and regional levels.

The Group is closely monitoring this indicator and has put in place action plans to retain at risk employees. Retention schemes are selectively put in place in volatile countries or in specific projects to ensure the retention of key and critical staff.

RESIGNATION RATE FOR EMPLOYEES ON PERMANENT CONTRACTS IN EACH REGION

Region	2016/17	2017/18	2018/19
Europe	3.6%	4.0%	3.2%
Middle East/Africa	7.0%	6.4%	5.0%
Asia/Pacific	9.2%	10.5%	9.1%
Americas	6.5%	5.6%	5.6%
ALSTOM	**4.9%**	**5.2%**	**4.5%**

Source: Alstom HRIS.

Absenteeism

The absenteeism indicator allows the monitoring of Alstom's ability to provide an appropriate working environment for its employees, as part of its well-being policy.

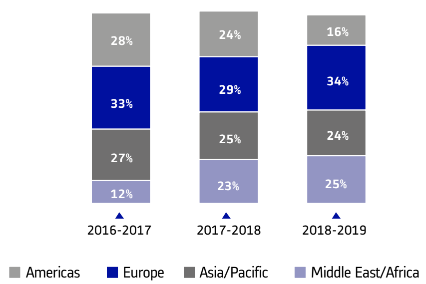
This is the third year that the absenteeism rate has been gathered at Group level. The data shows that "Medical or sick absence due to personal injury and disease" accounts for 89% of total number of absence hours. This indicator is monitored and analysed at local level, and local initiatives around well-being are implemented to reduce the absenteeism rate.

Absenteeism Rate	2017 (1)	2018
Europe	3.3%	3.5%
Middle East/Africa	2.4% (2)	1.9% (2)
Asia/Pacific	2.4%	2.3%
Americas	1.9%	1.8%
ALSTOM	**2.9%**	**2.8%**

Source: Social survey conducted in 28 countries (South Africa Gibela site excluded) representing 94.1% of the Company's total headcount.
(1) 2017 data was covering 27 countries (South Africa Gibela site excluded) representing 93.9% of Alstom total headcount.
(2) South Africa absenteeism reporting only covers Ubunye site. Gibela site is not tracked.

Talent acquisition indicators

Recruitment by region in 2018/19 (permanent contracts)



Source: Alstom HRIS.

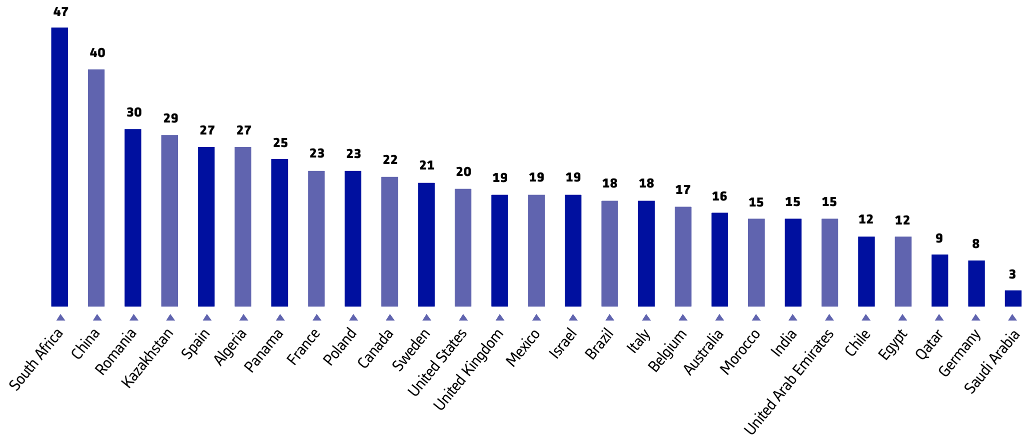
Diversity indicators

Indicators related to women by category

	2017/18	2018/19
Percentage of women in the workforce	17.4%	18.1%
Percentage of women: managers & professionals	20.1%	20.7%
Percentage of women: executives & senior managers	16.3%	16.4%
Percentage of women trained in training sessions(*)	17.3%	17.5%

Sources: Alstom HRIS. As of 31 March 2019.
(*) 2018 Social survey conducted in 28 countries representing 96.3% of Alstom's total headcount.
2017 Alstom social survey conducted in 27 countries representing 95.6% of Alstom's total headcount.

Percentage of women managers and professionals(*), permanent positions per country (as of 31 March 2019)



Source: Alstom HRIS.

(*) Managers, Engineers and Professionals.

Percentage of employees with disabilities

Percentage of employees with disabilities	2017(*)	2018
Alstom	2.8%	2.7%
Europe only	4.2%	4.3%

(*) 2018 Social survey conducted in 28 countries representing 96.3% of Alstom's total headcount.
2017 Alstom social survey conducted in 27 countries representing 95.6% of Alstom's total headcount.

Compensation and benefits indicator

Health and life insurance coverage indicators

	2017(*)	2018
Ratio of employees covered by a life insurance in case of accidental death or total and permanent disability during calendar year	97.3%	96.9%
Ratio of employees covered by a life insurance giving one-year salary in case of accidental death or total and permanent disability during calendar year	90.0%	90.4%

(*) 2018 Social survey conducted in 28 countries representing 96.3% of Alstom's total headcount.
2017 Alstom social survey conducted in 27 countries representing 95.6% of Alstom's total headcount.

PEOPLE DEVELOPMENT

To successfully deploy wide-scale projects, invent and implement smart technology and equipment or design fluidity for the future, Alstom needs competent, motivated and dedicated employees and teams worldwide. Therefore, human capital Is Alstom's greatest asset – people shape its future.

Our Human Resources strategy aims at supporting the Company's success by attracting, rewarding and retaining employees leveraging the management ability to develop all talents. It is based on our values – Team, Trust & Action and Ethics & Compliance – and our Leadership dimensions – Entrepreneurship, Collaboration, Agility & Global vision – and is embedded in the Alstom Strategy 2020 supporting its ambition of being the preferred partner of its customers for their transport solutions in all geographic locations and all market segments.

In order to support the Company in achieving its results, it is essential to have the right people at the right time. Thus, Human Resources should work not only on attracting and retaining (see the section "Attractivity and retention", page 226) people but also developing internally the competencies needed to perform our activities in order to ensure:

- on time delivery and quality of projects – a proper competency management allows Alstom to have the relevant managerial/ leadership and technical competencies, which is necessary in order to deliver on the projects to its customers on time and of high-quality;

- employees' retention – a lack of career development could lead to an increase in quit rate (see the section on Attractivity and Retention, page 226) and have consequences on the progress of projects;
- competitiveness of Alstom's offer: indeed, it is necessary that the Company anticipates market changes and technological developments in order to maintain its position in the market, including its ability to innovate.

Strategy and policies

An effective Talent Management is at the heart of Alstom's identity. Developing talented people is one of the keys to maintain the Group's leadership in our global markets and in growing Its business in the future.

The internal human resources strategy is deployed within the Group by the team in charge of talent management and development. Its goal is to enable Alstom to attract and develop leaders in its areas of activity as well as to develop a sustainable talent pool for the present and the future. Moreover, the talent management and development team facilitates the recruitment and management of talent pipelines (including their skills and performance) through continuous learning embedded in the People Management Cycle process (see the section on Attractivity and Retention, page 226). Its main tools for an efficient talents' management are the following:

- Performance and Talent Management (PMC) – the performance management cycle in Alstom aims at aligning individual contribution to the organisation's goals by setting reliable objectives and reviewing on a continuous basis their achievement progress. As part of the assessment, competencies assessments are also being implemented to better guide the development plans;
- learning solutions – for Alstom, learning is a key priority in order to develop its people and maintain their competencies at a high level. The main goal is to ensure the sustainable success of the Company and to better address competition. Training is also a key lever for employee development, representing an enormous source of motivation;
- community management and talent development – Alstom aims to contribute to the personal and professional development of its employees by offering high quality programs, built internationally, customised as needed, reviewed and updated regularly through the learning orientation process. The Group encourages employees to be active in the management of their own development.

Processes and action plans

Performance and talent management

Career path management relies on the combination of three processes articulated in the People Management Cycle (PMC) launched each year on 1 March:

- objective setting and annual performance evaluation – all employees participate in an annual objective setting meeting and performance evaluation with their managers. The aim is to discuss and agree on specific individual objectives at the beginning of each fiscal year. At the end of the fiscal year, during the annual performance evaluation, the manager and the employee review the achievement of these objectives. All managers, engineers and professionals participate in the objective setting and performance evaluation process. At the end of May 2018, 94% of managers, engineers and professionals had had a performance interview (15,458 out of 16,397);
- assessment and evaluation of competencies – this is a key management engagement event, conducted on a yearly basis by both HR and managers with the objective of putting the right person in the right place at the right time. It aims to build a collective and shared vision on the potential of employees and their evolution within the Organisation as well as to prepare the next steps of their careers taking into account their career aspirations and the needs of the Company. This staff review allows management to handle employees on the basis of performance, potential for change and the wishes expressed by employees as well as to develop succession plans for key positions. Decisions taken during the People Reviews are communicated by the manager to his/her direct reports during an individual meeting, called the People Review Feedback, which is part of the People Management Cycle. People reviews are carried out at sites, Regions, functions and Group level as a whole and cover systematically about 18,500 people;
- competencies identification and evaluation – Alstom launched in 2016/17 a major program of skills identification and assessment. This is a three-year project organised in three stages. For a given function a competency matrix has been defined. Its principle is the following: for each competency within the portfolio of a given function, a target level has been set. Each year, during the competency assessment exercise, the employee carries out a self-assessment, the manager evaluates the employee and then, during the meeting held together, they discuss the assessments and decide, if needed, on development actions (training or other). These assessments allow the better allocation of resources, a better identification of training needs and the implementation of more relevant individual development programs. This provides also key inputs for collective development and new programs.

Alstom proposes that managers and employees follow a training module on Performance Management & Talent Development, which enables managers to master basic people management skills, including how to effectively evaluate their performance, setting "SMART" objectives, structuring development plans, or providing feedback.

Learning Solutions

Alstom University

Learning is the cornerstone of Alstom's people development strategy. The internal University – Alstom University – proposes relevant and customised programmes. Carefully chosen expert partners – universities, external consultants, companies specialised in training design and delivery, as well as internal specialists – collaborate on these programmes. In addition, a wide range of training methods is used (including classroom-based learning, workshops, virtual classrooms, e-learning, blended learning, virtual reality modules). Today, the existing global catalogue proposes more than 400 different courses (face to face and virtual classrooms) and online content comprised of more than 700 in-house and more than 3,100 off-the-shelf learning elements (e-learning, tutorials, testimonials, MOOCs) in many languages in order to support self-development. All of the core business topics are addressed: Security, Environment, Health and Safety, Cyberdefense, Manufacturing, Engineering, Industrial, Project Management, Signalling, Supply Chain, Sourcing, Finance, Legal, HR, Leadership and Management, Ethics & Compliance, Sustainability and CSR.

The main missions of the Alstom University team include:

- to define and share annual learning orientations in line with business strategy;
- to design, build and manage a central and global learning offer and deploy it worldwide;
- to benchmark and detect innovative training methods and tools;
- to animate and facilitate the sharing of best practices and networking within the Learning community;
- to identify, train and reward internal trainers across the organisation.

A new Digital Learning ecosystem was implemented in June 2017 in the global Human Resources Information System. The core of this system is the i-Learn portal: a web platform available from any device (computer, tablet, smartphone) that offers highly interactive digital learning, within and outside of Alstom's universe. People can explore a broad range of topics, find relevant content and learn in their own rhythm. They are also able to create and share content in their area of expertise in a variety of formats.

The global learning orientations established for the fiscal year 2018/19 and shared with all the regions focused on:

- keeping ethics and compliance at the heart of Alstom ways of working;
- having security and safety at the top of Alstom priorities;
- reinforcing technical expertise and the capacity to innovate;
- targeting excellence in execution of Alstom products and projects;
- leading and motivating diverse teams.

The percentage of employees trained is 87% and the average number of training hours per employee is at 20.5 hours on average. It should be noted that it has increased by 0.8 hours during the fiscal year 2018/19 compared to last year, for two main reasons, namely:

- the development of needed competencies for the regions and countries with business growth (main development regions – Asia Pacific, Middle East Africa and North America);
- the deployment of large training programs in some activities and functions, including mandatory ones (EHS, Engineering, Quality, functions like Finance with IFRS 15 and Legal with Ethics & Compliance programs).

Knowledge management/transfer

Alstom believes that there is a positive and significant relationship between motivation and performance, and that having opportunities to learn is part of this motivation. Developing all employees is part of the Company's "People Management Cycle", which guides managers in empowering their teams. For each employee a training plan is designed annually together with his/her manager and the Human Resources partner and put into action during the year. In addition to the training planned, Alstom employees have access to an increased learning offer thanks to free access to a range of Digital Learning content. The digital portal also has the virtue of connecting experts and learners. Moreover, Alstom University supports local experts, Knowledge Centers as well as Technical Training Centers within the Company by bringing educational methods and tools to them.

Alstom University supports and animates the identification and training of internal trainers. Indeed, Alstom believes that being able to design and deliver training is a real managerial competency that needs to be valued but also that internal training helps develop and keep the expertise within the Company (being taught by colleagues facilitates the knowledge transfer).

In 2018/19, more than 400 internal trainers have been running training courses of the Alstom University Catalogue and more than 80% of the training sessions have been delivered by internal trainers. In this context, an internal training policy has been implemented in response to the constant increase in training volume. This policy explains how Alstom recruits new trainers but also how they are rewarded in order to keep them engaged in this role. This network of internal trainers is animated on a regular basis by Alstom University which also manages the implementation of the Internal Trainer Policy.

Finally, Alstom focuses on coaching and mentorship based on individual development needs. This kind of engagements are implemented globally and regionally to address people development areas and to support the sharing of knowledge and learning from each other.

Community management & talent development

In order to manage the Company's core competencies, Human Resources together with business have developed different programmes to address the management of key competencies across functions, such as: technical experts, project managers, and employees with management and leadership roles (people management).

Technical experts' development programmes

Alstom manages the development of technical experts through programmes adapted to their specific needs and environment. In particular, the World Class Engineering and World Class manufacturing programmes are important yearly processes meant to identify all technical experts, and to provide them with appropriate personal development opportunities ensuring that technical expertise supports the evolution of the market and Alstom's strategy. Today, Alstom benefits from a global network of around 490 Senior Experts and 50 Master Experts. Their main missions are:

- to use their technical expertise to support the teams in charge of the operational performance of bids and projects, both through design reviews and the resolution of problems arising during commercial service;
- to develop Alstom's knowledge in their field and to transmit their knowhow internally, thereby acting as trainers;
- to develop their influence in their area of competence and get recognition, not only within their entity or within the Company, but also outside the Company (in particular for Master Experts).

Specific skills-transfer programmes are implemented for Senior & Master Experts in order to develop technical expertise in the organisation.

New Experts were appointed last year, especially in the Signalling business due to the recent acquisition of a new entity, and new expertise has been integrated into the World Class Manufacturing program.

Project Management development programmes

Since 2016, Alstom runs a certification programme for its project manager community aimed at bringing a recognised external vision to the assessment and development of the Company's project management skills. This certification is provided by the International Project Management Association (IPMA), an independent certification body. On March 2019, 75 Project Managers have been certified and nine bid managers certified for the first year. 25 Project Managers and 10 Bid

Managers have been enrolled. The full programme will be gradually rolled-out to the broader Project and Bid Manager community, with 50 Project Managers and 10 Bid Managers to be enrolled each year.

Management development programmes

Management development programmes are mainly intended to develop management and leadership skills:

- at the central level, Alstom developed the "Accelerated Leadership Programme" (ALP) that has been in place for several years and which has been enriched/fine-tuned each year based on return of experience. It is a Learning Journey on Personal Leadership Development organised in three modules and held in various international locations. It aims to develop mid-level managerial executives with diverse backgrounds who have shown great potential in developing their leadership skills. The career progression of the participants is centrally monitored. In 2018/19, 18 different nationalities were represented among the 28 participants whilst 32% were women;
- at the local level, other management development programmes are organised to address local needs. These programs can be designed at the region or the country level. In 2018, the Company developed (in Middle-East and Africa) the "M3 program" designed with HEC business school (Paris); and for Asia-Pacific the "FMP –Future Managers Program" designed with Nanyang business school (Singapore). Alstom has also launched in 2018 an Executive Development Program for selected senior management. This development program blends individual psychometric diagnostics, assessment centers, success profiling and development coaching.

Main results and performance indicators

Training indicator

	2017 (1)	2018	Target
Percentage of employees who have had training	86.3%	87.2%	N/A
Average number of training hours/employee	19.6	20.4	20
Total number of training hours	621,042	677,762	N/A

Source: Alstom social survey conducted in 28 countries representing 96.3% of Alstom's total headcount.
(1) Alstom social survey conducted in 27 countries representing 95.6% of the Group's total headcount.

ETHICS & COMPLIANCE^{VP}

"Ethics and Compliance" relates to the section "Compliance" in chapter 4.

The respect of the highest standards of integrity is essential for Alstom. Alstom's reputation can only be built through the continuous strengthening of its ethical rules and procedures, as well as the adhesion of all managers and employees, who must know and rigorously apply the principles of Alstom's Code of Ethics and its Ethics & Compliance instructions.

The Alstom Ethics & Compliance (E&C) programme covers the areas of anti-corruption efforts, anti-trust compliance, export control and trade sanctions, and data privacy. The risks that these activities address are potential criminal liability which can result in important criminal penalties and imprisonment for Alstom managers, exclusion from national or international markets in the framework of debarments by public or private authorities and damage to Alstom's reputation in the eyes of its stakeholders in all aspects of its activities (employees, business partners, shareholders, among others).

The regulatory environment in which Alstom operates is becoming more and more complex. One area where this is evidenced is in the field of export control where the types of products that Alstom exports, the customers to whom it exports and the countries to which it exports or imports products and in which it operates are subject to high levels of regulations in many jurisdictions, including the United States of America and the European Union as well as other jurisdictions. In the case of data privacy rules, a breach could have a significant impact on individuals whose data Alstom processes as part of its activities.

More specifically, each aspect of the Alstom E&C programme covers the following topics:

- the Anti-corruption risk is present in Alstom's business activities due to the nature of the activity in the field of public works financed by taxes and other government funding.
- for Anti-trust, there is a risk of anti-competitive practices such as collusion or price fixing due to the structure of Alstom's markets which involve a small number of competitors;
- for export control and sanctions regimes, Alstom's activities are governed by European Union sanction and dual use regimes, OFAC (1) sanctions lists and BIS (2) export regimes in the United States as well as United Nations sanctions lists and other such lists in multiple jurisdictions. The fact that many of these regulations carry an extraterritorial impact make compliance activities even more challenging;
- for data privacy, the main non-compliance risks for Alstom are (i) an unauthorised disclosure of a person's personal data ("data breach"), (ii) an unjustified collection or usage of personal data, and (iii) the inability of Alstom to comply with the rights under law of data subjects (right to be forgotten, right of access, right to object, right of correction, right of transfer);

(1) Office of Foreign Assets Control.
(2) Bureau of Industry and Security.

Strategy and policies

The Alstom Ethics & Compliance Policy, signed by the General Counsel, sets forth the values and guiding of the Group. It is fully integrated into the Alstom Group Sustainability and Corporate Social Responsibility policy, which is endorsed by the CEO.

The fundamental rules are included in the Alstom Code of Ethics which prescribes fundamental principles of conduct: respect of laws and regulations, respect of all Alstom rules and policies, prevention of corruption and bribery, compliance with competition laws and the importance for everyone to play his/her role in internal control and the disclosure of information.

Published for the first time in 2001, this document applies to every Alstom manager and employee. Considerable efforts have been deployed to meet the objective of having a local language version of the Code of Ethics available to all employees. Currently, the updated Code of Ethics is available in 20 languages. The E&C Central team continuously works with local teams to understand the needs of employees and provide further local language versions as required.

The Code of Ethics presents the Alstom Integrity Programme and gives specific instructions and requirements on the level of ethical behaviour expected from each Alstom employee or manager. It also provides contact points so that everyone can raise any question or concern.

The Code of Ethics and related internal rules and instructions cover the way Alstom manages its relations with customers, suppliers and contractors, sales partners and government procurement teams in respect of the control of exports and trade restrictions, anti-money laundering, conflicts of interests, gifts and hospitality, environmental protection, relations with communities, political contributions and activity, charitable contributions, sponsorship, respect for human rights, relationships with employees, career management for employees, equal opportunity and diversity, health and safety, security of employees, data privacy, respect for confidential information, intellectual property, insider dealing, communication with analysts and investors, communication with the media and use of social networks.

The E&C Instructions specify the principles expressed in the Code of Ethics, in particular regarding gifts and hospitality, political contributions, charitable contributions, sponsorship, dealing with sales partners or consulting companies, conflicts of interest, facilitation payments and the prevention of corruption with suppliers and contractors and in joint ventures and consortia.

The E&C Instructions are regularly updated based on actual experience of the employees, external review (lawyers, companies specialised in the questions of ethics and compliance, etc.) and recommendations emanating from the World Bank and the other public entities.

The E&C activities are the responsibility of all Alstom employees and are implemented at all management levels of the organisation. The culture must permeate the whole organisation, the "tone from the top" being relayed by each level of the management to each and every employee.

Within the Board of Directors, the Ethics, Compliance and Sustainability (ECS) Committee, created in 2010, reviews the Ethics & Compliance policy of the Company and the processes in place, and monitors their implementation by providing its advice to the Board of Directors.

The Chief Compliance Officer leads a dedicated team and reports to the General Counsel of Alstom who is a member of the Executive Committee, as well as to the Chairman and Chief Executive Officer and to the Board of Directors. To avoid any conflict of interests, he has autonomy and independence to define and implement rules and adequate processes.

The Ethics and Compliance Department (E&C), managed by the Chief Compliance Officer, includes a central team and a regional network. This team is composed of compliance experts who ensure the implementation of, and the harmonised approach to, the compliance rules of Alstom and its processes. It provides a support for the application of the policies and the current rules.

The regional network is composed of six regional compliance officers, each reporting hierarchically to the VP Legal & Compliance of the region, and functionally to the Chief Compliance Officer. The regional compliance officers work as closely as possible to the management to provide the support necessary for the operational activities of their region.

In order to increase the awareness of managers and employees, the E&C Department relies on a community of over 330 E&C ambassadors, all volunteers, who come from all the functions. These ambassadors agree to devote part of their time to ethics and compliance matters, and have no specific responsibility for the implementation of Alstom Integrity Programme. Their main role is to promote the culture of integrity through E&C awareness sessions and participation in any action of communication organised in their region and to be a contact point for questions about ethics and compliance.

Certification

Alstom ensures that its efforts systematically reflect best practices in terms of compliance and ethical standards and regularly reviews and audits its Integrity Programme. Since 2009, Alstom has been engaged in a process of certification of its anti-corruption policy.

Alstom obtained, in June 2017, the ISO 37001 certification for its anti-bribery management system on a European scale. Awarded by AFNOR Certification, this certification confirms Alstom's commitment to fight corruption and marks the start of the Alstom certification campaign that will be followed by further audits in other regions in which the Group operates. The international standard ISO 37001, introduced in October 2016, advocates a series of measures to help organisations of all types, both private and public, to prevent, detect and tackle bribery through the implementation of an anti-bribery management system. The audit focused on the adequacy of Alstom's anti-bribery system according to the standard ISO 37001, in particular its Ethics & Compliance policy, the Code of Ethics, and the various instructions relating to existing anti-corruption procedures and numerous associated training tools.

In 2018, an initial audit took place in Asia-Pacific Region and this new region obtained the certification. An audit campaign was also launched for the remaining regions between September-December 2018 and Alstom is now certified ISO 37001 for all the six operational regions.

Processes and action plans

Risk based approach

Alstom deploys its E&C programme to address the risks of its activities and the requirements of its employees and business partners. The E&C Department conducts an annual risk assessment and develops an action plan to mitigate the identified risks. In 2018, the Department decided to address specifically the risk regarding joint ventures with minority stakes, by supporting them in adopting a Code of Ethics in particular. This risk assessment is then conducted on various levels of the organisation to adapt the evaluation of risks locally according to the operational activities and the geographical zone and to adapt corrective actions to every typology of risk.

In addition, a compliance assessment is made on each project during the pre-tender preparation phase prior to bidding on the project. Approximately 300 projects were evaluated during the fiscal year. In larger, more complex projects involving consortium partners and joint ventures, specific risk assessments are conducted on the project partners. A mitigation plan is elaborated according to the importance of the project and the risks identified before any answer to a tender, which is then transferred to the Project teams to ensure its execution.

In all projects and activities, the use of commercial agents is also subject to a specific risk review exercise as part of the due diligence and "on boarding" process of the commercial agent.

Finally, at the discretion of the compliance team, specific risk assessments have been implemented for long term projects which involve a significant investment in the country of activity.

Training and communication[VP]

Communication, awareness and training of the managers and employees are essential to explain Alstom's Ethics & Compliance policy. These actions are available on multiple media: on-line modules, live sessions and specialist interventions on the questions of ethics and compliance.

The e-Ethics module related to the Code of Ethics targets managers, engineers and professionals for whom it is compulsory when they join Alstom. This module has been completed by over 16,700 employees, which represents 91% of the targeted population.

A targeted three hour face-to-face "E&C" class goes deeper on the subject of the fight against corruption, the legal environment in which Alstom operates and the Company's rules on this subject. A new two-year learning campaign was launched in 2017 with the definition of a new target population, considered as more exposed to the risks of corruption, according to the function and the grading. 83% of the target audience has been trained to date (4,416 employees trained).

Finally, as part of our continuous improvement approach, the first annual micro-learning (10 minutes interactive e-learning refresher) was developed and implemented for this fiscal year with a focus on the Alstom Alert Procedure. The target population for this class is the same as for the e-ethics, meaning all managers, engineers and professionals. In addition to the objective of raising awareness about the Company's Alert Procedure, the Executive Committee decided to make this E&C exercise for the first time in Alstom history part of the bonus scheme and, as a result, a Group objective for the Company. The module was completed by over 18,000 employees (97% of the target audience) during the fiscal year.

A number of communication tools were adopted as part of a detailed communication plan in order to increase the visibility of the compliance activities:

- regular news on Alstom's internal communication tools (intranet, social network of Alstom "Chatter", TEAMS magazine);
- an updated E&C educational video addressing the issue of corruption prevention, available in both English and French on the intranet site as well as on www.alstom.com;
- a campaign of posters to give visibility to E&C on sites "10 E&C Golden Rules";
- the "E&C Days", an all-day or half-day compliance event which can be deployed remotely on each Alstom site to raise awareness and adherence to the Alstom Integrity Programme. These sessions are organised to introduce local teams to the E&C team, to highlight the importance of compliance activities in the Region and also to help fully integrate the E&C ambassadors into the program and raise their visibility. The E&C days are an interactive and informal way to reinforce the Company's expectations and promote an ethical culture, demonstrating that everyone is concerned through various role-playing scenarios where the participant is placed in practical situations. More than 25 E&C Days were organised around the world during this fiscal year;
- the celebration of the International Anti-Corruption Day in December with various actions among which were site events.

The E&C team works continuously with the E&C ambassador community to fully integrate them into the Integrity Programme. All training sessions reference the names and contact information of the local ambassadors and are conducted with their involvement when logistics allow. Also, the Regions circulate regular communication messages showcasing the ambassadors in order to publicise them as a point of contact for E&C issues.

A dedicated training course of one and a half days was implemented to strengthen their knowledge of the ethics and compliance subjects and various tools available to the employees of the Company such as the Alstom Alert Procedure. About 240 E&C ambassadors have been trained since the pilot session in February 2017.

Alert Procedure[VP]

The Alstom Alert Procedure allows any employee or any third party in relationship with Alstom to report, according to the applicable legislation, a violation of the Code of Ethics or Alstom rules and policies.

The Alert Procedure offers several means of reporting:

- a secure website (www.alstom.ethicspoint.com);
- an icon for a direct access on every Company computer;
- a toll-free hotline, both reachable 24 hours a day, seven days a week.

The scope of the Alstom Alert Procedure covers all the values and principles of the Alstom Code of Ethics, according to the applicable legislation in each country including corruption, anti-competitive practices, conflicts of interest; discrimination and harassment at the workplace, health, safety and security at the workplace; environmental issues; other violations of Alstom rules, policies and internal controls, human rights and IT frauds.

A new online training package was launched in January 2018 with a focus on the Alert Procedure (see the section "Attractivity and Retention", page 226).

Alstom ensures that every measure is taken to respect reporter confidentiality and make the commitment that no employee will suffer from retaliation, such as a change of status, harassment or any other form of discrimination as a result of using the Alert Procedure or disclosing information in good faith. Alstom also allows the anonymity of the reporter in the respect of applicable legislation.

All cases reported through the Alert Procedure were investigated, measures were taken and sanctions imposed by the disciplinary committee in all substantiated cases when judged necessary (oral warning, reminder letter, dismissal).

Disciplinary committee

Alstom has implemented a Disciplinary Committee as the management body with authority to review cases of non-compliance with the Code of Ethics and Alstom rules and decide on appropriate and uniform disciplinary actions throughout the Company. In order to reinforce the importance of this Committee and the Alstom commitment to discipline, the committee is made up of the Chief Executive Officer, the General Counsel, the Senior Vice-President of Human Resources and the Chief Compliance Officer.

This committee adopted a charter which governs its activities and holds reports of meetings and a register of all the disciplinary decisions taken to assure uniformity and equity. If the accused person is an employee, he/she has the right to be heard and any disciplinary action is presented to the employee by the Chief Compliance Officer or by the Human Resources Department and, in certain cases, directly by the General Management, to assure a complete understanding of the measures taken and their justification.

Furthermore, the E&C Central team deploys an annual communication plan to increase awareness regarding the disciplinary measures taken within the Group and publishes regularly anonymous examples of concrete cases.

Continuous improvement

The three-year period of self-reporting obligations implemented as part of the Agreement Plan of 22 December 2014 has come to a successful completion during the last fiscal year. This achievement is the result of the Company's efforts during the period and a close cooperation with the US Department of Justice. The Company remains committed to the highest level of integrity in its activities and will continue the development of its compliance program.

To control the relevance, the adequacy and the efficiency of the Alstom Integrity Programme, an internal audit plan dedicated to the E&C processes is established every year and a resource of the Internal Audit Department is dedicated to these audits.

To monitor the performance of the Alstom Integrity Programme, the E&C Department launched in 2012 the Yearly Integrity Review to gather feedback on the performance of the Alstom Integrity Programme during the year. The managers requested to complete the questionnaires were identified by Human Resources and the list is reviewed with the Chief Compliance Officer (approximately 400 managers). The managers have also signed a representation letter confirming the commitment to the Alstom Integrity Programme. The seventh exercise was launched in March 2019 at the closing of the fiscal year in order to collect the feedback.

Based on the responses, the E&C Department provides to the Chief Executive Officer and the Ethics, Compliance & Sustainability Committee members a summary of feedbacks and statistics on the responses to the online survey. Then, the E&C Department prepares an action plan to meet the perceived points of attention.

Regulation of lobbying activity

In December 2016, France modified its legal framework to reinforce its anti-corruption initiatives and promote transparency in public affairs. In this framework, a register of lobbyists was created by the High Authority for Transparency in Public Life *(Haute Autorité pour la transparence de la vie publique)* for concerned French companies to identify themselves and join the register. This registration was completed by Alstom which is currently identifying and training employees and related parties which are subject to the reporting requirement and since last year, Alstom has submitted the required annual report to the French authorities.

Main results and performance indicators[VP]

The E&C Department uses various indicators to monitor the performance of the Alstom Integrity Program.

	2017/18	2018/19	2020/21 targets
Number of E&C Ambassadors	290	330	**Renewal of current ambassador based and recruitment of new members**
Percentage increase in number of Alert Procedure reports	19%	25%	**Continued year over year increase of 20%**
ISO 37001 certification	2 of 6 regions certified	All regions certified	**Renewal of certification for the Alstom group**
% of people trained in E&C class	77%	83%	**90%**

RAILWAY SAFETY

"Railway Safety" relates to the section "Accidents" in chapter 4.

Railway safety can be defined as the ability of the Railway System to operate without leading to injuries or human casualties. This ability is defined as the absence of unacceptable risk (1).

The unsafe condition of a railway system can impact human health. The resultant risks for Alstom's activities could be the following:

- worldwide recall of products that are suspected to be unsafe and retrofit of fixes on all products that could be defective;
- the need to stop all or part of operations in the event that a safety issue has occurred or is suspected on a product, system or service provided to a customer by Alstom, with a further risk of penalties or a legal suit from this customer against the Company;
- liquidated damages related to the consequences of an accident on a railway network;
- legal impact with suits under Civil and/or Criminal law against the Company and/or its Employees;
- image damage, impacting the whole Company and its relationships with stakeholders and customers.

Strategy and policies

Product safety is a real concern for the railway industry and a major driver for Alstom's business.

The Alstom Quality and Railway Safety policy, updated in September 2018, highlights the strong commitment of Alstom in this area. Indeed, Alstom is committed to develop and deliver, for its clients and their customers, a range of products & services with a high safety level:

- based on railway safety regulations, and internal processes compliant with standards and codes of practices;
- formally demonstrated and assessed;
- maintained and continuously improved through return of experience.

The implication of the top management has led to the implementation of a Safety Management System, which is defined in a Railway Safety Manual.

Applicable requirements for Quality and Railway Safety are included in our Management System. It is regularly audited and certified following ISO 9001 and ISO/TS22163 (IRIS) standards.

Management and action plans

This policy is deployed through:

- the processes and way of working set in place in the different businesses and deployed in the Regions;
- dedicated annual action plans to enable the continuous improvement of Railway safety.

In addition, Alstom's products, core framework, sub-systems and systems all integrate cybersecurity arrangements and related good practices (see chapter 4 "Risk Factors, internal Control and Risk Management").

Processes and way of working

Dedicated railway safety processes exist and cover several needs:

- to ensure that safety is implemented and demonstrated in the systems/products delivered to customers, a systematic process (including safety risk analysis and safety demonstration) is applied. This process is in line with the European regulation EU402/2013 (2) and the Railway standards such as EN50126 (1). On certain projects, specific adaptations can be put in place to meet specific local requirements;
- to maintain safety during the operation and maintenance phase with adequate safety management of maintenance activities when performed by Alstom. (*i.e.* where Alstom is certified as the Entity in Charge of Maintenance of a project as per regulation (3) (4));
- to report and manage any potential safety issues occurring or having the potential to have an impact on revenue service, through a specific methodology and company tool;
- these processes are deployed and followed per activity in all Regions. The safety resources are managed with the appropriate level of independence and are allocated to projects either centrally or in the Regions;
- Alstom is constantly improving the efficiency of the management of safety aspects by anticipating the inclusion of safety requirements as early as possible in the project management processes. It is followed through Safety reviews all along the project with an indicator "% achieved of safety reviews OK".

Dedicated action plan

An annual action plan is defined and managed on a monthly base by a dedicated Railway Safety Core team. This action plan has five axes:

- reinforcement of the safety process and governance;
- strengthening of product safety (reduce safety issues) through actions on our way of working in implementing safety on projects and products;
- improvement of the reactivity to safety issues;
- deployment of the safety culture;
- actions of communication and lobbying / networking.

In particular, return on experience is taken into account to improve safety at the design phase.

Specific focus on safety culture

The reinforcing of the railway safety culture within Alstom, with a training campaign applied at different levels, targeting all employees through different sessions:

- the Top Management: – three-hour mandatory sessions (around 10 sessions per year and 100 trainees);
- the Quality & Safety populations – three sessions of one week deployed on an as-needed basis;
- the Project Management – one-day awareness (around 20 sessions per year and 250 trainees);
- any new Manager/Engineer/Professional – an E-learning mandatory session of 40 minutes;
- moreover, for blue collar workers (technicians and operators) on sites, dedicated awareness sessions are performed according to the specificities of the sites.

(1) IEC62278 or EN50126-1: Railway applications –Specification and demonstration of reliability, availability, maintainability and safety (RAMS) – Part 1: Generic RAMS process.
(2) Regulation (EU) No. 402/2013 of 30 April 2013 on the common safety method for risk evaluation and assessment.
(3) IEC62278 or EN50126-1: Railway applications –Specification and demonstration of reliability, availability, maintainability and safety (RAMS) – Part 1: Generic RAMS process.
(4) Commission Regulation (EU) No. 445/2011 of 10 May 2011 on a system of certification of entities in charge of maintenance for freight wagons.

Main results and performance indicators

The Railway Safety is monitored though different indicators:

	2018	2019	Target
% of Safety review OK (measures the capacity to anticipate safety concerns in projects execution)(1)	60.2%	66.1%	**75% in 2020**

(1) Calculated over 12 months. During calendar year 2018, the number of safety reviews performed and registered is 558.

	March 2018	March 2019	Target
Participation to Railway Safety E-training *(% of the targeted population trained)*	60%	71.4%	**95% by 2021/22**

SUSTAINABLE SOURCING[VP]

Alstom is both a local and global actor. With 105 sites distributed over 60 countries, the Group works with a large panel of suppliers, such as: start-ups, small, medium and large companies, including companies employing differently-abled people. In this context, sourcing activities represent near 60% of the Group's turnover.

Sourcing represent major challenges for the Company and entails at the same time opportunities and risks. On the one hand, sourcing directly impacts the Company's performance. On the other hand, the durability of its activities and its reputation could be at stake if the Company does not sufficiently take into account ethical, social and environmental issues (including eco-design or health and safety) in its purchasing processes.

Therefore, tight and balanced relationships with suppliers and subcontractors are key to Alstom's sustainable success, and the Corporate Social Responsibility (CSR) of the Company and of its suppliers and contractors based on reciprocal commitments provides another opportunity to strengthen these relations.

Strategy and policies

Completely integrated in the Sourcing Department, the Sustainable Sourcing activities are set up centrally at Alstom Headquarters and rely on a sourcing network of 850 people worldwide. Sustainable Sourcing is also represented in the Sustainability & CSR Steering Committee of the Company.

Alstom's Sourcing organisation is structured by domains (commodity families) and by Regions covering the global perimeter. Sourcing Managers are responsible for a defined panel of global strategic commodities and directly liaise, in a key account management mode, with the suppliers and subcontractors of their portfolio. In addition, the management of local purchasing activities is led by sourcing teams located at Alstom's sites worldwide.

The application of sustainable development within the Sourcing strategy and daily activities is continuously improved and reinforced. Main axes, described in the "Sustainable Sourcing Policy" (signed by the Chief Purchasing Officer of Alstom and available on www.alstom.com), are the following:

- ensure that the suppliers and contractors commit to the "Ethics and Sustainable Development Charter for Alstom's Suppliers and Contractors";
- assess, develop and accompany suppliers and contractors on their performance with a specific focus on CSR;
- source eco-designed, environmentally friendly and socially responsible products and services provided in the frame of safe working conditions;
- develop tight and balanced relationships with start-ups, small, medium, large companies and companies employing differently-abled people, in the context of both global and local footprints;
- work in a continuous improvement approach with appropriate indicators.

Processes and action plans

Risk mapping[VP]

Regarding the number, the footprint and diversity of suppliers, it is necessary to assess in priority the suppliers that present the highest levels of environmental, social and ethical risks. To establish this priority list, a supplier risk mapping is performed every year according to three criteria:

- product family;
- supplier's country;
- volume of purchases by Alstom from suppliers.

The level of risk per product family is based on the level of energy consumption, the risk of chemical pollution related, as well as health and safety issues. The level of risk regarding the country is based on risks relating to corruption, political instability, the respect of human rights and ecological awareness. These risks are assessed by an external provider.

Assessment, mitigation and prevention measures, follow-up and monitoring system[VP]

Commitment and qualification of suppliers

Alstom ensures that its suppliers and contractors are committed to social, environmental, ethical, health and safety-related requirements through the signature of the "Ethics and Sustainable Development Charter for Alstom's Suppliers and Contractors".

By signing the Charter, first published in 2007, Alstom's suppliers commit to comply with the principles of the United Nations Universal Declaration of Human Rights, the fundamental conventions of the International Labour Organisation (ILO), the OECD Guidelines for Multinational Enterprises, the rules of conduct of the International Chamber of Commerce (ICC) and the values set out in the Alstom Code of Ethics.

In line with its ISO 37001 (Anti-bribery management systems) certification, the fifth edition of Alstom's Charter, published in October 2017, includes a paragraph related to Alstom's Alert Procedure. Suppliers and contractors can, on a named or anonymous basis, use this procedure 24h/24 and 7d/7 in respect of all forms of illicit practices, particularly those linked to business ethics and human rights violations.

Following the French implementation of the European regulation on General Data Protection (GDPR) in May 2018, a paragraph on data privacy has also been included to stipulate that all suppliers must undertake to collect and process all personal data in compliance with Alstom's policy, current data protection laws and regulations applicable to the processing of this data in the specific jurisdiction where services are provided.

Sourcing teams request the signature of these Charters before the contracting phase, taking action on it at the earliest possible stage of the negotiation process. In addition, conformity with the charter has been included in Alstom's general purchasing conditions.

On 31 March 2019, over 87% of the key suppliers [1] representing 98% of the purchasing volume have signed this Charter. The objective to cover a minimum of 98% of the annual expenses with these key suppliers in 2020 was achieved.

Assessment and audits

The CSR activities of Alstom's suppliers are assessed according to environmental, social and ethical criteria as well as how they apply such criteria to their own suppliers.

Two main evaluation methods are considered:

- on-line assessments, undertaken by the external company, EcoVadis;
- on-site audits, called "Generic Process Audits" and led by Alstom's quality teams.

Undertaken by EcoVadis, the on-line assessments are led by a team of CSR experts who analyse the suppliers' answers and the uploaded evidence documentation. The evaluation system complies with the United Nations Global Compact guidelines, the ISO 26000 standard and the Global Reporting Initiative. In April 2017, Alstom's CSR performance threshold were revised upwards. When the evaluation results do not comply with Alstom's requirements, suppliers are required to establish and implement an action plan to address the possibilities of improvements identified. In this task, they are free to ask the fully trained Sourcing Managers of Alstom to accompany them in their improvement process. Once the corrective action plans have been implemented, the suppliers undergo a new evaluation. In case a non-compliant supplier declines to implement corrective actions or to commit to progress, Alstom may decide to stop the business relationship.

On 31 March 2019, 644 suppliers have a valid valuation less than three years old.

As part of the qualification process, preliminary audits called "Quick Industrial Assessment" are deployed on site by the buyers. These audits already include questions related to the suppliers' CSR activities. If results are satisfactory, a "Generic Process Audit", more extensive, is conducted by the quality team. This second audit includes questions aimed at minimising CSR risks. An update of the CSR questions raised during these audits was made in January 2017. They include the signature of the Ethics and Sustainable Development Charter, the respect of a minimum level of social practices as well as more precise questions regarding waste management, recycling processes and measures related to the reduction of greenhouse gas emissions.

In 2018/19, 315 Generic Process Audits have been led by the quality teams of Alstom.

In total, on-line-assessments and on-sites audits cover more than 75% of the volume of purchases made with suppliers identified as being at risk. Alstom has the objective to raise this to at least 80% by 2020.

In addition, Human Rights audits have been performed during in 2018 by an Alstom HR-EHS task force at selected Contractors (refer to the section on "Respect of Human rights", page 243).

Finally, non-compliances are subject to corrective action plans and monitoring to ensure that the required levels are reached. In March 2018, an internal management committee focused on suppliers' CSR risk management was created. It is represented by the Chief Purchasing Officer, the CSR Vice-President and the Sustainable Sourcing Director who meet on a quarterly basis to deal with these cases. Depending on the situation, the Committee can decide to launch a second assessment, to undertake an on-site audit, to put the supplier on–hold, or to stop the business relationship.

Sectoral initiative: Railsponsible[VP]

On March 2015, in order to broaden sustainability actions throughout the railway supply chain, Alstom has allied with other stakeholders of the railway sector (together with SNCF, Nederlandse Spoorwegen (NS), Deutsche Bahn, Bombardier and Knorr-Bremse) and founded "Railsponsible" – a collaborative initiative on sustainable procurement in railway. It now gathers 12 members.

Focused on sustainable sourcing, this initiative aims to improve the CSR practices of the whole supply chain through a common approach, field collaboration and the sharing of best practices, tools and processes. Under this framework, the members use the same evaluation platform – EcoVadis – in order to measure their supplier's CSR performance. The initiative has many advantages, for both the suppliers and the members. Once the evaluation has been carried out, the score is visible to the rest of its members. Through its access to the supplier evaluations that are not necessarily derived from the risk mapping, Alstom benefits from a better overview of the CSR performance of more suppliers and gains time and efficiency in doing so. For more information refer to www.railsponsible.org.

In January 2017, "Railsponsible" joined the Sustainable Public Procurement Program led by the United Nations Environment Programme (UNEP). This partnership allowed Railsponsible to join a network of private and public actors whose actions are aligned with the global movement dedicated to achieving the United Nations' Sustainable Development Goals.

The 2020 strategy of the Railsponsible Committee is built on three main actions:

- train the staff and the executive committee of organisations' members of responsible purchasing;
- build joint programs with suppliers;
- promote this initiative to railway organisations.

On 31 March 2019, more than 970 suppliers, representing the whole range of professions in the railway industry, have been assessed on this common platform under the Railsponsible initiative.

(1) Suppliers with whom Alstom has a yearly turnover superior to €100,000.

Two key areas of improvements have been identified as matters of priority to be addressed in the following years: Climate resilience and Health & Safety. Members of the initiative, divided into working groups, are setting up information and training guides for the suppliers to help them progress on those subjects.

In order to align with a common path of progress, a position paper of the Railsponsible Committee on Climate Change was issued and communicated to the supply chain network in April 2018.

In September 2018, the third ceremony of the "Railsponsible Awards" was organised during the Innotrans exhibition in Berlin. The ceremony rewarded suppliers who had shown the best CSR performance during the year. For Railsponsible it is a way to make visible, every year, suppliers and contractors that have best integrated a responsible approach.

Raising buyers awareness and sourcing sustainable products and services

Alstom's global approach aims to integrate sustainable development as a key element of the sourcing culture. Beyond simple awareness, Alstom has developed a mandatory training program adapted to the sourcing and supplier quality communities, in order to favour the strong involvement of all the buyers.

The main goal of these trainings is to anchor CSR issues at each stage of the sourcing process, in addition to the challenges represented by responsible purchasing for Alstom, the monitoring of the suppliers' evaluations and the support to provide them with for the implementation of corrective action plans.

In this context, and with the support of the Ecodesign and EHS experts' teams, buyers are advised on the criteria leading to the best sustainable solutions *versus* the ones that need to be further developed.

For example, an excellent cooperation with a supplier has enabled Alstom to develop a new balise which shell is made out of bio-sourced composite and that is now offered in signaling solutions. This solution allows significant savings in terms of resources depletion (>90%), air pollution (>10%) and water depletion (>70%).

Alstom collaborates with another supplier in order to develop a wrapping film to be placed on aluminum carbody shell as an alternative to painting without solvent emissions or hazardous substances through an easy and safe process.

The training content is updated every year and evolves together with the sustainable sourcing maturity of buyers and suppliers.

Two levels of training were proposed in the fiscal year 2018/19:

- a complete training module originally dedicated to sourcing managers and now opened to buyers (376 buyers followed this training in 2018/19);
- an introduction to sustainable sourcing delivered in the form of short face-to-face modules for new buyers (72 members of the sourcing network have attended the introduction module).

On 31 March 2019, nearly 91% of the sourcing managers – the priority target – had been trained.

Moreover, every year, a part of Alstom's sourcing managers have to respond to an Internal Audit (SMART). Its goals is to verify the maturity of sourcing through the strict application of the processes. The CSR management of suppliers' and contractors' is one of the topics verified by the auditors. A minimum score for this audit is part of the individual objectives of sourcing managers.

Developing tight and balanced relationships

To enhance its global and local footprint, Alstom develops and tightens relationships with its suppliers and subcontractors through different local and global programs and platforms (refer to the "Encouraging Local Development" section, page 246). Whether digital or physical forums, every opportunity is seized to ensure the quality of these relationships wherever Alstom operates.

A good example would be the programme "Alliance", which is a premium programme that Alstom has developed with its strategic suppliers. Alstom Alliance is a partnership programme to develop a collaborative approach with strategic suppliers on three main axes: Business development, Industrial excellence, Product & Innovation. 31 suppliers have signed the Charter defining concrete objectives: differentiation from supplier is a key driver to obtain the "strategic" status. The governance of the programme evaluates each year the mutual interest, achievements and common benefits. As a result of this assessment, relationships can be renewed or ended while entries of new companies could be considered.

It is possible to highlight other programme as those related to relationships with Small and Medium Enterprises (SMEs), which are being proposed by the French association, *"Pacte PME"*. This association gathers 53 public and private large companies and 35 professional organisations which seeks to facilitate and strengthen the relationships between companies of all sizes (see more details page 247). In addition, Alstom takes part in the annual suppliers "Barometer" of *Pacte PME* (that measures the quality of the relationships with the SMEs) in order to analyse the level of satisfaction of its suppliers and subcontractors and to designate the improvement areas. A feedback meeting was organised with involved suppliers to present a plan to answer the supplier requests. This created an additional opportunity for exchange and mutual improvement.

The Charter *"Relations Fournisseurs Responsables"* ("Sustainable Relationships with Suppliers") distinguishes French companies that have demonstrated sustainable and fair relationships with their suppliers; it was created by *"Médiation des Entreprises"*. In September 2013, Alstom obtained the Label "Sustainable Relationships with Suppliers". This label was confirmed during three consecutive years. In October 2017, the label converged with the certification ISO 20 400 related to responsible sourcing. Therefore, Alstom is being audited in order to obtain this new edition of the label, which would allow to evaluate the maturity of its CSR policy regarding its suppliers.

With the aim of enhancing collaboration with suppliers and sub-contractors who employ people who are differently abled, the Sourcing Department in collaboration with the Human Resources Department has reinforced its processes in order to systematically include these companies in its supplier selection tools for eligible markets.

To reward and highlight practices of collaboration with these companies, Alstom launched the "We Are All Differently Abled" (WADA) week in November 2018 at the occasion of the European Handicap Week.

Furthermore, "Tech days", "Suppliers Days" and other events focused on suppliers and sub-contractors are organised along the year, on the Alstom sites. These gatherings present opportunities to communicate with suppliers on the main challenges and axes of the Alstom Sourcing policy and to showcase innovative products that have been co-developed. Alstom participates in several external events during the year, which present good opportunities to meet especially with Directors of SMEs and Start-ups. This can lead to concrete professional collaborations.

Main results and performance indicators[VP]

	2016/17	2017/18	2018/19
% of purchase amount covered by the referenced suppliers having signed the Ethics and Sustainable Development Charter (1)	90%	94%	98%
Number of suppliers covered by an assessment less than 3 years old	483	510	644
% of sourcing managers who have attended sustainable sourcing training	88%	87%	91%

(1) Suppliers with whom Alstom has a spending exceeding €100,000, excluding the Charters included in the general conditions of purchase.

RESPECT OF HUMAN RIGHTS[VP]

The respect for, and adherence to, human rights is at the heart of Alstom's social responsibility. The consideration of fundamental human rights concerns the entire value chain.

Alstom's ability to report on the way it takes human rights into account in its strategy and operations can have a significant impact on its ability to control risks that may affect its stakeholders, its operational effectiveness and its reputation.

Strategy and policies

Alstom's human rights policy is part of the Sustainability and CSR policy and is defined in the Group's Code of Ethics. Its aim is to comply with the Guiding Principles on Business and Human Rights set out by the United Nations Human Rights Council and to respect internationally recognised human rights in all countries where Alstom operates. Alstom is particularly respectful of the laws governing, *inter alia*, human rights and labour, health and safety standards, and the protection of the environment. Alstom's policy is to comply fully with the fundamental conventions of the International Labour Organisation (ILO). Alstom supports the elimination of all forms of illegal, forced or compulsory labour, including child labour. Illegal, forced or compulsory labour is strictly prohibited for Alstom's suppliers and subcontractors. Alstom also complies with the Guidelines for multinational enterprises of the OECD and the United Nations Universal Declaration of Human Rights.

Alstom's objective is to identify risks and prevent serious violations of human rights and fundamental freedom in its activities and supply chain.

Respect for human rights is managed transversely according to the topics addressed. The Human Resources function, Sustainable Sourcing, Health and Safety, Sustainable Development and CSR, and the Legal Department are all involved in Human Rights processes.

Alstom is a member of the United Nations Global Compact (UNGC), promoting the respect of human rights within its sphere of influence. In May 2018, the Group's Chairman and Chief Executive Officer renewed his commitment to the 10 principles of the United Nations Global Compact (see Alstom's website www.alstom.com).

Process and action plans

Risk mapping[VP]

During the fiscal year 2017/18, the Sustainability and Corporate Social Responsibility (CSR) Department drew up a mapping that determines and ranks the Human Rights challenges that Alstom's activities are most likely to face. This mapping is based on:

- the list of Human Rights as presented in Annex A of the UN Guiding Principles Reporting Framework: "Table: Internationally Recognised Human Rights and Examples Of How Business Might Impact Them";
- the assessment by the transverse working group of the risks posed to each Human Right by each of Alstom's functions and macro-processes.

This assessment leads to the identification of the main risks based on the potential severity and probability of impacts in the fields of Human Rights standards applied by business partners, both in projects where Alstom is involved and those where Alstom is an investor. It addresses the safety of solutions and safety at work; the prevention of discrimination and harassment; the social dialogue and the protection of labour rights; supply-chain management; and data protection for our employees and passengers.

Following a gap analysis between identified risks and existing procedures, an instruction is under development to describe the human rights management system for these different risks.

The risk mapping, prioritisation of issues and analysis of corresponding procedures will be reviewed annually by the Sustainable Development and Sustainability and CSR Steering Committee.

A diagnosis of the actions performed so far is currently being carried out in order to identify potential areas for improvement during the next fiscal year.

Assessment, mitigation and prevention measures, follow-up and monitoring system[VP]

Following the completion of the Human Rights risk mapping, the existing mitigation measures in place were assessed and additional actions were launched to drive continuous improvement:

- a Human Rights review of the countries in which Alstom operates or might operate was developed. The objective is to identify potential risks related to projects and mitigation measures ahead of bid submissions, including the undertaking of specific Human Rights due diligence assessments when relevant. Support is being provided to define priorities for action in each relevant country and for each relevant call for tenders by type of activity;
- the questionnaire for assessing living conditions on construction sites where workers are provided with accommodation is now integrated in AZDP audits (see the section "Employees Health and Safety, page 223) and will be systematically deployed at the beginning of the 2019/20 fiscal year in identified high-stakes countries. A total of 13 sites or projects are now part of this audit schedule. The evaluation grid was developed in collaboration with local stakeholders, including human resources representatives and workers. A specific instruction has been developed for its implementation written and validated by the Sustainable Development and CSR, Sustainable Sourcing and EHS teams. The questionnaire covers such issues as the general level of comfort and cleanliness of the facilities and the existence of communication means and medical care facilities. A score below 80% leads to the implementation of an appropriate action plan by the subcontractor within three months and a subsequent reassessment. Unsatisfactory results are reported to the internal CSR and supplier financial risk management committee, which is responsible for taking appropriate measures, up to and including the ending of a business relationship. New projects will be reviewed by the Sustainability and CSR steering committee to validate the relevance of integrating them into the official audit planning.

  This year, the EHS teams carried out first three audits in India and one in Riyadh which confirmed the relevance of the questionnaire, and then an audit in Qatar, with an even more specific evaluation grid. For example, at the Madhepura site in India, the audit led to significant improvements, such as the upgrading of certain equipment, site security and more frequent cleaning of the accommodation. Following the audit, the site's score was improved by 12%;
- the human rights impact assessment on working conditions (work intensity, payment…) completes the above-mentioned questionnaire on living conditions. Under the combined action of the Human Resources, Sourcing and EHS Departments, other Human Rights requirements, such as the freedom of movement or resignation and fairness in wages, will now be assessed. Alstom has set four golden rules that must be followed by its subcontractors and workers: having an employment contract signed and understood by both parties, ensuring a minimum wage, offering decent and regular working hours (in accordance with local labour laws), and ensuring social protection (health insurance, free exit from a country).

  This year, several pilot audits were carried out in certain geographical areas that are sensitive in terms of human rights, where Alstom operates with subcontractors for line construction projects. Subcontractors are chosen according to the number of workers on site.

  A total of four audits were carried out in the fiscal year 2018/19 in the Middle East. The first results are satisfactory:
  - following the audits in Dubai, the evaluation grid will be adjusted to better meet the necessary requirements in the Middle East region,
  - in Qatar, a specific audit grid has been in place for two years, and an annual audit plan is planned for the 2019/20 fiscal year.

  Objectives will be developed next year to set up and monitor audit plans for the region.

  Evaluations of the working conditions of our subcontractors will be deployed in 2019/20 with external consultants in countries where Alstom is developing rail construction projects. The objective will be to validate the relevance of the questionnaire for all Alstom countries in order to then systematically deploy it;
- every year, Alstom conducts a social survey to ensure the absence of any incident regarding child labour, forced labour or freedom of association and to monitor human rights alerts reported through the alert procedure. This year, no incident was reported.

Next year, Alstom also plans to deploy a human rights training course for relevant Group managers.

In the day-to-day management of its activities Alstom strives to strictly comply with its commitments through its policies on Health and Safety (see section on Employees Health and Safety, page 223), product safety (see section on Railway Safety, page 239), prevention of discrimination and harassment (see section on Ethics and Compliance, page 235), social dialogue and protection of labour laws (see section on Attractivity and Retention, page 226), supply chain management (see section on Sustainable Sourcing, page 240) and data protection for its employees and passengers (see section on Data privacy, page 266).

Main results and performance indicators[VP]

	2017/18	2018/19
Number of evaluations carried out on living conditions of our subcontractors	New indicator	5
Number of evaluations carried out on working conditions of our subcontractors	New indicator	4
Number of incidents reported in the areas of child exploitation, forced labour, freedom of association from alert procedure	0	0

RELATIONSHIP WITH CUSTOMERS

Alstom serves the owners and operators of public and private transport services for urban and main line passenger mobility as well as the freight and mining sectors around the world. The Company offers these customers a broad range of technological products, systems and services. Thus, the risk of not being able to establish a long-term relationship of trust with its customers could lead to a decrease in orders. The Group therefore integrates customer expectations into the development of its new products and services in order to satisfy them in the realisation of their projects.

Alstom's vision is to be the preferred partner of its customers.

Strategy and policies

The first commitment of the Alstom Sustainable Development and Social Responsibility Charter (established in January 2018) is that the Group acts as a customer-oriented organisation, being able to adapt its offer and realise its projects according to their expectations. In addition, the first pillar of Alstom's strategy emphasizes that customer satisfaction is a key issue.

To achieve customer satisfaction, Alstom's commitments are:

- to capture and understand our customers' needs in order to offer them adapted solutions, taking Into account price, life cycle costs, quality and sustainability criteria;
- to satisfy our customers and provide the highest availability from the start of their buying process until the end of a contract execution;
- to accompany our customers anytime, including after the end of a contract until the end of life of the solutions we sold;

In 2014, Alstom set up a regionalised organisation to be closer to its customers and to better understand and address their needs. This regionalised organisation is complemented by central support functions such as the Performance Office whose role is to orchestrate the relationship between the Regions, the Platforms (Product Lines) and Strategy as customer representative. This relies on common processes and tools applied worldwide.

Processes and action plans

Integrating customers into innovation processes

Since 2013, Alstom has been running an annual process – called the Marketing Carousel – which aims at adapting our solutions to customer needs.

This process is managed by the Performance Office which collects the customer needs from the Sales and Marketing teams in the Regions and classifies them by Platform. Then each Platform analyses its related requirements and decides whether and how to include them in its three-year product plan. Requirements potentially leading to the development of a new product range are subject to a more detailed analysis with a group of representative customers.

Customer needs reported between two Marketing Carousels are analysed on a case-by-case basis.

Innovation is also coming from Alstom's engineering teams. These internal innovation ideas are tested with customers though proof of concepts before deciding to include them in Alstom's product plans. Alstom measures the impact of the innovation process with the "New Product KPI", including for example Avelia Horizon[1] high-speed train 2020 or Metropolis™ project, part of the Alstom 2020 Strategic Plan: "Percentage of new contracts won in the last three years with innovative products/total order intake of the last three fiscal years". The objective is to reach 30% by 2020. The "New Product KPI" was 50% in 2018/19.

Measuring customer satisfaction

To support customer satisfaction, Alstom has implemented a management system compliant with ISO standards (ISO 9001 for Quality, ISO 14001 for Environment, ISO 37001 for anti-bribery).

Since 2013, Alstom has run periodic surveys to measure customer satisfaction on the way projects are executed. Alstom executes concurrently some 500 contracts as "projects" worldwide. Of these about 360 have a contract value over €15 million and fall within the scope of the Customer Satisfaction Surveys (CSS). About half of these 360 projects are selected to be surveyed each year. CSS is under the responsibility of Alstom Account Directors who sit within the teams of each Region.

The principal measure of a customer's satisfaction is the Net Promoter Score (NPS), *i.e.* their propensity to recommend Alstom as a supplier. Our set objective is to achieve an annual average NPS of eight, through to 2020. In 2018/19, 197 projects were identified for conduct of the CSS. Of these, 146 projects have so far been surveyed for which the NPS is 8.1. A NPS below four on a 10-point scale is triggering an alert to the Account Director, the Quality organisation and management hierarchy.

Technical complaints with impact on performance or security are consolidated and analysed by the Alstom Quality organisation. The resolution of the Top 10 issues is followed on a monthly basis by Alstom top management.

Staying close to customers

Alstom relies on digital services to provide its customers with support and expertise wherever and whenever needed, even when any contractual relationship has terminated.

Opened in 2015, the Alstom Customer Portal is the digital entry point to Alstom services. It gives customers access to a wide range of services such as technical support, spares ordering and training courses. This portal brings Alstom expertise closer to its customers and allows real time interactions. Entirely secured and accessible 24/7, it is a smooth way to work with Alstom.

Available all over the world, the Customer Portal welcomes over 1,300 active users from 300 customer companies on a regular basis to manage service requests; share files and data; receive safety and obsolescence alerts; and exchange with experts through the online customer community. More information on the Service Customer Portal can be found by going to: http://services.transport.alstom.com.

(1) Avelia Horizon is Alstom's high-speed train solution for SNCF's "TGV du futur". TGV is a SNCF brand.

Early in 2019, Alstom launched a complementary digital service for mobility professionals: StationOne. StationOne is an independent online market place dedicated to the railway sector, connecting professionals in the railway industry, and is designed as an efficient way to both promote and access the broadest possible range of mobility-related products and services. It provides a unique catalogue of commodity spares which typically represents 20% of the purchases in value but 80% of the flows due to the large variety of references and suppliers. As a one stop shop solution, StationOne connects buyers and Alstom-approved vendors in a seamless way and eases the procurement process of commodities. It operates in a dedicated and separate environment that ensures complete neutrality regarding its listed products and services and total confidentiality.

Main results

Indicators	2017/18	2018/19	Objectives
Net Promoter Score (NPS)	8.0	8.1	8 each year until 2020
Total orders from newly developed products *(% in value)*	30%	50%	30% until 2020

ENCOURAGING LOCAL DEVELOPMENT

As a global Company working for public authorities, Alstom has the responsibility to develop and anchor its projects in the local economies where it operates. Its contribution to local development includes employing locals or hiring local enterprises and more broadly developing relationships with local economical actors.

Strategy and policies

The development of local enterprises is the third axis of Alstom's community investment policy which applies worldwide. It mainly consists of supporting innovative local institutions and companies, cultivating the local supply chain (refer to the sustainable sourcing policy described in the section on Sustainable Sourcing, page 240) and contributing to the direct and indirect development of territories where the Company is operating.

Wherever Alstom is expanding its industrial footprint, new ecosystems appear. Best illustrations are the recent construction of Alstom factories in India and South Africa and the establishment of enterprises nearby that will benefit from this long-term presence.

Sourcing teams organise and coordinate the exchanges with local and global companies that are already established in the country and those that take the opportunity to expand and open facilities near to the Alstom premises.

As a multinational company, Alstom assumes a responsibility to coach and support small and medium-sized enterprises (SMEs) and start-ups at local level through mentorships and financial support. Particular emphasis is placed on strengthening our suppliers' skills and helping them to understand what it takes to become a supplier to Alstom in terms of, *inter alia*, quality standards, working practices, ethics and compliance, human rights.

As part of its open innovation paradigm, Alstom contributes to local development by participating in programmes related to technology and research, nurturing the key enabling technologies alongside other counterparts through different instruments such as competitiveness clusters.

Further examples of local enterprise support include:

- support of local supply chain:
  - expansion of the local supply base to meet future needs,
  - provision of training in Alstom's requirements (quality; standards etc.) to strengthen supplier's skills;
- support of local start-ups:
  - venture capital provision,
  - sponsoring Hackathons.

Processes and action plans

The dimensioning of Alstom's local footprint and the development of the local supply chain are carried out in accordance with the applicable laws and regulations of the countries and in full respect of the customers' requirements.

In addition, Alstom assumes a responsibility to coach and support small and medium-sized enterprises (SMEs) and start-ups at local level through mentorships and financial support. Particular emphasis is placed on strengthening suppliers' skills and helping them to understand what it takes to become a supplier to Alstom in terms of, *inter alia*, quality standards, working practices, ethics and compliance, and human rights.

Alstom intends to pursue its international growth and anchorage by further improving the strength of its relationships with suppliers and contractors throughout different supportive programs.

Main results and performance indicators

The international presence of Alstom today already speaks for its ability to adapt. To enhance its global and local footprint, Alstom develops and tightens relationships with its suppliers and subcontractors through different local and global programs and platforms (see the section on Sustainable Sourcing, page 240). Be it through digital or physical forums, every opportunity is taken to ensure intimacy everywhere Alstom operates.

The Group's main actions reflecting its local development policy at the global level are presented below, namely:

- Alstom supports innovative companies through the venture capital funds Aster II and VI in which €50M have been committed. Investments are targeting early-stage startups in the field of industry (digital factory, engineering 4.0, computing…) and mobility (new usages, sustainable mobility, multi-modality, connected and autonomous vehicles). Aster offices in Europe, Israel and USA enable Alstom to identify the best opportunities in the main innovation hubs;

- in South Africa, Alstom's Joint Venture Gibela, which is building passenger trains for the state passenger rail agency PRASA, has a contractual obligation to achieve set levels of local content and to develop the local supply chain whilst complying with national Preferential Procurement legislation. This implies a significant amount of knowledge transfer and skills development from Alstom to the local companies. The first report on socio-economic impact showed that 91% of the capex spent has been with South African companies [1]. The project's total contribution to the South African GDP is estimated at approximately €5 billion between 2017 and 2028, in addition to the value of the 600 new trains;
- in Israel, Alstom is a partner with Unistream which exists to encourage life-changing entrepreneurship. The partners work together to seek out breakthrough projects and encourage young entrepreneurs, thereby supporting future of the country's youth;
- in the United States, in the frame of the new high-speed train contract, Alstom tightly works with local companies, and encourage global partners to develop their activities locally, in full compliance with the Buy American Act requirements. Moreover Alstom has developed contractual relationships with Disadvantaged Business Enterprises (DBE) and Small Business Enterprises (SBE);
- in India Alstom is actively implementing the national Make-in-India policy with 92% of components purchased locally. Alstom has also initiated a Supplier development programme supported by an Internal cross functional team to accompany the suppliers on their growth Including sustainable development stakes;
- in Mexico, one of this year's highlights is the support brought to the development of a supplier that can, after four years, export its know-how and respond to the requirements of Alstom's Canadian projects;
- in France, Alstom is a member of several associations and develops projects with SMEs:
  - Alstom is, since its creation in 2010, a member of the Association Pacte PME. This association gathers 53 public and private large companies and 35 professional organisations. Their common ambition is to reinforce cooperation between large and small & medium companies (SMEs) to lead to the emergence of new leading companies. Within this association, Alstom leads actions to accompany its SMEs on three axes: innovation, pooling and international development. In October 2018, the program "Destination ETI" came to the end of its first year aiming to support 34 SMEs leaders to grow their enterprises from small to medium size. In addition, Alstom was one of the eight founding members of the *"Pacte International"* platforms, the objective of which is to help SMEs to export themselves,
  - the Group is also a member of the *Association Alliance et Territoires* which was set up to develop employability in the Rhône-Alpes region by creating a secure dynamic in terms of employment and skills development through the development of initiatives, pathways and skills enhancement programmes and by contributing to social innovation through the development of new management, human resource and corporate social responsibility practices,
  - Alstom also develops joint projects with SMEs and academics as part of the "Investments for the Future" program. Examples of this are its involvement in Technology Research Institutes in Saclay (SystemX) and in Northern France (Railenium) and the Energy Transition Institute in Villeurbanne (SuperGrid). To develop ecosystems around innovation, Alstom is also present in numerous clusters, such as the I-Trans and Médée clusters in Northern France, the Vehicle of the Future cluster in Belfort, the Aerospace Valley cluster in Toulouse and the Systematic cluster in Paris. More information can be found on www.alstom.com,

Finally, to build a base of solid skill to receive and to support the new equipment and technologies, Alstom, in collaboration with French and foreign Ministries of Education, creates locally centers of excellences, in Panama, in Morocco and in Southern Africa. These centers have authority to train technicians of rail maintenance to operate later on in an autonomous way at local level. It is about a transfer of technical and pedagogic knowledge to return every country autonomous in the maintenance of its modern equipment, to reduce its carbon footprint.

Social Impact Assessments

In 2016 Social Impact Assessments (SIAs) were undertaken on the Company's activity in the United Kingdom and on the Gibela JV's activity in South Africa. The aim was to assess the economic value of these activities and their contribution to the local economy. It assessed the value of the entities as providers of products and services; as major employers and skills developers; as drivers of local supply chains and local community economic development. It also considered their environmental footprint; their role as corporate citizens; and their overall contribution to national development.

In the future, Alstom plans to measure more precisely the social benefits of its activities and its contribution to the development of its territories. An indicator, relating to the deployment of a process to monitor Alstom's contribution to local development, will be put in place next year.

RELATIONSHIP WITH LOCAL POPULATIONS

The legitimacy of a company like Alstom, which is operating in many countries around the globe stands not just on its ability to satisfy its customers, partners, investors and employees, but also on the acceptance of its presence by the communities amongst which it is located. The lack of open and regular engagement with local communities could impact a company's reputation thereby challenging its legitimacy – its "Licence to operate" – and potentially giving rise to litigation with its neighbours.

Establishing itself locally, and demonstrating positive impact is essential to preserve ability to perform day to day business. Through dialogue with the community and contribution to its local initiatives, Alstom intends to become a Good Corporate Citizen, the success of which is good for the broader community.

(1) Gibela, Socio-economic impact report, 2016.

Strategy and policies

Alstom recognises that, whilst it is a global player, it also has the obligation to act as a local player wherever it is operating. This requires engagement with communities local to its sites and offices in order to nurture good relationships, to ensure an acceptance of its presence and to demonstrate its long-term commitment to the locations where it is present. The Company's various stakeholders – its customers; investors; employees; local authorities; and the local communities themselves – increasingly expect such engagement to lead to measurable material benefit for the communities; indeed, in some countries (*e.g.* India) there is a legal requirement for companies to undertake such activities.

Community investment

Alstom first defined its global Community Investment Policy – which is published on the Company's website – in 2013. Since then it has consistently applied this policy, engaging with local stakeholders in order to develop and implement local action plans (the Country Community Action Plans or CCAPs) which meet their expectations and needs.

The Community Investment Policy has three priorities:

- responding to local social needs;
- supporting development through education;
- encouraging the development of local enterprises (see the section on Local Development, page 246).

Responding to local social needs

Alstom seeks to make a positive impact on disadvantaged local communities, improving their living conditions and their socio-economic standing through pragmatic dialogue and by encouraging employee awareness and employee involvement in various volunteering activities.

Alstom is involved in charitable activities and fund-raising in most of the countries in which it has a major presence. The Company encourages initiatives amongst its employees to raise money or other forms of donation for local charities and often contributes to them in some way, such as through sponsorship, the "matching" of employee donations, the provision of logistical support, the provision of food or refreshments, by allowing the use of company property or by giving employees the time to participate.

Most usually Alstom's employees get involved in fund-raising events such as charity runs, golf tournaments, coffee mornings and barbeques. They also are frequently engaged in collecting or donating clothes, toys, books or food. In France, an agreement with the charity Emmaus has led to a van being made available twice a year at the Company's Headquarters into which employees may put items which could be of value to disadvantaged individuals or saleable to raise money. Other countries, such as Belgium, Italy, Poland, Brazil and USA, do something similar but more geared to a specific calendar event such as Christmas time, Ramadan or Chinese New Year.

Overall, Alstom addresses social needs through its support to charities and through community project support. Emergency relief in the wake of natural disasters is in the remit of the Alstom Foundation.

Examples of charitable support include:

- donations of cash, products (food; toys, clothes…), services or equipment to local, national and international charitable appeals;
- membership of, and subscriptions to, charitable organisations that help to deliver the community engagement strategy;
- company-matching of employee donations and fundraising;
- employees volunteering during working hours and the support given to them.

Examples of community support include:

- involvement in the development and promotion of understanding of key topics such as environmental awareness; diversity; human rights; STEM (Science, Technology, Engineering, Mathematics);
- general manpower and financial support to disadvantaged communities;
- grants, donations (cash, product, services or equipment) to community partner organisations;
- support to individuals of the community who are struggling, by such actions as God-fathering jobseekers and targeted recruitment of local people from disadvantaged backgrounds or without qualifications.

Supporting development through education

Alstom promotes education among young people through four primary activities: the development of individual skills and employability, the raising of awareness on key topics linked to Alstom values (*e.g.* the environment, diversity, health and safety, human rights, STEM), the support of schools and partnerships with colleges and universities. The Company has created a core group of STEM Ambassadors with the expertise, experience, training and will to collaborate with educational establishments to promote STEM topics and to mentor individual students.

Alstom's sites around the world often have strong links, either formal or informal, to local schools, supporting them by organising familiarisation visits to its sites, by participating in Governing or Examining Boards, by deploying its STEM Ambassadors to encourage the children to contemplate careers in these areas, by facilitating internships and by fulfilling other needs such as equipment provision or the renovation of school infrastructure.

Alstom has a broad array of technical partnerships in place with Universities/Higher Education establishments in Europe and beyond. The objective of these is to enhance the Company's Research and Development (R&D) capability by using local talent. A list of these partners by country can be found on the Alstom website.

The Company has targeted relationships with selected educational establishments around the world aimed at facilitating internships and encouraging students into the railway industry. This has the double benefit of allowing alumni to secure good jobs at the end of their course, whilst allowing Alstom to identify strong candidates for recruitment.

Beyond this, the Company frequently supports educational establishments by making its experts available as lecturers, examiners and mentors, by participating in job/career fairs, and by organising workshops and site visits.

Further examples of education-related activities include:

- developing employability – encouraging individuals *e.g.* In-house training and placements of local people and mentoring of apprentices;
- support to schools *e.g.* Organisation of Alstom site visits; General manpower and financial support;
- partnerships with/support to Colleges/Universities:
  - providing lecturers on engineering-related topics,
  - establishment of Alstom Scholarships/Chairs,
  - sponsoring engineering fairs and innovation competitions.

Volunteering

In support of its Community Investment Policy Alstom has developed its Volunteering Policy which seeks to encourage volunteering amongst its workforce. It is estimated that a significant proportion of the Alstom workforce (between 20-25%) engages in some sort of philanthropic activity in support of good causes. This they do of their own volition, giving freely of their time, money and expertise. Alstom seeks to leverage this, adding value where it can consistent with its Community

Investment Policy. Local management teams are authorised to allow Alstom employees to spend one paid day per year to undertake a volunteering activity. Whilst activities can be undertaken at individual level, it has been found that team activities give the best results for the beneficiaries whilst promoting team-building amongst Alstom colleagues.

Processes and action plans

Under the banner of "Alstom in the Community" there are two arms to the Company's local community activities. One arm is the Alstom Foundation which is a centrally managed entity, with its own unique budget and branding, which selects, finances and monitors the progress of local community-related projects around the world on a once a year cycle. These projects are generally of a six-month to three-year duration. The second arm involves the management teams, in all countries in which Alstom has a significant employee headcount, in the development of their own annual Country Community Action Plans (CCAPs) for the application of the Company's community investment policy. 27 countries or country clusters, representing 96% of the Alstom workforce, established CCAPs during the year, encompassing nearly 500 separate activities. This compares with 24 countries/clusters and just under 400 activities during the previous fiscal year. These plans are developed, funded, managed and implemented locally in line with the Company's community investment policy. The actions under each plan are decided based upon a local perspective of how the Company can have maximum impact in addressing local needs, whilst taking into account local culture and sensitivities. Such actions are normally performed in the name of the local Alstom entity.

The Alstom Foundation

The Alstom Foundation was created in 2007 in order to share Alstom's success with disadvantaged communities situated in countries where Alstom is active, thereby enhancing the relationships with such communities whilst recognising the citizenship and engagement of Alstom's employees. Working with international and local partners, the Foundation seeks to improve the living conditions of local communities by providing finance for a variety of concrete initiatives which support socio-economic development and sustainability. With its budget of €1 million per year, the Foundation has supported 184 projects to date, including the 16 projects selected in 2018/19. These projects, all of which were submitted by Alstom employees working hand-in-hand with partner entities with proven local expertise, span 55 countries across six of the world's continents. The Alstom Foundation also makes donations on a selective basis to expert Non-Governmental Organisations actively involved in supporting communities in the aftermath of natural disasters. During the Fiscal Year, it acted in the aftermath of the floods in the Aude region of southern France and Typhoon Mangkhut in the North Luzon area of the Philippines.

Whilst the focus of the Foundation in the past has been, and will remain, predominantly developing economies, the Foundation also supports suitable community projects located in developed countries, which recognises the fact that Alstom has a major presence in several developed countries and that disadvantaged communities also exist in these countries.

The projects of the Foundation generally address one or more of the following four challenges:

- supporting communities facing social and economic difficulties;
- protecting or preserving our natural environment;
- addressing energy and/or water supply insecurity;
- assisting communities which suffer from a lack of access to mobility.

In the light of the steadily increasing number of submissions received by the Alstom Foundation each year, it was decided that from 2018/19 the dominant socio-economic category will be refined to address exclusively (i) skills development and employability of disadvantaged young adults and women (ii) care and protection, shelters and homes for children in a precarious position such as street children and orphans.

The Foundation's Board of Directors includes eight members, five of whom are internal to Alstom and three of whom are external experts. The Board is supported by a Secretariat which undertakes the day-to-day running of the Foundation and implements the Board's decisions. The Secretariat oversees the implementation of the agreements with the selected partners and the progress of the projects that the Foundation is supporting.

42 projects were active in April 2018; of these, 16 remained active at the end of the fiscal year (March 2019) and 16 new ones were added in September 2018, all of which were still active at the fiscal year end. Several of these projects (notably those in Vietnam; UK; Israel; South Africa) were the subject of focused volunteering activity by teams of Alstom employees who gave freely of their time and expertise to give on the ground support to our local NGO partners.

Country Community Action Plans

In all the countries in which Alstom has a substantial headcount (typically greater than 200 employees) a CSR Champion has been appointed to lead the local implementation of the Company's Community Investment Policy. CSR Champions have also been appointed at Region level to coordinate such activities across countries in a Region and to facilitate approvals where required. The Champions are not full time in this role, but are considered, on average, to dedicate 15% of their time to it. This equates to roughly five man-years per year in total. Global coordination at HQ is undertaken by the Director, Community Investment, who ensures the overall consistency of activities and the transfer of best practice from one Region to another.

Alstom has put in place a philanthropy and community engagement strategy spanning all the countries in which it has a major presence. This strategy is consistent with the Community Investment Policy and its priorities are aligned with Alstom's business drivers. Such alignment allows the Company to leverage its strengths, its brand and its employees to have the maximum impact on the beneficiaries. The strategy is underpinned by a process, drawn up in 2018 and lodged formally in the Alstom Management System, which sets out the rules and methodology for the production and implementation of Country Community Action Plans.

A common tool, the CCAP Template, is used by the CSR Champions to support this process, allowing the actions to be planned, monitored, recorded and assessed. It also facilitates consolidation to give an overall global picture of the Company's community actions during the year.

CCAP initiatives must be aligned with the Community Investment Policy with its three axes: meeting social needs; supporting education; cultivating local enterprises.

A global cash budget of €1 million per year has been established to support the implementation of CCAP activities, this money being used as leverage to achieve benefits of greater value to the supported communities. In addition, Alstom's Joint Venture in South Africa – Gibela – spent during the year over €7 million on Broad-Based Black Economic Empowerment-related skills development, local enterprise development and socio-economic development.

Main results and performance indicators

The Alstom Foundation

At its meeting in September 2018 the Board of Directors selected the following 16 projects for support from the 2018/19 budget, presented below by geographical region. The relevant local Alstom facility, be it a factory site, an office or some other entity, is identified.

Asia-Pacific

- India – Bangalore office. Provision of professional training of 12 months for 16 young, aspiring female entrepreneurs from disadvantaged backgrounds. Partner: Life Project 4 Youth (LP4Y);
- India – Bangalore office. "Small Homes: Big Dreams" – third year of a project supported by the Foundation in the previous two years aimed at offering street children (girls) a safe home, decent healthcare and a proper education: partner: Dream India Network (DIN)/*Objectif France Inde* (OFI);
- India – Madhepura factory site. Second year of a multi-facetted project to empower women and adolescent girls from seven villages in the vicinity of the site to achieve dignified livelihoods and improved health. Partner: CARE India;
- Vietnam – Hanoi office. Provision of safe drinking water and improved sanitation facilities coupled with the promotion of good health practices at a school for 132 children from 6-12 years old. Partner: XUAN – *Les Enfants de l'Avenir.*

Europe

- Italy – Savigliano factory site. Provision of economic support and increased job opportunities for mothers with young children who are going through a difficult period in life due to family, economic or social issues. Partner: Oasi Giovanni onlus;
- Poland – Katowice factory site. Support to two social enterprises which train 150 disadvantaged youth for the labour market, specifically expanding the IT training and placement programmes. Partner: NESsT;
- Romania – Bucharest office. Work integration programme for people who, despite a wrong start in life or a life accident are motivated to rebuild their lives regardless of the discrimination and other obstacles they face. Partner: *Asociatia Ateliere Fara Frontiere;*
- Spain – Barcelona factory site. Training and ongoing guidance to people suffering from socio-labour exclusion so that they may set up and make a success of their own businesses. Partner: *Accion contra el hambre* (Action against hunger).

Americas

- Brazil – Sao Paulo factory. Creation of a professional training centre in the favela, recognised by the national training authorities, to increase the employability of vulnerable and low-qualified young people from 16-35 years of age. Partner: *Arca de Noe de Apolo social;*
- Brazil – "*Viver de bike"* is an income generation and employability programme which aims to train vulnerable youth in repairing bicycles and encourage them towards entrepreneurship (*e.g.* providing delivery services for the elderly). Partner: Aromeiazero Institute;
- Chile – Santiago office. Part of an ongoing programme to give technical training to youth from low income backgrounds mentoring them and secure them internships in local industry. It includes the provision of up to date technical equipment to the participating schools. Partner: *Fundacion Educacion 2020;*
- Colombia – "Small steps forward". Project focused on the mobility needs of children and young people in the city of Medellin, which aims at mapping the city from the perspective of their safety when making everyday journeys on foot. Partner: Walk 21.

Middle East Africa

- Algeria – Algiers office. "Digital Village". Year 3 of a project to upgrade buildings providing homes to 142 children deprived of their biological families. The aim of the village is to alleviate hardship and maintain family-like stability so that children will be safe and grow up in a loving home. This year's focus is on the provision of computers, internet access and IT training. Partner: *SOS Village d'Enfants,* Algeria;
- Kazakhstan – Astana office. Project aiming at improving career opportunities for technical-vocational school students in Atbasar through the modernisation of training equipment and the upgrading of the curriculum. Partner: Eurasian Foundation of Central Asia;
- Israel – Jerusalem depot. Project which aims to equip underprivileged youth with practical entrepreneurial, business, leadership and technical skills and to create social change by demonstrating to their communities that social mobility is achievable. Partner: Unistream;
- South Africa – Ubunye and Gibela factories. After-school life skills development programme focused on providing vulnerable children affected and/or infected by AIDS to improve their school performance and enhance their psychosocial status, thereby better positioning them for the future. Partner: Association Francois-Xavier Bagnoud (FXB).

The nature of the projects supported by the Alstom Foundation is such that it is often quite difficult to assess the number of direct beneficiaries of a project and even more difficult to assess the number of indirect beneficiaries. An added dimension is time. For example, a small pilot project could give rise to scaled-up follow-on projects with many thousands of beneficiaries over several years. An analysis of the 51 projects that were active during the Fiscal Year across 24 countries indicates that over 20,000 individuals will benefit directly from them once they are completed. Dozens, if not hundreds, more have benefitted from the Natural Disaster Fund donations of the Foundation following the flooding in the Philippines and France (see next paragraph).

More information about the Alstom Foundation and its projects can be found on the Foundation's website: www.foundation.alstom.com.

Country Community Action Plans (CCAPs)

At the end of the fiscal year, 27 Country Community Action plans implemented.

It is difficult to assess with any accuracy the number of people who benefit directly and indirectly from these various activities and the ways in which they benefit can vary enormously. Overall, it is estimated that around 75,000 people have benefitted in some way from Alstom's community activities during the year. This number is probably an under-estimate as for many activities it is difficult to assess the number of beneficiaries and this number considers only the direct ones.

The following paragraphs highlight the inputs and outcomes of a selection of activities from the list of nearly 500 undertaken during the Fiscal Year pertinent to each category of the Community Investment Policy.

Responding to local social needs

- Community project support:
  - in August 2018 destructive floods wreaked havoc in Kerala and parts of Karnataka in southern India. Alstom employees from across the country donated a day of their salaries to support those affected. The amount raised was matched by the Company. Working in conjunction with the NGO United Way, the funds were used to provide 1,300 education kits, assembled by Alstom team members, to local schools and to help renovate four schools and 10 learning centres. The number of direct beneficiaries is estimated at 2000;
  - in various countries (*e.g.* Singapore, United Arab Emirates, Turkey) Alstom teams have engaged in clearing waste from open areas like beaches, river banks and parks. In other countries (*e.g.* Chile, Panama) the Company has participated in reforestation/tree planting activities. Sometimes organised by the Company, sometimes by national or even global movements, the Company often provides the time, the transportation and the equipment for such engagement in the interest of the environment.
- Supporting disadvantaged individuals:
  - in several countries (*e.g.* Australia, Belgium, Israel) Alstom encourages its employees to give blood by arranging for the blood transfusion services to come to our premises and by allowing employees to donate during working time. In the case of Spain, Alstom staff even fitted out a tram with the necessary equipment and facilities for it to be used as a travelling blood donation facility;
  - in France, the Company provides volunteer and financial support for the NGO *"Sport dans la Ville"* which seeks to engage with youth from disadvantaged areas through sport, thereafter encouraging them through mentorships, internships and other means to move down a pathway towards meaningful careers.
- Support to charities:
  - in most countries Alstom engages in activities to raise money and/or to gather items (*e.g.* food, toys, clothes) for donation to charities, often incentivising employee involvement through a matching policy. Generally, money raising is focused around sporting events such as charity bike rides (*e.g.* Italy) of golf competitions (*e.g.* USA), but can also include on-site coffee mornings (*e.g.* UK). Overall around €400,000 was spent in money and time on such activities during the year (not counting the contributions from individual Alstom staff);
  - Alstom's Modern Workplace programme, which commenced in 2018, involves the replacement of many thousands of laptop personal computers used by Alstom staff. It was therefore resolved that those replaced computers that were still usable would be cleaned up and then made available, to suitable charities, NGOs and schools in disadvantaged areas. After pilots in six countries, the scheme went live in February 2019. By the end of March 2019 an estimated 250 computers had been handed over. Several thousand more will follow during the next fiscal year.

Supporting development through education

- Developing individual skills and employability:
  - Alstom has apprentice and internship programmes in place in several countries which are often (as is the case in Brazil, France, Spain and the UK) focused on young people from disadvantaged or marginalised backgrounds. This frequently involves partnerships with local institutions, the training of internal mentors, and the development and implementation of a training plan. The aim is for apprentices to learn a trade as leverage to future employment – whether in Alstom or elsewhere. Training can be full or part time and of different durations.
- Raising awareness on key topics:
  - in France and Spain, Alstom acts in partnership with the Association *"Elles Bougent"* in order to develop mindsets on diversity and promote engineering as a career for women. The Company contributes to a broad range of events – both external (*e.g.* Engineering Day for Women, Industrial week at INSA – the National Institute of Applied Sciences) and internal (*e.g.* hosting site visits);
  - in many countries (*e.g.* Israel, France, Spain) Alstom has an obligation to support people with disabilities. This can take several forms including the creation of meaningful employment; support to supplier organisations that employ a majority disabled workforce; and in involving disabled people in the design of its products and services in order to ensure that their needs are taken into account. In Spain, the Company has in place a frame agreement with *Fundacion ONCE* (an Association for the Blind) aimed at improving vision-impaired people's passenger experience and to promote their employment in Alstom.
- Supporting local schools:
  - several Alstom countries (*e.g.* Chile, Morocco, UK) hold open days at, or receive organised visits to, its factories and work sites so that school children may gain a perception of life in industry in general, and in the transport sector in particular. Several others provide short term internships to allow children to gain work experience and exposure to different corporate departments. Support is also provided by Alstom Ambassadors giving lessons on STEM topics or acting as school governor;
  - in South Africa, the local Alstom entity supported a project funded by the Alstom Foundation to set up a welding school as part of the Esibonelwesihle Technical School. Alstom provided the technical expertise to define and procure the equipment that would be needed, to define the course content and to train the teachers.

- Supporting Colleges and Universities:
  - in Italy, Alstom is one of the founding partners of Technical Institute "ITS Lombardia Meccatronica", near to Alstom Sesto San Giovanni site. The Company participates in the setting of the training programs and the organisation of internships for some students. It also provides three grants for economically disadvantaged and outstanding students to attend the institute, covering the registration fees;
  - Alstom has in place relationships with more than 20 universities in seven countries, primarily in Europe and the USA, for Research and Development purposes. The list of these, and those of other research establishments with which the Company is working, can be found on the Alstom website www.alstom.com.

METHODOLOGY

INTRODUCTION

The content of this chapter dedicated to Alstom's Sustainable Development and Corporate Social Responsibility (CSR) has been prepared by the Sustainable Development and CSR central team of Alstom with the collaboration of many support functions such as Sourcing, Human Resources, Risk Control, Ethics & Compliance, Environment Health & Safety (EHS), Ecodesign, Innovation, country representatives and Product platforms.

The collection and consolidation of all information was the subject of a dedicated process between January and April 2019. The whole chapter has been reviewed by PricewaterhouseCoopers as an independent third party in respect of the order of 19 July 2017 (order No. 2017-1180) and of the Decree No. 2017-1265 of 9 August 2017.

REPORTING PRINCIPLES

All the data reported (indicators) are coming from different Alstom internal reporting systems, detailed in the respective sub-sections. Indicators considered relevant are defined with reference to the Global Reporting Initiative (GRI). However, some indicators are not yet available on a consolidated basis or have been considered irrelevant for Alstom reporting. In such cases, they are not mentioned or are limited in scope, which is then specified. A synthesis of indicators/key figures is available in a dedicated section at the end of this chapter. It includes information as per the Order of 19 July 2017 (Order No. 2017-1180) transposing Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 on the publication of non-financial information.

ENVIRONMENTAL PERFORMANCE AND HEALTH AND SAFETY RESULTS

Data covering these topics are gathered within the reporting and consolidation system "Teranga", which is also used for financial reporting purposes.

On the reporting scope, safety and health results cover almost 100% of Alstom's employees and contractors working for Alstom. As regards the environmental performance, all production sites, all depots operated and managed by Alstom in the context of a contract duration of five years or more, all permanent offices occupied and managed by Alstom and all permanent sites of more than 200 persons are consolidated in the environmental reporting. Due to different possible configurations and partnerships that could occur in projects, only the waste environmental performance of temporary construction sites covered by an ISO 14001 certification is recorded. Temporary construction sites not covered by a certification as well as activities conducted in sites of less than 200 persons on which the utilities are not managed by Alstom are not recorded. Environmental results cover 78% of Alstom employees.

Newly acquired activities start to report after a full calendar month of presence in the Group in the case of safety results and after a full calendar quarter of presence in the case of environmental results. The environmental results of newly acquired sites are consolidated after a full calendar year of reporting. Data of the baseline year is then recalculated to take into account the new sites and allow the performance to be measured at a constant scope.

Concerning health and safety reporting, this is done on a monthly basis from around 170 elementary reporting units with 12 basic indicators. On environment, the reporting is done on a quarterly basis from around 74 reporting units with 27 basic indicators. Intensities (energy, greenhouse gases, waste and water) are calculated from the hours worked within the units that report on environment. Monthly and quarterly reporting is completed by a yearly reporting campaign with 18 additional indicators.

The definition of indicators is described in a Group document – the EHS reporting manual, which is completed by a reporting procedure. The process is under the responsibility of the EHS Vice President.

Except when specified differently, health and safety data are presented in a fiscal year, *i.e.* from April 2018 to March 2019, while environmental data is consolidated in a calendar year, *i.e.* from January to December 2018.

SOCIAL REPORT AND ACTIONS ON LOCAL COMMUNITIES

The sources for social reporting indicators are:

- the Alstom Human Resources Information System (HRIS), which is based on Success Factor software and covers all Alstom facilities;
- a social survey, conducted in 28 countries, on the figures of calendar year 2017 – Algeria, Australia, Belgium, Brazil, Canada, Chile, China, Egypt, France, Germany, Hong Kong, Israel, India, Italy, Mexico, Morocco, The Netherlands, Panama, Poland, Qatar, Romania, Saudi Arabia, South Africa, Spain, Sweden, United Arab Emirates (UAE), United Kingdom (UK) and United States of America (USA) –, representing 95.6% of Alstom's workforce.

ALPS data is presented over the fiscal year, *i.e.* from April 2018 to March 2019, while data from the Social Survey is consolidated over the calendar year, *i.e.* from January to December 2018.

In addition, and in order to illustrate the different sections with examples of initiatives, the following actions are conducted by the Sustainability and CSR central team:

- a collection and summarisation of the local community activities conducted in the 27 countries of more than 200 employees, with the support of the network of CSR Champions and local management teams;
- a survey among the Product platforms regarding achievements of the year and ongoing developments;
- a collection of all news related to Sustainability and CSR, published internally through internal communication tools and externally through press releases.

REPORT BY ONE OF THE STATUTORY AUDITORS, APPOINTED AS AN INDEPENDENT THIRD PARTY, ON THE CONSOLIDATED HUMAN RESOURCES, ENVIRONMENTAL AND SOCIAL INFORMATION INCLUDED IN THE MANAGEMENT REPORT

This is a free translation into English of the Statutory Auditor's report issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

For the year ended 31 March 2019

To Alstom S.A. Annual General Meeting,

In our capacity as Statutory Auditor of Alstom S.A. (hereinafter the "entity), appointed as an independent third party and accredited by COFRAC under number 3-1060 rév.2 (whose scope is available at www.cofrac.fr), we hereby report to you on the consolidated non-financial statement for the year ended 31 March 2019 (hereinafter the "Statement"), included in the Group's management report pursuant to the legal and regulatory provisions of Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code *(Code de commerce)*.

The entity's responsibility

Pursuant to legal and regulatory requirements, the Board of Directors is responsible for preparing the Statement, including a presentation of the business model, a description of the principal non-financial risks, a presentation of the policies implemented considering those risks and the outcomes of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Guidelines"), the main elements of which are available on request from the Company's Head Office.

Independence and quality control

Our independence is defined by the provisions of article L. 822-11-3 of the French Commercial Code and the French Code of Ethics *(Code de déontologie)* of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, French professional guidance and applicable legal and regulatory requirements.

Responsibility of the Statutory Auditor, appointed as an independent third party

On the basis of our work, our responsibility is to provide a report expressing a limited assurance conclusion on:

- the compliance of the Statement with the provisions of article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with article R. 225-105-I-3 and II of the French Commercial Code, *i.e.*, the outcomes, including key performance indicators, and the measures implemented considering the principal risks (hereinafter the "Information").

However, it is not our responsibility to comment on:

- the entity's compliance with other applicable legal and regulatory provisions, in particular the French duty of care law and anti-corruption and tax evasion legislation;
- the compliance of products and services with the applicable regulations.

Nature and scope of our work

The work described below was performed in accordance with the provisions of articles A. 225-1 *et seq.* of the French Commercial Code determining the conditions in which the independent third party performs its engagement and with the professional guidance of the French Institute of Statutory Auditors ("CNCC") applicable to such engagements, as well as with ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

Our procedures allowed us to assess the compliance of the Statement with regulatory provisions and the fairness of the Information:

- we obtained an understanding of all the consolidated entities' activities, the description of the social and environmental risks associated with their activities and the impact of these activities on compliance with human rights and anti-corruption and tax evasion legislation, as well as the resulting policies and their outcomes;

- we assessed the suitability of the Guidelines with respect to their relevance, completeness, reliability, objectivity and understandability, with due consideration of industry best practices, where appropriate;
- we verified that the Statement includes each category of social and environmental information set out in article L. 225-102-1-III, as well as information regarding compliance with human rights and anti-corruption and tax evasion legislation;
- we verified that the Statement includes an explanation for the absence of the information required under article L. 225-102-1-III-2;
- we verified that the Statement presents the business model and the principal risks associated with all the consolidated entities' activities, including where relevant and proportionate, the risks associated with their business relationships and products or services, as well as their policies, measures and the outcomes thereof, including key performance indicators;
- we verified, where relevant with respect to the principal risks or the policies presented, that the Statement provides the information required under article R. 225-105-II;
- we assessed the process used to identify and confirm the principal risks;
- we asked what internal control and risk management procedures the entity has put in place;
- we assessed the consistency of the outcomes and the key performance indicators used with respect to the principal risks and the policies presented;
- we verified that the Statement covers the scope of consolidation, *i.e.,* all the companies included in the scope of consolidation in accordance with article L. 233-16 within the limitations set out in the Statement;
- we assessed the data collection process implemented by the entity to ensure the completeness and fairness of the Information;
- for the key performance indicators and other quantitative outcomes that we considered to be the most important, we implemented:
  - analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
  - substantive tests, using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities: Belfort and Le Creusot in France, Bologna, Nola et Savigliano in Italia, Santa Perpetua in Spain, Dubai in the United Arab Emirates, Ubunye in South Africa, Bangalore and Sri City in India, Rochester and Hornell in the United-States, as well as in Alstom S.A. Head Office for information consolidated at Group level and covers between 29% and 100% of the consolidated data relating to the key performance indicators and outcomes selected for these tests;
- we referred to documentary sources and conducted interviews to corroborate the qualitative information (measures and outcomes) that we considered to be the most important;
- we assessed the overall consistency of the Statement based on our knowledge of all the consolidated entities.

We believe that the work carried out, based on our professional judgement, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures.

Means and resources

Our work was carried out by a team of six people between September 2018 and April 2019 and took a total of eight weeks.

We were assisted in our work by our specialists in sustainable development and corporate social responsibility. We conducted one hundred of interviews with the people responsible for preparing the Statement representing Sustainability and CSR, Marketing, Compliance, Quality, Human resources, Health and safety, Environment and Purchasing Departments.

Conclusion

Based on our work, nothing has come to our attention that causes us to believe that the non-financial statement is not in accordance with the applicable regulatory provisions and that the Information, taken as a whole, is not presented fairly in accordance with the Guidelines.

Neuilly-sur-Seine, 6 May 2019

One of the Statutory Auditors

PricewaterhouseCoopers Audit

Édouard Demarcq	Pascal Baranger
Partner	Sustainable Development Director

ADDITIONAL INFORMATION **FOR STAKEHOLDERS**

VIGILANCE PLAN

In compliance with the French law on the corporate duty of vigilance for parent and instructing companies of 27 March 2017 (Law No. 2017-399 published in the Official Journal on 28 March 2018, referred to in this document as the "duty of vigilance law"), the Company established its Vigilance plan (the "Vigilance plan") for the fiscal year 2017/18. This document will be updated every year to report on the measures implemented and assess the efficiency of the Group's actions regarding human rights, health, safety and environmental issues.

As required, the Vigilance plan is targeting risks that could have severe adverse impacts. As defined in the United Nations Guiding Principles on Business and Human rights, the severity of adverse impacts is judged by their scale, scope and irremediable character.

Alstom is particularly respectful of the laws governing, *inter alia*, human rights and labour, health and safety standards, as well as the protection of the environment: Alstom's policy is to comply fully with the fundamental conventions of the International Labour Organisation (ILO) as specified in the Code of Ethics of the Company. Alstom also complies with the Guidelines for multinational enterprises of the OECD and the United Nations Universal Declaration of Human Rights.

Alstom is a member of the United Nations Global Compact (UNGC), promoting the respect of human rights within its sphere of influence. In May 2018, the Alstom Chairman and CEO renewed the Company's commitment to the 10 principles of the UNGC (see Alstom website).

The Vigilance plan was established in FY2017/18 by a transverse working group composed of members of the following Departments: Human Resources, Environment Health and Safety, Legal, Ethics and Compliance, Sourcing, Internal Audit & Internal Control, Governance and Sustainability and CSR. This plan includes the various measures taken at the different levels of the organisation to manage human rights, health and safety and environmental risks:

- global risk mapping and management tools expanded to integrate the relevant topics;
- specific risk analysis and mitigation measures covering Human Rights, Health and Safety and Environmental risks from Alstom activities, which also apply to contractors operating in Alstom's facilities;
- dedicated risk mapping and risk management measures for risks arising from the Supply-chain applied to suppliers and contractors.

Risk mappings, assessment, mitigation and prevention procedures and monitoring of measures taken are detailed in the chapters on the Extra-Financial Performance Declaration and on the Information published for stakeholders. This information is identified in the chapter by a VP logo and are summarised in the table below.

The deployment of the plan is under supervision of the Sustainability and CSR steering committee.

Global risk management procedure	**p. 129**
At Alstom, a general risk mapping procedure is implemented by the Internal Audit & Internal Control Department, as described in chapter 4 of this document (see page 129). Every year, the risks related to Alstom's activities, its contractors' and its suppliers' are reassessed by the Internal Audit & Internal Control Department.	
Risk management covering the activities of Alstom and its contractors	
Human rights	p. 243
Risk mapping	p. 243
Assessment, mitigation and prevention measures, follow-up and monitoring system, deployment	p. 244
Health and safety	p. 223
Risk mapping	p. 224
Assessment, mitigation and prevention measures, follow-up and monitoring system, deployment	p. 224
Environment	p. 257
Risk mapping	p. 257
Assessment, mitigation and prevention measures, follow-up and monitoring system, deployment	p. 257
Risk management covering Alstom's supply chain	
Risk mapping	p. 240
Assessment, mitigation and prevention measures, follow-up and monitoring system, deployment	p. 240
Alert procedure	**p. 237**

ENVIRONMENTAL DATA[VP]

Alstom's environmental management is based on:

- consideration given to environmental issues at all levels of the Company;
- deployment of environmental objectives in the organisation and periodical results reviews at the same frequency and in the same internal governance committees as for financial results reviews;
- implementation of an environmental programme: development and deployment of internal standards, assessment tools, targeted training actions that involve employees, communication and awareness-raising actions;
- an EHS ("Environment, Health & Safety") organisation managed in the Regions and coordinated centrally.

The Company has established operational and environmental excellence as one of its five strategic pillars. In this context, Alstom has set environmental targets for 2020 (compared to 2014 as a baseline year) and defined the scope of its environmental results as described in the methodology.

The main environmental indicators for monitoring Alstom's progress in this area are the following:

- energy consumption and greenhouse gas emissions (GHG) related to its activity (intensities) (see page 222);
- the share of recovered waste;
- the volume of waste related to activity (intensity);
- water consumption related to activity (intensity);
- volatile organic compounds (VOC) emissions related to activity (intensity).

In this section, environmental results are presented in calendar year. ISO 14001 certification results are presented in fiscal year.

Risk mapping[VP]

In terms of environmental risks, Alstom favours an environmental management based on the continuous improvement principle, as described in the Environmental Management System Manual. The procedures address the management of all the sites, being also applied for the new sites, a lease agreement, or a service contract (or on every existing site when such an assessment has never been done before).

An environmental risk mapping is established for each site. Globally, for all the sites, lease agreements or service contracts, the EHS manager assesses the potential environmental impacts related to the activities, such as: release of substances onto/into the ground; release of substances to the water; release of substances to the air; waste resulting from an activity, product or service; waste disposal; and use of resources.

Once the impacts are identified, the EHS manager assesses the likelihood of severe damages to the environment.

Assessment, mitigation and prevention measures, follow-up and monitoring system[VP]

Certification of units

All manufacturing sites and regional centers with more than 200 employees have maintained their ISO 14001 certification this year, which guarantees the implementation of appropriate control measures for the risks identified on each site. Almost 88% of Alstom employees work on certified sites or projects, which means that Alstom is aligned with its target to obtain a global ISO 14001 certification for Alstom's sites by 2020.

This year, Alstom obtained a global certificate for France (including for the headquarters functions) and aims to obtain a global ISO 14001 certification that covers all its activities by 2020.

Moreover, the requirements of the ISO 14001 standard are integrated in the Alstom Management System and contribute to the environmental performance improvement process of our sites.

Site specific procedures

Within the framework of ISO 14001, control measures of the environmental risk are being implemented at each site level. These measures are established on the results of the risk mapping on each site. An evaluation team is in charge of determining appropriate control measures and identifying the persons responsible for their implementation.

Measures taken for Alstom's general activity

In addition to local management measures, Alstom performs a specific follow-up at central level in three areas likely to generate potentially severe impacts at the Group level.

Waterborne discharge

In 2018, 58% of sites had the obligation to monitor the quantity and the quality of waterborne discharges. The various obligations in terms of nature and limits of the discharges do not allow the consolidation of those figures at Alstom level. Nevertheless, Alstom ensures, through an indicator measuring the regulatory compliance of the waterborne discharges created in 2015, that regulatory monitoring is done and the authorised thresholds are respected.

Airborne emissions

In 2018, 46% of Alstom's sites had the obligation to monitor the quantity or the quality of their air emissions. The various obligations in terms of nature and limits of the emissions do not allow those figures to be consolidated at Alstom level. Nevertheless, Alstom ensures, through an indicator measuring the regulatory compliance of the air emissions created in 2015, that regulatory monitoring is done and the authorised thresholds respected.

Historical pollution control

Alstom's current and standard activities do not generate soil releases. Nevertheless, some accidental leakage prevention devices are deployed on each site.

On old sites potentially contaminated as a result of past activities, Alstom implements a monitoring and management program and ensures compliance with local regulations. This five-year plan must be applied on each site. On this basis, the sites conduct surveys in order to assess the environmental and health risks due to contamination in soils and groundwater. They also have an action plan according to the priority level defined for the site (from 1 – immediate risk to 4 – absence of risk).

The progress of the plan is monitored centrally. Besides the scope of the duty of vigilance and severe environmental risks, Alstom has also committed to reduce the environmental footprint of its sites as part of its 2020 strategy (see the section on Energy performance of operations and data mentioned below).

GHG emissions related to business travels

	Alstom		
(in kilotonnes CO_2 eq.)	**2016**	**2017**	**2018**
CO_2 emissions from air travels(*) (Scope 3)	27	29	35
CO_2 emissions from train travels(*) (Scope 3)	1	1	1
CO_2 emissions from Company cars using gasoline (Scope 1)	1	1	1
CO_2 emissions from Company cars using diesel oil (Scope 1)	3	3	3

Source: Alstom Teranga.
(*) Source: Carlson Wagonlit Travel (CWT) – CO_2 eq calculations are based on the 2011 guidelines produced by DEFRA/DECC's GHG Conversion Factors – The calculation takes into account only air travel that has been tracked by CWT.

In 2018, although Alstom maintained strict control over air travel, encouraging as much as possible the use of trains and telepresence meetings, the number of trips increased in line with the diversity of activities spread throughout the world. As a result, CO_2 emissions from air travel increased (+6%). Emissions from other travel remained stable.

Other indirect GHG emissions – Scope 3

CO_2 emissions related to logistics

Since 2016, Alstom has been assessing the carbon footprint of logistics transport under its control (between its sites; to customers; and a limited part of deliveries from suppliers). The Company has also launched several action plans to reduce CO_2 emissions from all its sites around the world. In this sense, one of the main actions taken was to favour sea shipments coming from India instead of air shipments. Moreover, the usage of reusable packaging was implemented within several sites and some training sessions to increase the knowledge of its employees were performed.

CO_2 emissions related to logistics *(in kilotonnes CO_2 eq.)*	**2017**	**2018**
Standard Transport (SMC)	19	17
Exceptional Transport	4(*)	6

Source: Alstom/Logistics Dept.
(*) Corrected figures following the reviewed methodology and data by logistics partners.

In 2018, CO_2 emissions are stable despite the intensification of international trade flows, especially between Europe and Asia. Aligned with Alstom sourcing strategy, several new projects increased their purchases from Low Labour Cost countries.

Nonetheless, at the same time, Alstom has started to monitor the main CO_2 emissions from logistics flows especially by working closely with major contributors in this area as well as by deepening partnerships with its service providers. Alstom aims to reduce the CO_2 impact of its freight transport by anticipating shipments appropriately and by improving coordination and management. In particular, as concerns overseas transportation, the Company favours the mode of transport with the lowest environmental impact (rail, shipping, or a combination of both) over air freight. The actual loading rate of containers is also optimised by pooling shipments.

GHG emissions related to products and services sold

Alstom regularly carries out life cycle assessments of its solutions to assess their environmental footprint.

Data related to products and services sold by Alstom are described in the section "Low carbon solution", page 214.

Water consumption

2020 Goal: Reduce water consumption by 10% compared to 2014 as a baseline year.

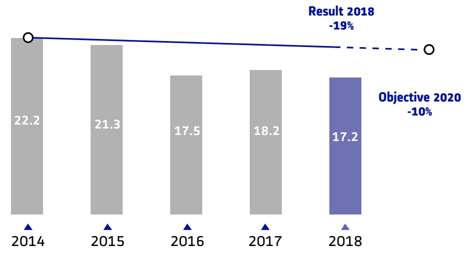
This indicator is monitored because of the sensitivity of the water resource, particularly in water-stressed regions, and more generally in emerging countries where Alstom is developing its business.

Results: Since 2017, Alstom has decided to monitor water intensity instead of water gross consumption. This monitoring is more relevant, as it is defined by the volume of water consumed related to its activity, which is measured in hours worked. Water intensity reduction is largely in line with the 2020 target (having achieved -19% compared to 2014 baseline year) and has decreased compared to 2017 (-4.8%).

WATER INTENSITY

(in l/hours worked)

The 2018 scope has not evolved over the calendar year.



Details of water consumption

(in thousands of cubic meters)	Alstom 2015	2016	2017	2018
Public network water	590	557	612	667
Ground water(*)	228	125	149	116
Surface water	0	0	0	0
TOTAL WATER CONSUMPTION	**818**	**682**	**761**	**783**

Source: Alstom Teranga.

(*) This figure doesn't take into account the groundwater pumped for geothermal purposes, considering that the water is reinjected into the ground without any impact.

Most of the consumption is for domestic use. The Company experienced a slight increase of its water consumption directly linked to the use of groundwater in validation tests in Tarbes; the installation of a fire water tank in Katowice; and the increase of activities in Sri-City, India.

Waste management

2020 Goal: Maintain the percentage of recovered waste at 80%.

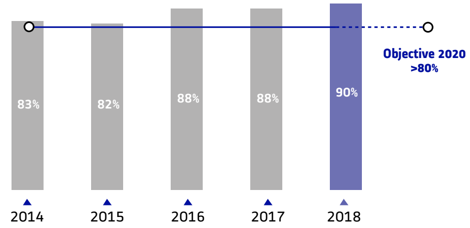
The Company is pursuing its target of recovering 80% of waste, particularly in countries where waste recovery is not developed. Waste intensity is defined as the amount of waste produced in relation to Alstom's activity. The activity is measured in hours worked.

Results: At the end of 2018, the waste recovery target was largely exceeded with a rate of 90%. Regarding the waste intensity, it remained stable compared to 2017 but it decreased by 3% compared to 2014: it sat at 0.73kg/hours worked which is slightly above the 2020 target.

The Hornell site has undergone a major modification of its facilities following the launch of a new project. This exceptional event is treated in parallel with the follow-up of the normal indicator to allow a follow-up with a constant scope.

PERCENTAGE OF RECOVERED WASTE

In this context, data have been adjusted to monitor performance evolution over similar scope.



Waste production

	Alstom			
(in metric tonnes)	2015	2016	2017	2018
Hazardous waste	4,236	2, 728	2,633	2,994
of which ISO 14001 projects(*)				*155*
of which recovered	*1,790*	*1,504*	*1,600*	*1,685*
Non-hazardous waste	28,860	27,014	27,910	32,756
of which ISO 14001 projects(*)				*3,335*
of which recovered	*25,420*	*24,529*	*25,280*	*29,465*
TOTAL WASTE PRODUCTION	**33,096**	**29,742**	**30,543**	**35,750**
OF WHICH ISO 14001 PROJECTS				***3,490***

Source: Alstom Teranga.
(*) Waste produced by projects certified ISO 14001 related to infrastructure and signalling. Excluding Hornell site waste due to an exceptional production in 2018 linked to the extension of the site.

In 2018, waste generated by ISO 14001-certified infrastructure and signalling projects was integrated into the raw data, increasing overall volumes. Exceptional waste from the Hornell site in the United States is treated separately from other waste because it corresponds to soil excavated as part of a site extension project.

Food waste

The Company's food waste is only related to meals taken in the canteens. Being part of non-hazardous waste, it is not specifically monitored.

Air emissions of non-methane volatile organic compounds (VOC)

VOC are the main air pollutants emitted by Alstom operations. Painting operations are the main source of VOC. By implementing paint substitution initiatives (*e.g.* replacement of solvent-containing paints by aqueous paints), Alstom has divided by two its VOC emissions between 2010 and 2016. The Company continues to pay particular attention to these emissions with the aim of reducing their intensity.

Detail of non-methane VOC emissions

	Alstom			
(in metric tonnes)	2015	2016	2017	2018
VOC emissions	150	141	163	175

Source: Alstom Teranga.

In terms of gross VOC emissions, the Barcelona site is, as in 2017, the one that emitted the most VOCs (52 tonnes) due to the resumption of painting activity on the site. It is in Belfort, where the locomotives are painted, that the ratio of VOC emissions per painted unit remains the highest (349 kg/locomotive) because a locomotive has a much larger surface area to paint than a car.

The VOC intensity corresponds to the quantity of VOC emitted related to the painting activity (11 sites are being concerned). The activity is measured in number of units painted (one unit can be a locomotive or a coach).

In 2018, the VOC intensity is 71 kg/painted unit, an increase of 9.6% compared to the 2016 baseline year.

Employees awareness and recognition for best practices

The Group carries out communication and awareness-raising activities for its employees on best environmental practices, in particular as part of its ISO 14001 certification program. These actions are supplemented by mobilisation programs often coupled with those for health and safety.

During the last years (2018/19), the following aspects related to employees awareness and the recognition for best practices should be highlighted:

- at the beginning of 2019, two awareness days were organised at Alstom's headquarters in Saint-Ouen: one to promote well-being at work, and the other to raise awareness about sorting waste. Besides, the Villeurbanne site also organised a day on the topic of sorting waste, as a dehydrator was set up to reduce the amount of food waste by 80%;
- La Rochelle's manufacturing site received the first prize of the 2018 Mobility Challenge on 7 November 2018 from the President of the Urban Community and the Mayor of La Rochelle;
- two employees from Sorel Tracy (Canada) were declared "Safety Heroes" under a North American program that praises employees for their exemplary contribution to the improvement of health and safety at work for their colleagues;
- Alstom Qatar (namely the Al-Kheesa-based Supply Chain team) won a competition organised between several companies by the client of the tramway project. The ranking was established based on EHS criteria, such as the compliance of personal protective equipment, the reporting of near-accidents, or the number of incidents and accidents.

SOCIAL DATA

Group Headcount

Breakdown by Region

	At 31 March 2018					At 31 March 2019				
	Middle East/ Africa	Asia/ Pacific	Europe	Americas	Total	Middle East/ Africa	Asia/ Pacific	Europe	Americas	Total
Employees	3,561	4,701	21,071	5,133	34,466	4,450	5,175	21,427	5,218	36,270
% of employees	10.3%	13.6%	61.1%	14.9%	100.0%	12.3%	14.3%	59.1%	14.4%	100.0%
Out of which long-term absentees (LTA)	10	6	558	56	630	16	11	475	47	549

Source: Alstom HRIS.

Breakdown by type of contract

At 31 March 2018				At 31 March 2019			
Permanent contracts	Fixed-Term contracts	Interns	Total employees	Permanent contracts	Fixed-term contracts	Interns	Total employees
30,972	2,563	931	34,466	32,789	2,768	713	36,270

Source: Alstom HRIS.

Breakdown by category

At 31 March 2018				At 31 March 2019			
Managers and professionals		Other employees		Managers and professionals		Other employees	
Total	% of total employees	Total	% of total employees	Total	% of total employees	Total	% of total employees
17,927	52.0%	16,539	48.0%	19,022	52.4%	17,248	47.6%

Source: Alstom HRIS.

Workforce changes during fiscal year

At 31 March 2018						At 31 March 2019					
Hiring on permanent contracts	Hiring on fixed-term contracts	Resignations (1)	Redundancies (1)	Dismissals (1)	Other departures (2)	Hiring on permanent contracts	Hiring on fixed-term contracts	Resignations (1)	Redundancies (1)	Dismissals (1)	Other departures (2)
4,286	2,216	1,583	382	582	2,179	4,814	1,910	1,418	554	350	815

Source: Alstom HRIS.
Not including acquisitions and disposals.
(1) Calculated on permanent headcount only.
(2) Including retirement and end of Fixed Term Contract (FTC).

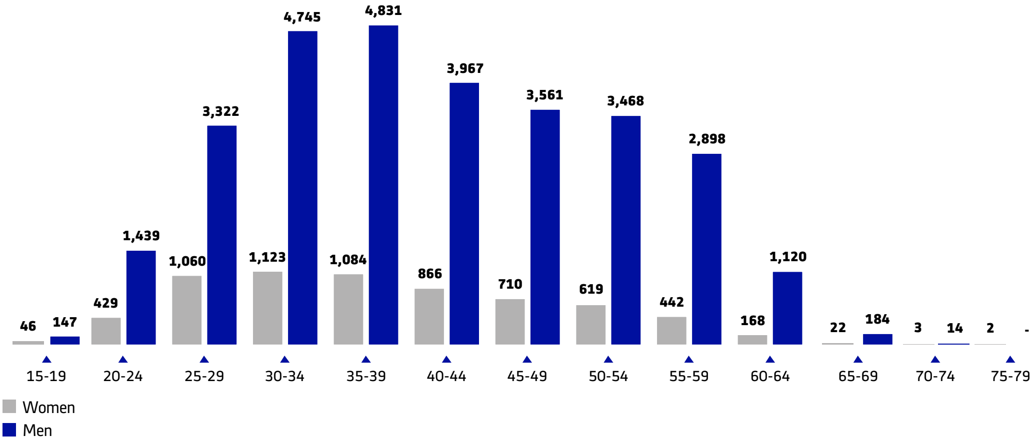
Diversity indicators

Breakdown by gender

At 31 March 2018				At 31 March 2019			
Men		Women		Men		Women	
Total	Total	Total	Total	Total	% of total employees	Total	% of total employees
28,483	82.6%	5,983	17.4%	29,696	81.9%	6,574	18.1%

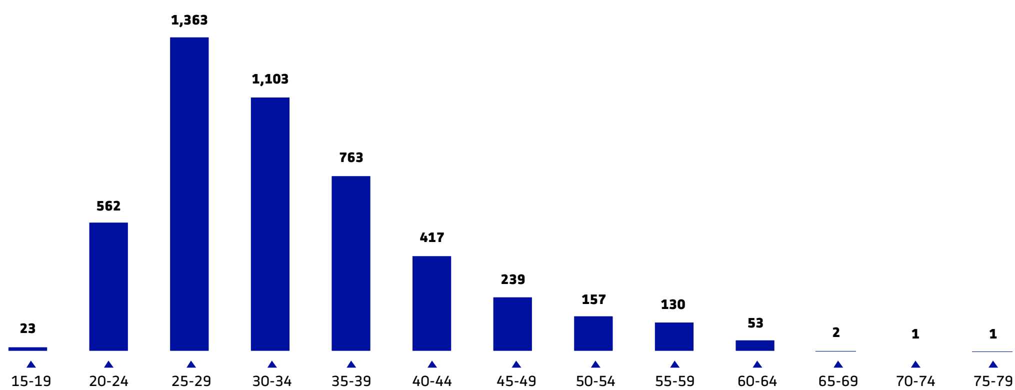
Source: Alstom HRIS.

Age pyramid by gender as of 31 March 2019



Source: Alstom HRIS.

Age pyramid of new hires 2018/19 – Permanent contracts



Source: Alstom HRIS.

Management of senior careers

At Alstom, employees who are over 45 years old represent almost 36% of the total workforce.

585 people who are over 45 years old were hired during the year, representing 12% of new hires, a result which is comparable to last year.

Engagement of employees & Opinion survey

Engagement is one of the pillars of the Alstom Human Resources strategy. In order to foster the employees' involvement, Alstom organises surveys every two years which aim to measure employee opinion and assess employee engagement in respect of the Company's vision, roadmap and strategy in order to implement appropriate actions.

Alstom conducted an Employee Opinion Survey for all its employees in November 2016 with a 61% response rate that represents nearly 18,000 responses. Compared with 2014 survey results, improvement actions launched in different Regions have shown positive impact.

In particular, for topics related to the work environment, trends are positive, particularly regarding the pride in working for the Company and recommending Alstom as a good a place to work. This evolution offsets the four-point drop in work-life balance satisfaction compared to the last engagement survey:

- 88% are proud to work for Alstom (*vs.* 87% in 2014);
- 83% would recommend working for Alstom (*vs.* 78%);
- 73% are satisfied with the work/life balance (*vs.* 77%).

Due to the context of the possible merge with Siemens Mobility we did not perform the engagement survey in 2018, we expect to launch next engagement survey on 2020.

Well-being and employer of choice

Alstom is committed to the continuous improvement of health and wellbeing at work. An improvement program has been defined based on the following four axes:

- occupational health risk management aimed at promoting healthy behaviour;
- supporting mental health by creating a peaceful and engaging environment;
- support for physical health through the provision of tools for managing health and well-being at work;
- improving social well-being by promoting communications and social interactions.

For the second time, a thematic day was organised at all primary Alstom sites focused on well-being at work; the benefits of physical activity; prevention of addictions such as alcohol and tobacco; nutrition; and health for frequent travellers. The activities, workshops and initiatives were abundant on Alstom's sites.

Amongst the many examples that could be cited, it is notable that In China, employees participated to the Spring Charity for World Hemophilia Day; in Hanoï and in Canada, two nutritionists were Invited for a speech; Singapore office organised a demonstration on simple office stretching to relieve joints and muscle tension; North America Region focused on health and wellness for 100 days *via* the Virgin Pulse Global Challenge, while in Algeria a football tournament was organised.

At site and country level, specific programs are in place to improve employee health and well-being and work-life balance. For example, for the fourth consecutive year, Alstom Spain has received the "Top Employers Spain 2019" certification, which testifies to the quality of working conditions. This certification was awarded following the achievement of the required requirements and an in-depth research survey conducted by the Top Employers Institute.

Furthermore, in several countries, measures have been taken or renewed to encourage a good balance between personal and professional life. For example, Alstom encourages the development of its parental policy by helping employees to find childcare solutions or establishing inter-company day nurseries (in India and France), or pushing for flexible work schemes, such as the "smart working program" in Italy.

Teleworking possibilities are offered to employees in main sites in France and abroad to limit the commuting burden. Application Charters are usually in place to ensure qualitative conditions.

Finally, World Heart Day was celebrated on 29 September at the Coimbatore site in India with the aim of informing all employees about the risks of heart attack, particularly related to a poor diet, with the participation of a cardiologist from Kovai Medical Hospital Center.

Employee relations

An internal survey (named the Social Survey), conducted in 28 countries and representing 96.3% of Alstom's total headcount, showed that 65.1% of employees are covered by a national or legal entity collective bargaining agreement.

Collective bargaining agreements

Alstom's Management and employee representatives work closely together at all levels within Alstom (European, countries, sites…).

The European Works Forum (EWF) meets on a regular basis in various formats:

- three regular select committees were held during 2018;
- four regular plenary sessions were held during 2018.

The regular exchanges allowed the business situation and its impact on the workforce to be reviewed. Most meetings focused on Business and Market updates and the impact on workload, Product and Solutions strategy and Innovation.

On top of those regular select and plenary sessions, extraordinary meetings are organised.

In 2018, 12 extraordinary meetings of the EWF took place regarding the Siemens Alstom Project (three select and nine plenary sessions). Information was shared subsequently in the different countries.

In 2018, 109 agreements were signed in Alstom's most important countries. These agreements were signed either at country or legal entity level. The majority of them were related to the following topics:

- Health, Medical & Retirement;
- Working time & Organisation;
- Work Life balance / Well-being;
- Total Compensation;
- Union's Rights.

One objective of the new agreements or addenda is to continue the harmonisation of Alstom benefits offered at country level.

Work-life balance / Well-being / Diversity & Inclusion were again a strong focus this year as well as flexibility agreements regarding working time & organisation to gain agility.

RELATIONS WITH GOVERNMENTS, INTERNATIONAL ORGANISATIONS AND THINK TANKS

Contribution to the public debate on sustainable development policies

Alstom contributes to the public debate around sustainable mobility and rail transport, engaging with governments and international organisations in the development of policies.

The Group is actively involved in the dialogue with governments and international organisations, exchanges regularly with other actors of influence and participates on some initiatives of which it shares the vision.

The messages through which Alstom contributes to the policy debate focus on the following:

- the role of open markets and of fair competition to support a sustainable growth, across:
  - fair competition and reciprocity of public procurement,
  - consistent application of high international standards for ethics and compliance,
  - protection of intellectual property rights (IPR) as a major driver of innovation and of investment in Research, Development and Deployment (R&D),
  - evaluation of requests for proposals for transport systems on the basis of the most economically advantageous tender criteria, taking into account the duration of these Investments,
  - uniform implementation and mutual recognition of standards and norms between different jurisdictions (certification and approval), in order to reduce cost;
- the need for continued investment in sustainable technologies in the public and private sectors, particularly through:
  - public support and collaboration to accelerate R&D and the demonstration of sustainable technologies and services,
  - public funding for the piloting and demonstration of pre-commercial technologies,
  - installation of mechanisms of financing on long-term way to spread on a large scale the solutions of sustainable mobility,
  - necessity of the support of policies to internalise the external costs, *via* especially a consistent pricing for CO_2,
  - the contribution for the international financial institutions to finance the big infrastructure projects in developing countries,
  - the appeal by the financial institutions in innovative financial mechanisms to mobilise the private investments, by the sharing of risks, as well as by means of the governments which support and make their actions easier;
- the importance of long-term, transparent and stable policy frameworks to support investment in sustainable development, particularly through:
  - the promotion of strategies of sustainable transport and in zero carbon emission, based on shared, electrical mobility and in hydrogen, rather than on transport individual and using fossil fuels,
  - the definition of a network of pan-European infrastructures allowing the deployment of the rail transportation and mobility solutions to zero emission for all citizens and companies,
  - the definition and the actual application of balanced regulations to support a wide portfolio of low carbon and high efficiency solutions,
  - the increase of the impact strength of our infrastructures of transport, to answer the impacts of the climate change.

Participation in organisations and high level initiatives

Convinced that the Sustainable Development goals will only be reached if all relevant stakeholders are actively involved, Alstom participates in a number of leading bodies.

At international level

- Since 2008, Alstom adheres to the United Nations Global Compact Initiative, which seeks to encourage companies to commit to a set of values such as human rights, the respect for labor conditions, the protection of the environment, and ethics in business. Alstom is actively involved in this initiative and promotes the ten principles that summarise its key values.
- Besides, the Group supported an active participation in UNFCCC forums (United Nations Framework Convention on Climate Change), by participating in COP 24, which was held in Poland in November 2018, to show how its technologies support the transition towards a low carbon emissions society.
- Alstom is a member of the initiative "Sustainable Low Carbon Transport Partnership" (SLoCaT) that brings together international players committed to sustainable mobility, and a sponsor of the "Paris Process on Mobility and Climate" (PPMC), an open and inclusive platform created to reinforce the position of the actors in favor of sustainable transport.
- Alstom is a founding member of the Transport Decarbonisation Alliance, which gathers States, local authorities and industrialists eager to accelerate the transformation of the transport sector into a sector with zero net CO_2 emissions by 2050.
- In 2018, the Company renewed its support to the International Union of Railroads (UIC) Low Carbon Rail Transport Challenge, "a commitment to deliver railway solutions which are ever more energy efficient and attractive such as with high-performance electrical, diesel and hybrid trains, smart railway systems and modernisation services".
- As a member of the International Union of Public transits (UITP), Alstom signed its Charter of sustainable development.
- Alstom is a founding member of the Hydrogen Council, which gathers 33 companies sharing the same vision on hydrogen as a key driver of the energy transition.
- Finally, Alstom is a member of the Corporate Partnership Board of the International Transport Forum (ITF), an intergovernmental organisation of the OECD, which gathers of the Ministers of Transport at global level.

At regional/local level

- Alstom is a member of the European Railway Industries Union (UNIFE) which represents the sector within the European institutions. It promotes, among other things, the establishment of a European railway equipment market through interoperability and implementation of the fourth rail package, as well as the role of rail in the achievement of greenhouse gaz reduction objectives at the European Union (EU) level.
- The Company contributes to the Platform for electro-mobility, a voluntary group of 36 companies, NGO and European sectorial associations, which encourages a wider use of electric vehicles in order to control emissions due to the transport sector.
- Alstom is also a founding member of "Shift2Rail", the European Union joint venture for railway research. "Shift2Rail" aims to respond to the changing transport needs of the European Union, through research and innovation, in order to develop advanced and innovative technologies.
- Alstom is a member of "Hydrogen Europe", an industrial member association of the joint company "Fuel Cell Hydrogen", which represents more than 100 companies and national associations, and supports research in the field of hydrogen and fuel cells while promoting this type of energy as being an efficient and clean technology.
- Alstom is a member of several expert groups of the European Commission such as: Sustainable Transport, the Competitiveness of the European Rail Industry and the implementation of a Taxonomy on Sustainable Investments. In 2018, Alstom pursued its commitment within different institutions and contributed to the debate on the rail sector.
- The Group also contributes to many local initiatives. For example, in France, Alstom participates in activities of many industrial associations, such as CS2F (Strategy committee of the Rail industry, Henri Poupart-Lafarge being its President), MEDEF (Movement of Entreprises of France), France Industry, AFEP (French Association of Private firms), Fer de France, FIF (Federation of Rail Industries), etc. This active participation allows the Group to better include the demands of public authorities, strengthen its proposals and anticipate the evolution of regulations.

TAX EVASION

Tax evasion risk can be defined through three aspects:

- a financial risk: risk of tax re-assessment by tax authorities, based on a matter related to tax avoidance, artificial tax scheme or lack of substance. For instance, the risk would materialise if Alstom was in breach of an anti-avoidance rule or tax transparency rule;
- a business risk: for example an aggressive tax behaviour would jeopardise the Company's ability to win new projects, since a significant percentage of Alstom revenue is from direct or indirect government and public sector entities;
- a reputation risk: risk of deterioration of the public image of Alstom if it was suspected of participating in tax evasion.

Based on this analysis, it is estimated that Alstom's risk regarding tax evasion is low.

Alstom is committed to comply with tax laws in a responsible and ethical manner and to have collaborative and transparent relationships with tax authorities. Tax obligations, and therefore tax contribution, are aligned with the commercial and economic activity of Alstom's operations.

The Chief Tax Officer is responsible for ensuring that policies and procedures are in place, maintained and used consistently around the world, and that the global tax team has the skills and experience to implement them. He/she also leads an in-house team of tax analysts who provide advice where required. Alstom's tax policy is closely monitored to ensure a consistent application across all territories.

External service providers are used on a selective basis, for example when the Company needs additional resource or expertise.

The Internal Audit team independently monitors and tests Alstom's key financial controls, including those for tax, and reports on their effectiveness to the Audit Committee.

Alstom is highly engaged in determining the correct tax treatment across all its business transactions, to ensure it pays the right amount of tax at the right time, in accordance with the tax laws of the territories in which the Group operates. Concerning the uncertainty related to the application of tax law, Alstom engages discussion with the relevant tax authority to achieve certainty for Alstom and the tax authority concerned.

Alstom has a low-risk approach to tax and does not engage in artificial tax arrangements, or undertake transaction for the only purpose of realising tax savings.

The Group seeks to conduct transactions between Alstom companies in accordance with the OECD principles. Since two years, Alstom has filed to the French tax Authorities the Country By Country Report, which confirms that the Company does not engage in any artificial tax driven scheme. This document is available to foreign tax Authorities upon request to the French Tax Authorities.

Over the last years and in the course of Tax audits that were performed worldwide, the authorities have not reported any tax evasion or lack of substance.

For instance, Panama is a country where Alstom operates, and which could still be viewed as a Fiscal Paradise even if it has been removed from the EU and the OECD's lists of uncooperative countries. In this country, Alstom is the leader of the consortium which has been granted with the Panama City metro construction project. For this consistent project, Alstom has set up a business subsidiary in Panama, which employs 225 people.

The United Arab Emirates is also a low-tax country where Alstom operates. In this country, Alstom is leading the consortium that has been granted the "Route 2020" Dubai Metro project: the extension of a metro line as well as the delivery of rolling stock for the "2020 Exhibition", one of the Company's most important projects.

DATA PRIVACY

Alstom respects the privacy of all individual stakeholders with whom it interacts. Alstom's Code of Ethics and the Alstom Data Privacy Charter provide the fundamental rules of the Company in this regard as well as protection to all employees, business partners and other third parties whose personal data Alstom processes. In addition, Alstom has implemented a data privacy compliance program centered around the three fundamental principles of its approach: Transparency, Proportionality and Necessity. The Alstom website provides an overview of the data privacy compliance program, copies of the corporate policies including the Data Privacy Charter and various data privacy notices covering the categories of individuals whose personal data is processed.

Alstom is fully transparent on all types of personal data collected, why it collects the data and the type of processing it undertakes on it. The Group collects only personal data that requires for its business purposes, primarily legal obligations and legitimate interests, and does not allow any additional further processing of the data. Alstom has a dedicated email address, which is available to all Alstom employees and any third party who have queries about the nature of personal data collected, the type of processing it undertakes and the exercise of their rights under applicable legislation. Employees who breach data privacy rules and internal policies are subject to disciplinary measures in the framework of Alstom's disciplinary policies and the Alstom Disciplinary Committee.

SYNTHESIS OF **INDICATORS / KEY FIGURES** 2018/19

Indicators	2017/18	2018/19	GRI 2016 reference	Page
ENVIRONMENTAL INDICATORS				
Energy				
Energy consumption from natural gas [1] *(in GWh)*	223	231	302.1	222
Energy consumption from butane/propane and other gases [1] *(in GWh)*	8	8	302.1	222
Energy consumption from domestic fuel [1] *(in GWh)*	5	6	302.1	222
Energy consumption from steam/heat [1] *(in GWh)*	41	42	302.1	222
Energy consumption from electricity [1] *(in GWh)*	184	187	302.1	222
Energy consumption from coal, heavy fuels and other fuels [1] *(in GWh)*	1	1	302.1	222
Total in energy consumption [1] *(in GWh)*	462	475	302.1	222
Energy intensity [1] *(in kWh/hours worked)*	10.4	9.9	302.3	222
Share of electricity from renewable sources [1] *(in %)*	-	40		222
Direct CO_2 emissions from natural gas, butane, propane, coal and oil consumption [1] *(in kilotonnes CO_2 eq.)*	48	50	305.1	223
Indirect CO_2 emissions from steam, heat and electricity consumption [1] *(in kilotonnes CO_2 eq.)*	65	65	305.2	223
Total gross CO_2 emissions from energy consumption [1] *(in kilotonnes CO_2 eq.)*	113	115	305.1/2	223
Avoided emissions due to the supply of green electricity [1] *(in kilotonnes CO_2 eq.)*	-	14		223
Total net CO_2 emissions related to energy consumption [1] [3] *(in kilotonnes CO_2 eq.)*	113	101		223
Other direct CO_2 emissions from HFC [1] *(in kilotonnes CO_2 eq.)*	1	1	305.3	223
Total CO_2 emissions from energy consumption and other direct emissions [1] *(in kilotonnes CO_2 eq.)*	114	102	305.1/2/3	223
GHG emissions intensity [1] *(in kilotonnes CO_2 eq./hours worked)*	2.5	2.2	305.4	222
CO_2 emissions from air travels [1] *(in kilotonnes CO_2 eq.)*	29	35	305.3	258
CO_2 emissions from train travels [1] *(in kilotonnes CO_2 eq.)*	1	1	305.3	258
Company cars CO_2 emissions from gasoline [1] *(in kilotonnes CO_2 eq.)*	1	1	305.1	258
Company cars CO_2 emissions from diesel oil [1] *(in kilotonnes CO_2 eq.)*	3	3	305.1	258
CO_2 emissions from standard transport of goods [1] *(in kilotonnes CO_2 eq.)*	19	17	305.3	258
CO_2 emissions from exceptional transport of goods [1] *(in kilotonnes CO_2 eq.)*	4 [2]	6	305.3	258
CO_2 emissions from trains sold for passenger transport *(average in g CO_2 eq. per pass* km)*	7	6.5	305.3	217
Reduction of solutions energy consumption *(in %)*	14	17		217
Solutions covered by an ecodesigned process *(in numbers)*	25	28		219
Natural disasters generating more than €2 million in damages for products and operating losses *(in numbers)*	0	1		218

Indicators	2017/18	2018/19	GRI 2016 reference	Page
Water and releases				
Water consumption from public network (1) *(in thousands of m³)*	612	667	303.1	259
Water consumption pumped from groundwater (1) *(in thousands of m³)*	149	116	303.1	259
Water consumption pumped from surface water (1) *(in thousands of m³)*	0	0	303.1	259
Total water consumption (1) *(in thousands of m³)*	761	783	303.1	259
Water intensity *(in thousands of m³)*	18.2	17.2		259
Airborne emissions				
Non-methane volatile organic compounds (VOCs) emissions (1) *(in tonnes)*	163	175	305	260
Waste management				
Hazardous waste (1) *(in tonnes)*	2,633	2,994	306.2	260
Recovered hazardous waste (1) *(in tonnes)*	1,600	1,685	306.2	260
Non-hazardous waste (1) *(in tonnes)*	27,910	32,756	306.2	260
Recovered non-hazardous waste (1) *(in tonnes)*	25,280	29,465	306.2	260
Total waste production (1) *(in tonnes)*	30,543	35,750	306.2	260
Percentage of recovered waste (1) *(in %)*	88	90	306.2	260
Management system				
Proportion of manufacturing sites and Regional Centers of more than 200 employees certified ISO 14001 *(in %)*	100	100	103	257
SOCIAL INDICATORS				
Occupational Health and Safety				
Number of fatalities at work (Alstom employees and contractors) *(in numbers)*	1	3	403.2	225
Number of travel fatalities (Alstom employees) *(in numbers)*	0	1	403.2	225
Number of occupational severe accidents (incl. fatal accidents) *(in numbers)*	8	9	403.2	225
Lost time injury frequency rate (employees and contractors) – TF1	1.0	1.1	403.2	225
Number of Alstom Zero Deviation Plan audits conducted in a fiscal year *(in numbers)*	66	64	Non-GRI	225
Proportion of Alstom employees trained to e-learning module on High Risk Activities (1) *(in %)*	81	77	404.1	225
Number of recognised occupational diseases for the entire Alstom scope (1)	39	37	403.2	225
Ratio of employees covered by a life insurance in case of accidental death or total and permanent disability (1) *(in %)*	97.3	96.9	401.2	232
Ratio of employees covered by a life insurance giving one-year salary in case of accidents (1) *(in %)*	90.0	90.4	401.2	232
Workforce and organisation				
Distribution of employees by type of contract *(in numbers)*			**102.8**	**261**
Permanent contracts (CDI)	30,972	32,789		261
Fixed-term contracts (CDD)	2,563	2,768		261
Interns	931	713		261
Total employees	**34,466**	**36,270**	**102.7**	**261**
Distribution of employees by Region *(in %)*			**102.8**	**261**
Middle East/Africa	10.3	12.3		261
Asia/Pacific	13.6	14.3		261
Europe	61.1	59.1		261
Americas	14.9	14.4		261

Indicators	2017/18	2018/19	GRI 2016 reference	Page
Distribution of employees by category			**Non-GRI**	**261**
Managers and professionals *(in %)*	52.0	52.4		261
Other employees *(in %)*	48.0	47.6		261
Employees' movements in a fiscal year			**401.1**	**261**
Hires on permanent contracts *(in numbers)*	4,286	4,814		261
Hires on fixed-term contract *(in numbers)*	2,216	1,910		261
Resignations *(in numbers)*	1,583	1,418		261
Share of resignations *(in %)*	5.2%	4.5%		261
Economic redundancies *(in numbers)*	382	554		261
Non-economic redundancies *(permanent staff)*	582	350		261
Other (incl. retirements, excluding disposals and acquisitions) *(in numbers)*	2,179	815		261
Recruitments per Region (permanent contracts) *(in %)*			**401.1**	**231**
Middle East/Africa	23	25		231
Asia/Pacific	25	24		231
Europe	29	34		231
Americas	24	16		231
Resignation rate for employees on permanent contracts by Region *(in %)*			**401.1**	**231**
Middle East/Africa	6.4	5.0		231
Asia/Pacific	10.5	9.1		231
Europe	4.0	3.2		231
Americas	5.6	5.6		231
Absenteeism rate (1) *(in %)*	**2.9**	**2.8**	**403.2**	**231**
Middle East/Africa	2.4 (4)	1.9 (4)		231
Asia/Pacific	2.4	2.3		231
Europe	3.3	3.5		231
Americas	1.9	1.8		231
Competencies and carriers				
Proportion of annual performance interviews conducted (managers & professionals) *(in %)*	93	94	404.3	233
Proportion of trained employees (1) *(in %)*	86.3	87.2	404.2	235
Average training hours per employee (1) *(in hours/employee)*	19.6	20.4	404.1	235
Total number of training hours (1) *(in hours)*	621,042	677,762	404.1	235
Diversity and equal opportunity				
Proportion of women in the workforce *(in %)*	17.4	18.1	405.1	231
Proportion of female managers or professionals *(in %)*	20.1	20.7	405.1	231
Proportion of women as senior managers and executives *(in %)*	16.3	16.4	405.1	231
Proportion of women trained (1) *(in %)*	17.3	17.5	405.1	231
Proportion of employees with disabilities (1) *(in %)* – Alstom	2.8	2.7	405.1	232
Proportion of employees with disabilities (1) *(in %)* – Europe	4.2	4.3		
Proportion of employees aged over 45 *(in %)*	38	36	405.1	262
Social dialogue				
Share of employees covered by a national collective agreement or a company agreement (1) *(in %)*	65.4	65.1		263
INDICATORS RELATED TO ETHICS AND COMPLIANCE				
Ethics and Compliance ambassadors *(in numbers)*	290	330		238
Increase in the percentage of the number of alerts received *(in %)*	19	25		238
Certification ISO 37001 *(in % of regions included)*	33	100		238
Employees having received an "E&C class" training *(in %)*	77	83		238

Indicators	2017/18	2018/19	GRI 2016 reference	Page
INDICATORS RELATED TO HUMAN RIGHTS				
Evaluations made on the living conditions of our contractors *(in numbers)*	-	5		244
Evaluations made on the working conditions of our contractors *(in numbers)*	-	4		244
Cases recorded in the field of child exploitation, forced labour, freedom of association *(in numbers)*	0	0		244
SOCIETAL INDICATORS				
Product safety				
Safety review OK (measure the ability to anticipate safety issues in project execution) (1) *(in %)*	60.2	66.1		240
Ratio of participations to online trainings *(in %)*	60	71.4		240
Relationships with customers				
Net Promoter Score *(out of 10)*	8.0	8.1		246
Total orders from newly developed products *(in % of value)*	30	50		246
Relationships with local communities				
Country Community Action Plans implemented *(in number)*	24	27		250
Responsible sourcing			**414**	**243**
Proportion of purchase amount covered by the referenced suppliers having signed the Sustainable Development Charter *(in %)*	94	98		243
Suppliers covered by an assessment less than three years old *(in numbers)*	510	644		243
Proportion of sourcing managers who have attended sustainable sourcing trainings *(in %)*	87	91		243

(1) Indicators reported on the calendar years 2017 et 2018.
(2) Modified scope.
(3) Including the use of electricity from renewable sources.
(4) The calculation of the absenteeism rate in South Africa covers only the Ubunye site. Data from the Gibela site are not reported.

7 ADDITIONAL INFORMATION

AFR The Content of the Annual Financial Report is identified in the summary table with the help of this pictogram

INFORMATION ON THE GROUP AND THE PARENT COMPANY

BACKGROUND

The Group was created in 1989 by The General Electric Company plc ("GEC") and Alcatel, its 50-50 shareholders, in order to consolidate businesses, hitherto operated by certain of their respective subsidiaries, in a single group. The joint venture was a holding company incorporated under Netherlands law, GEC ALSTHOM NV. This joint venture, carried out during a time of consolidation in the energy sector, aimed at benefiting from certain complementary products and markets of Alcatel and GEC respectively.

At the end of 1997, the two shareholders decided to list the Company on the Paris, New York and London Stock Exchanges and to sell some of their shares on the market. They chose Paris as the main listing exchange and decided to transfer to a French public limited company *(société anonyme),* renamed Alstom (previously Jotelec), the whole of the activities until then carried out by GEC ALSTHOM NV. Before the IPO of Alstom (or the "Company"), almost all of the assets directly or indirectly held by GEC ALSTHOM NV were transferred to one of its French subsidiaries, Alstom France SA, 100% owned by Alstom. This company, since then renamed Alstom Holdings, is the sub-holding company of the Group, which owns the operational subsidiaries of the Group (see below "Simplified organisation chart of the Group at 31 March 2019").

Since the listing of Alstom in 1998, the Group's scope has changed significantly. One of the most significant operations was the acquisition of ABB power generation activities in two phases: first, in July 1999, a joint venture was set up and then in May 2000, Alstom bought ABB's share in the abovementioned joint venture. At the same time, the Group re-focused on its core business, notably by selling its Contracting Sector in July 2001.

The Group sold its Transmission & Distribution and Marine Sectors in 2004 and 2006 respectively. In June 2010, Alstom acquired the Transmission activities of AREVA, now the Grid Sector of the Group.

The operational activities of the Group had been organised in four Sectors since July 2011: Thermal Power, Renewable Power, Grid and Transport.

On 4 November 2014, the Board of Directors of Alstom approved the signing of an agreement with General Electric to sell Alstom's Energy businesses, namely Power (electricity generation) and Grid, as well as shared and central services of Alstom. This transaction was accompanied by the reinvestment of part of the sale proceeds in three joint ventures to be created with General Electric: in Nuclear, the company GEAST (20% minus one share); in Grid, the company GE Grid Alliance BV (50% minus one share) and in Renewable, the company GE Renewable Holdings BV (50% minus one share). Alstom has also acquired General Electric's Signalling business and has concluded a global alliance in the rail sector.

The transaction was completed on 2 November 2015 after finalising the carve-out operations of the Energy and Transport businesses and obtaining antitrust and regulatory authorisations.

Alstom had, for each of these joint ventures, a put option (exercisable in September 2018 or in September 2019 for the Grid and Renewable joint ventures, and during the first quarter of years 2021 and 2022 for the nuclear joint venture) at a price based on a formula related to results, provided such price was not lower than that of Alstom's acquisition of the joint venture shares plus 2% or 3% per year, as applicable, from the closing of the sale of the Energy businesses to General Electric.

On 10 May 2018, Alstom signed an agreement with General Electric relating to the planned exit of Alstom from the Renewable, Grid and Nuclear joint ventures. On 2 October 2018, Alstom sold all its stakes in the three Energy joint ventures (Renewable, Grid and Nuclear) to General Electric for a total of €2.594 billion.

IDENTITY OF THE COMPANY

Company name and registered office

Alstom

48, rue Albert-Dhalenne, 93400 Saint-Ouen

Tel.: 01 57 06 90 00

Legal form

French limited liability company with a Board of Directors governed in particular by the French Commercial Code.

Duration

Alstom was incorporated under the name "Jotelec" on 17 November 1992 and its existence will expire on 17 November 2091, unless it is dissolved early or is extended.

Registration number

389 058 447 RCS Bobigny.

Code APE

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KEY PROVISIONS OF THE ARTICLES OF ASSOCIATION

Company object

(Article 3 of the Articles of Association)

Alstom's object is, directly or indirectly:

- to conduct all industrial, commercial, shipping, financial, real property and asset transactions in France and abroad, notably in the following fields:
  - energy,
  - energy transmission and distribution,
  - transport,
  - industrial equipment,
  - naval construction and repair work,
  - engineering and consultancy, design and/or production studies and general contracting associated with public or private works and construction, and
  - more generally, activities related or incidental to the above;
- participation, by any means, directly or indirectly, in any operations which may be associated with its object, by the creation of new companies, capital contributions, subscription or purchase of stocks or rights, merger with such companies or otherwise, the creation, acquisition, lease or takeover of business goodwill or businesses; the adoption, acquisition, operation or sale of any processes and patents relating to such activities; and
- generally undertaking all industrial, commercial, financial and civil operations and real property and asset transactions that may be directly or indirectly associated with Alstom objects or with any similar or related object.

Furthermore, Alstom may acquire an interest, of whatever form, in any French or foreign business or organisation.

Fiscal year

(Article 19 of the Articles of Association)

The fiscal year starts on 1 April and ends on 31 March of each year.

Shareholders' Meetings

(Article 15 of the Articles of Association)

Convening and proceedings – Agenda

Ordinary and Extraordinary General Meetings, satisfying the legal conditions for quorum and majority voting, exercise the powers respectively attributed to them by the law. They are convened in accordance with the rules and the terms laid down by law.

Meetings are held at the registered office of Alstom or at any other place determined by the Board, either within the "département" in which the registered office is located or in any other place within French territory.

The agenda of the meeting is drawn up by the Board of Directors if the Board has called the meeting and, if not, by the person calling the meeting. However, one or more shareholders satisfying the conditions laid down by law may request the inclusion of draft resolutions on the agenda. Questions not appearing on the agenda may not be deliberated.

Admission and representation

Ordinary and Extraordinary General Meetings are made up of all shareholders without distinction between the class of shares which they hold.

At all Shareholders' Meetings, shareholders are only entitled to exercise their right to vote if their shares have been recorded in the accounts in the name of the shareholder or the intermediary registered for its account pursuant to the legal and regulatory provisions on the second business day [(1)] preceding the date of the Shareholders' Meeting at midnight, Paris time, either in the accounts of registered securities held by the Company for registered shares, or in the accounts of bearer securities held by an intermediary authorised for bearer shares. This record is officially acknowledged in accordance with the terms laid down by law.

Shareholders may vote by proxy or by correspondence at General Meetings under the conditions laid down by law.

In order to be taken into account, the voting forms and proxies must be received by the Company at least three days before the meeting, unless a shorter term is decided by the Board of Directors or is stipulated by law.

Pursuant to the Board of Directors' decision, communicated by way of notice of meeting and/or the convocation to the meeting, any shareholder may vote at a Shareholders' Meeting, by proxy or by correspondence *via* any electronic means of telecommunication in accordance with the conditions set by law. In these cases, forms for voting at a distance or by proxy, as well as participation certificates, can be completed by way of a duly signed electronic medium under the conditions set forth by the applicable legal and regulatory provisions.

To this end, completing and electronically signing the form can be done directly on the Internet site created by the centralizing agent of the Shareholders' Meeting. The electronic signature of the form can be carried out (i) by entering an identification code and password, under the conditions that comply with the provisions of the first sentence of the second paragraph of Article 1367 of the French Civil Code, or (ii) by any other process satisfying the conditions defined in the first sentence of the second paragraph of Article 1367 of the French Civil Code. The power to vote by proxy or the vote expressed as such before the Shareholders' Meeting by way of this electronic method as well as, if applicable, the proof of receipt delivered after the power to vote by proxy or the vote is expressed, will be considered as a written proof that is irrevocable and binding to all, excluding cases of sales of securities that are subject to the notification set forth in paragraph IV of Article R. 225-85 of the French Commercial Code.

However, pursuant to paragraph 7 of Article L. 228-1 of the French Commercial Code, the owners of securities may be represented by a registered intermediary under the conditions set down by law.

Any shareholder having voted at a distance, or sent a proxy or requested his or her admission card or an attendance certificate, may at any time sell all or some of his or her shares for which he or she transmitted his or her vote or proxy or requested one of these documents. Any sale shall be taken into account in the conditions laid down by law.

The Board of Directors shall have the powers to organise, within the limits of the law, the attendance and voting of the shareholders at General Meetings by videoconferencing or by any telecommunications means enabling the identification of such shareholders. If applicable, this decision of the Board of Directors shall be communicated in the notice of the meeting and/or the invitation to attend. Those shareholders attending Shareholders' Meetings by videoconference or by these other means are deemed to be present for the purposes of calculating the quorum and the majority.

(1) Article 225-85 of the French Commercial Code, as amended by decree on 8 December 2014, reduced the deadline applicable to record dates for listed companies from three business days before the meeting to two business days before the meeting. This is a public mandatory provision.

Voting rights

Each member of the meeting is entitled to as many votes as the number of shares which he holds or represents.

At all Ordinary, Extraordinary or Special General Meetings, the voting right on shares shall, in cases where such shares are subject to usufruct, be exercisable by the usufructuary.

Following the law "aimed at recapturing the real economy", known as the "Florange" Act, enacted in France on 29 March 2014, double voting rights will be fully allocated to shareholders holding registered shares for at least two years in a listed company, unless stated otherwise in a provision of the Articles of Association of the Company adopted after the entry in force of the new law. As the accounting period started on 1 April 2014, and in the absence of a contrary provision in the Articles of Association, double voting rights have applied automatically since 31 March 2016. It is recalled that the Ordinary and Extraordinary Shareholders' Meeting, convened on 1 July 2014, voted against the 20th resolution, which proposed to introduce in the Alstom's Articles of Association a new provision in order to maintain single voting rights.

Notification of holdings exceeding certain percentages

(Extract of Article 7 of the Articles of Association)

In addition to the legal obligation to notify the Company of certain shareholding levels or voting rights, any individual or legal entity who holds directly or indirectly, alone or in concert pursuant to Articles L. 233-10 *et seq.* of the French Commercial Code a number of shares in the Company giving a shareholding equal to or in excess of 0.5% of the total number of shares or voting rights issued must notify the Company by recorded letter with proof of receipt within five trading days of this threshold being crossed. Notification is to be repeated under the same conditions whenever a new threshold of a multiple of 0.5% of the total number of shares or voting rights is exceeded, up to and including threshold of 50%.

To determine these thresholds, shares equivalent to the shares owned as defined by the legislative and regulatory provisions of Article L. 233-7 *et seq.* of the French Commercial Code, will be taken into account.

In each of the abovementioned notifications, the declaring person must certify that the notification includes all stock held or owned in the sense of the preceding paragraph. Such notification must also state: the declarer's identity as well as that of individuals or legal entities acting in concert with him, the total number of shares or voting rights that he holds directly or indirectly, alone or in concert, the date and the source of crossing the threshold and, where applicable, the information mentioned in the third paragraph I of Article L. 233-7 of the French Commercial Code.

Any shareholder whose participation in the shareholding or in voting rights falls below one of the abovementioned thresholds is also required to notify the Company within the same length of time of five trading days and by the same means.

In the event of non-observance of the above provisions and in accordance with the conditions and levels laid down by law, the shareholder shall lose the voting rights relating to the shares in excess of the thresholds which should have been notified, if one or more shareholders holding at least 3% of the share capital or voting rights so requires.

Identification of holders of bearer shares

(Extract of Article 7 of the Articles of Association)

The Company may, under the conditions laid down by the legal provisions in force, request any officially authorised organisation or intermediary to pass on all information concerning its shareholders or holders of its stock conferring an immediate or subsequent right to vote, their identity and the number of shares that they hold.

Appropriation of income

(Extract of Article 21 of the Articles of Association)

The profits for the fiscal year consist of the revenues relating to the preceding fiscal year, less overheads and other Company expenditure including provisions and depreciation allowances. At least 5% of the profit, less any previous losses, is set aside to form the legal reserve fund. This provision ceases to be mandatory once the value of the fund reaches one-tenth of the share capital.

The remainder (less the above deductions) of the retained earnings and withdrawals from the reserves which the General Meeting has at its disposal shall, if the General Meeting so desires, be distributed among the shares, once the sums carried forward by the said meeting or transferred by it to one or more reserve funds have been deducted.

After the General Meeting has approved the accounts, any losses are carried forward and offset against the profits of future fiscal years until they are discharged.

Each shareholder may be granted, at the General Meeting, for all or part of the dividend or interim dividend to be distributed, an option to be paid the dividend or interim dividends in cash or in shares of the Company, under the current legal and regulatory conditions.

The Articles of Association do not contain any provision, which may delay, postpone or prevent a change of control.

DOCUMENTS ACCESSIBLE TO THE PUBLIC

The legal documents relating to the Company and the Group, which are required to be accessible by the shareholders according to the applicable law are available for inspection at the Company's registered office and some of them, including the Articles of Association, are available on the Group's website (http://www.alstom.com/fr/), in particular in the "Investors" sections, in application of Article L. 451-1-2 of the French Monetary and Financial Code. The Group's Annual Reports for the last ten financial years are also available on the website.

ACTIVITY OF THE PARENT COMPANY

Alstom is the holding company of the Group. Alstom investments consist exclusively of the shares of Alstom Holdings. Alstom pools a large proportion of the Group's external funding, and advances the funds thus obtained to its subsidiary Alstom Holdings through loans and a current account. Fees from its indirect subsidiaries for the use of the Alstom name are Alstom's main other source of revenue. For more information, see section "Financial information – Statutory accounts – Comments on statutory accounts".

INTELLECTUAL PROPERTY

The Group owns or benefits from licenses for the use of several trademarks, patents and other intellectual property rights. All these rights contribute to the good performance of the business, but none of the licenses alone currently has a material relevance for the activities of the Group.

REAL PROPERTY

The Group carries out its activities on certain real estate over which it has rights of different types. The Group has full ownership of most of its main industrial sites.

The Group set up a leasing strategy for its offices buildings, which applies notably to the headquarters of the Group. The gross value of land and buildings fully owned and leased under financial leases as of 31 March 2019 is €1,042 million. The depreciation recognised for the above is €503 million. These amounts do not include operating leases.

The Group's tangible assets are subject to costs for general maintenance and repairs required for their successful operation, to meet with legal and quality requirements, including environmental, health and safety matters.

MAIN SITES (NON EXHAUSTIVE LIST)

Country	Site
South Africa	Johannesburg (Gibela)
	Johannesburg (Ubunye)
Germany	Braunschweig *(Lease)*
	Salzgitter
	Stendal
Algeria	Algiers *(Lease)*
Australia	Ballarat
	Sydney *(Lease)*
Belgium	Charleroi
Brazil	Taubate
Canada	Sorel-Tracy *(Lease)*
	Toronto *(Lease)*
Egypt	Cairo *(Lease)*
Spain	Barcelona
	Madrid *(Lease)*
USA	Hornell (NY) *(Lease)*
	Rochester (NY) *(Lease)*
	Grain Valley (MI)
	Warrensburg (MI)
	Melbourne (FL) *(Lease)*

Country	Site
France	Aix-en-Provence
	Aytré – La Rochelle
	Belfort
	Le Creusot
	Ornans
	Petit-Quevilly *(Lease)*
	Reichshoffen
	Saint-Ouen *(Lease)*
	Tarbes
	Valenciennes
	Villeurbanne *(Lease)*
	Vitrolles
Kazakhstan	Astana
India	Bangalore *(Lease)*
	Madhepura
	Chennai – SriCity
	Coimbatore *(Lease)*
Italy	Bologna *(Lease)*
	Florence *(Lease)*
	Lecco *(Lease)*
	Nola
	Savigliano
	Sesto *(Lease)*
Morocco	Fes *(Lease)*
Mexico	Mexico *(Lease)*
Netherlands	Ridderkerk *(Lease)*
	Utrecht *(Lease)*
Poland	Katowice
United Kingdom	Manchester *(Lease)*
	Radlett *(Lease)*
	Widnes
Sweden	Motala *(Lease)*
Turkey	Istanbul *(Lease)*

AGREEMENTS CONCLUDED BY THE EXECUTIVE OFFICERS OR MAJOR SHAREHOLDERS OF THE COMPANY AND A COMPANY SUBSIDIARY

(Disclosure pursuant to Article L. 225-37-4 of the French Commercial Code)

None.

MATERIAL CONTRACTS

The main acquisitions, disposals, partnerships, joint ventures and changes in scope of consolidation are identified in chapter 2 "Main events of year ended 31 March 2019" of this Registration Document.

DETAILS OF SHAREHOLDINGS ACQUIRED DURING FISCAL YEAR 2018/19

(Section including disclosure pursuant to Article L. 233-6 of the French Commercial Code)

The equity investments described here below reflect those which are in the Alstom perimeter on 31 March 2019.

- On 4 April 2018, Alstom Transport UK (Holdings) Ltd acquired 100% of the share capital of 21net Ltd from the Innovacom fund and other investors. The company, headquartered in the UK, is a provider of on-board Internet and passenger infotainment for the railway industry and reinforced Alstom digital offering and expertise, one year after the acquisition of Nomad Digital.
- Alstom, previously owning 33% of JSC Transmashholding (TMH), reinforced its investment in Russia by reaching a 20% stake in Transmashholding Ltd, the new holding company owning TMH and another Russian company operating in the services activity, Locotech-Service LLC. The deal was completed on 29 June 2018.
- On 8 February 2016, Alstom Transport Holdings BV acquired from JSC Remlokomotiv, itself held by JSC KTZ (Stock Company Kazakh Railways), 25% of the capital of a Kazakh company called EKZ LLP (Electrovoz Kurastyru Zauyty LLP), specialized in the development, manufacture, sale and maintenance of components and railway rolling stock. As a consequence, Alstom Transport Holdings BV therefore held 50% of Electrovoz Kurastyru Zauyty LLP. In 2018/19, Alstom Transport Holdings BV acquired additional 25% stake and now holds 75% of EKZ LLP.

SIGNIFICANT CHANGE IN THE FINANCIAL OR TRADING CONDITION

To the Company's knowledge and as of the date of this Registration Document, no significant change in the financial or trading condition of the Group has occurred since 6 May 2019, the closing date of the latest published statutory and consolidated accounts.

FINANCIAL RATING

Alstom has been rated by the rating agency Moody's Investors Services since May 2008. On 23 September 2016, Alstom requested Standard & Poors to withdraw all of its ratings on the Group and to stop rating it.

Agency	May 2019	May 2018	May 2017
Moody's Investors Services(*)			
Short-term rating	P-2	P-2	P-2
Long-term rating	Baa2 (outlook stable)	Baa2 (outlook stable)	Baa2 (outlook stable)

(*) Moody's Investors Services revised the long-term credit rating from Baa3 to Baa2 (outlook stable) on 10 June 2016.

INFORMATION ON THE **SHARE CAPITAL**

As of 31 March 2019, Alstom's share capital amounted to €1,565,006,191 consisting of 223,572,313 shares of the same class and fully paid with a par value of €7 per share, following the operations completed during fiscal year 2018/19, which are detailed in the table page 280 in section "Changes in share capital" below.

As of 30 April 2019, the share capital amounted to €1,565,042,227 divided into 223,577,461 shares with a par value of €7 each, resulting from the issuance of 5,148 new shares since 31 March 2019.

Following the law "aimed at recapturing the real economy", known as the "Florange" Act, enacted in France on 29 March 2014, double voting rights will be fully allocated to shareholders holding registered shares for at least two years in a listed company, unless stated otherwise in a provision of the Articles of Association of the Company adopted after the entry in force of the new law. As the accounting period started on 1 April 2014, and in the absence of a contrary provision in the Articles of Association, double voting rights have applied automatically since 31 March 2016.

To the knowledge of the Company, there is to date no pledge over the securities of the Company or of its significant subsidiaries, other than the pledging by Mr. Henri Poupart-Lafarge of 45,980 of his shares.

Following the decision of the Ordinary and Extraordinary General Meeting of 24 June 2008 in its 16th resolution, the par value of the share was split in two on 7 July 2008. Each share with a par value of €14 comprising the share capital as of this date was automatically exchanged for two shares of par value €7 each and entitled to the same rights as the previous shares.

As a consequence of these operations, the number of shares that could possibly be obtained by the beneficiaries of stock options and free allocation of shares and the redemption ratio of the ORA were adjusted.

FINANCIAL AUTHORISATIONS

(Section including disclosure pursuant to Article L. 225-37-4 of the French Commercial Code)

The table below sets forth the financial authorisations that are in force as of 6 May 2019 and their use during fiscal year:

Nature of the authorisation	Maximum nominal amount authorised	Nominal amount used during the previous fiscal year	Available amount	Expiry of the authorisation / Duration
ISSUANCE OF SECURITIES				
Delegation of competence to issue shares and securities giving access to the share capital with preferential subscription right and/or by capitalisation of reserves (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 20**)	Capital: €510 million (corresponds to 33% of the share capital) (1) (5) Debt securities: €1.5 billion (2)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
Delegation of competence to issue shares and securities giving access to the share capital with cancellation of the preferential subscription right, *via* a public offering and option to offer a priority period (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 21**)	Capital: €155 million (corresponds to approximately 10% of the capital) (5), minus any capital increase with cancellation of the preferential subscription right by virtue of resolutions Nos. 22 to 27 (1) (3) Debt securities: €750 million (2)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
Delegation of competence to issue shares and securities giving access to the share capital with cancellation of the preferential subscription right *via* a private placing (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 22**)	Capital: €155 million (corresponds to approximately 10% of the capital) (5), minus any capital increase with cancellation of the preferential subscription right by virtue of resolutions Nos. 21 and 23 to 27 (1) (3) Debt securities: €750 million (2)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
Possibility of issuing shares and/or any transferable securities that grant immediate or subsequent access to the capital in exchange for contributions in kind in the form of shares or transferable securities that give access to the Company's ordinary shares (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 23**)	Capital: €155 million (corresponds to approximately 10% of the capital) (5), minus any capital increase with cancellation of the preferential subscription right by virtue of resolutions Nos. 21, 22 and 24 to 27 (1) (3)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
Delegation of competence to increase the amount of the initial issue by 15% in the event of a share capital increase with or without a preferential subscription right (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 24**)	Not to exceed 15% of the initial issuance, and to be deducted from the maximum amounts authorised by the delegations under which the initial issuance is carried out (resolutions No. 21, 22 and 25 to 27) (1) (3) Debt securities: €750 million (2)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
Delegation of competence to set the issue price without preferential subscription right *via* a public offering or private placing (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 25**)	Issue price: the Board may choose one of the two options below: (i) an issue price corresponding to the average price recorded over a period of up to six months before the issue, or (ii) an issue price corresponding to the volume weighted average price on the day before the issue (1-day VWAP) with a maximum discount of 5%. Not to exceed 10% of the initial issuance, and to be deducted from the maximum amounts authorised by the delegations under which the initial issuance is carried out (resolutions Nos. 21 and 22) (1) (3) Debt securities: €750 million (2)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)

Nature of the authorisation	Maximum nominal amount authorised	Nominal amount used during the previous fiscal year	Available amount	Expiry of the authorisation / Duration
Delegation of competence to issue, with cancellation of the preferential subscription right, Company shares and securities giving access to the Company's ordinary shares in the event of a public exchange offer initiated by the Company (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 26**)	Capital: €155 million (corresponds to approximately 10% of the capital) (5), minus any capital increase with cancellation of the preferential subscription right by virtue of resolutions Nos. 21 to 25 and 27 (1) (3)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
Delegation of competence to issue Company shares, with cancellation of the preferential subscription right, as a result of the Company's subsidiaries issuing securities giving access to the Company's ordinary shares (only available outside public offering periods) (AGM 17 July 2018, **resolution No. 27**)	Capital: €155 million (corresponds to approximately 10% of the capital) (5), minus any capital increase with cancellation of the preferential subscription right by virtue of resolutions Nos. 21 to 26 (1) (3)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
OFFERINGS TO EMPLOYEES AND EXECUTIVES				
Delegation of competence to issue shares and other securities granting rights to the share capital with cancellation of the preferential subscription right reserved for members of a Group savings plan (AGM 17 July 2018, **resolution No. 29**)	2% of the share capital at the date of the Shareholders' Meeting, less any amount issued by virtue of resolution No. 30 (1) (4)	None	Maximum amount authorised	17 September 2020 (duration: 26 months)
Delegation of competence to issue shares reserved for a category of beneficiaries with cancellation of the preferential subscription rights (AGM 17 July 2018, **resolution No. 30**)	0.5% of the share capital at the date of the Shareholders' Meeting, less any amount issued by virtue of resolution No. 29 (1) (4)			17 January 2020 (duration: 18 months)
Authorisation to make free allotments of existing or future shares with cancellation of the preferential subscription rights (AGM 17 July 2018, **resolution No. 31**)	5 million shares, or approximately 2.3% of the capital (1), including up to 150,000 shares for corporate officers and up to 2 million shares under profit-share arrangements (not performance-related).	7,561,050	€27,438,950 (corresponding to 3,919,850 shares)	17 January 2020 (duration: 18 months)
SHARE BUYBACKS AND REDUCTIONS IN CAPITAL				
Authorisation to trade in the Company's shares (usable only outside public offering periods) (AGM 17 July 2018, **resolution No. 32**)	10% of the share capital Maximum price of €55 Maximum total programme amount of €1.2 billion	None	Maximum amount authorised	17 January 2020 (duration: 18 months)
Authorisation to reduce the capital by cancelling shares (AGM 17 July 2018, **resolution No. 28**)	10% of the shares that make up the Company's share capital on each cancellation date, the maximum number of shares cancelled during the 24-month period preceding said cancellation, including the shares subject to such cancellation.	None	Maximum amount authorised	17 September 2020 (duration: 26 months)

(1) Overall cap on capital increases that may result from these authorisations at €510 million, or approximately 33% of the capital as of 31 March 2019 and as of 31 March 2018 (before any adjustments).
(2) Overall cap on issuances of debt securities under these authorisations at €1.5 billion.
(3) Overall cap on capital increases that may result from these authorisations without preferential subscription rights (resolutions No. 21 to 27) at €155 million, *i.e.,* approximately 10% of the capital as of 31 March 2019 and as of 31 March 2018 (before any adjustments).
(4) Overall cap on capital increases in relation to employee savings schemes at 2% of the capital at the date of the 2018 Annual Shareholder Meeting (before any adjustments).
(5) On the basis of the share capital as of 31 March 2019 which amounted to €1,565,006,191 consisting of 223,572,313 shares with a par value of €7 per share and as of 31 March 2018 which amounted to €1,555,473,297 consisting of 222,210,471 shares with a par value of €7 per share.

It will be proposed to the 2019 Annual Shareholder Meeting to renew the share buy-back authorisation granted by the Annual Shareholder Meeting held on 17 July 2018 which will expire during fiscal year 2019/20.

It will also be proposed to renew the delegations of competence to the Board of Directors on share capital increases related to employee shareholding transactions which are intended for the development of employee shareholding, which is set at 1.22% of the share capital as of 31 March 2019 (either directly or *via* Alstom's *fonds commun de placement, i.e.,* a French shareholding vehicle or "FCP"), one of them expiring in fiscal year 2019/20.

Finally, it will be proposed to renew the authorisation related to the free allotment of (existing or to be issued) shares which will expire during fiscal year 2019/20.

CHANGES IN SHARE CAPITAL

	Number of shares issued or cancelled	Nominal amount of share capital increase or decrease *(in €)*	Paid in capital amount *(in €)*	Resulting total number of shares	Capital *(in €)*
31 MARCH 2016				**219,127,044**	**1,533,889,308**
Share capital increase resulting from the exercise of options and ORA(*) (30 April 2016)	31	217	488	219,127,075	1,533,889,525
Share capital increase resulting from the exercise of options (30 September 2016)	4,900	34,300	78,204	219,131,975	1,533,923,825
Share capital increase resulting from the exercise of options (30 November 2016)	182,564	1,277,948	2,998,026	219,314,539	1,535,201,773
Share capital increase resulting from the allocation of performance shares under plans LTI No. 15 and LTI No. 16 (12 December 2016)	212,821	1,489,747	-	219,527,360	1,536,691,520
Share capital increase resulting from the exercise of options (31 December 2016)	51,644	361,508	858,208	219,579,004	1,537,053,028
Share capital increase resulting from the exercise of options and allocation of performance shares under plan LTI No. 16 (31 January 2017)	45,669	319,683	738,417	219,624,673	1,537,372,711
Share capital increase resulting from the exercise of options (28 February 2017)	52,309	366,163	858,388	219,676,982	1,537,738,874
Share capital increase resulting from the exercise of options, allocation of performance shares under plans LTI No. 16 and PSP 2016 and allocation of free shares under plan "We are Alstom 2016" (31 March 2017)	34,848	243,936	542,965	219,711,830	1,537,982,810
31 MARCH 2017				**219,711,830**	**1,537,982,810**
Share capital increase resulting from the exercise of options and ORA(*) (30 April 2017)	36,852	257,964	593,126	219,748,682	1,538,240,774
Share capital increase resulting from the exercise of options (26 May 2017)	169,295	1,185,065	-	219,917,977	1,539,425,839
Share capital increase resulting from the exercise of options (31 May 2017)	58,629	410,403	3,941,952	219,976,606	1,539,836,242
Share capital increase resulting from the exercise of options (30 June 2017)	191,443	1,340,101	3,379,306	220,168,049	1,541,176,343
Share capital increase resulting from the exercise of options and ORA(*) (31 July 2017)	94,778	663,446	1,693,405	220,262,827	1,541,839,789
Share capital increase resulting from the exercise of options (31 August 2017)	18,565	129,955	327,952	220,281,392	1,541,969,744
Share capital increase resulting from the exercise of options and allocation of performance shares under plan LTI No. 16 (2 October 2017)	1,261,047	8,827,329	4,596,544	221,542,439	1,550,797,073

	Number of shares issued or cancelled	Nominal amount of share capital increase or decrease *(in €)*	Paid in capital amount *(in €)*	Resulting total number of shares	Capital *(in €)*
Share capital increase resulting from the exercise of options (31 October 2017)	281,790	1,972,530	5,246,061	221,824,229	1,552,769,603
Share capital increase resulting from the exercise of options and ORA(*) (30 November 2017)	51,028	357,196	916,809	221,875,257	1,553,126,799
Share capital increase resulting from the exercise of options (31 December 2017)	57,659	403,613	1,039,320	221,932,916	1,553,530,412
Share capital increase resulting from the exercise of options (31 January 2018)	212,558	1,487,906	3,758,902	222,145,474	1,555,018,318
Share capital increase resulting from the exercise of options (28 February 2018)	14,281	99,967	242,648	222,159,755	1,555,118,285
Share capital increase resulting from the exercise of options (31 March 2018)	50,716	355,012	952,813	222,210,471	1,555,473,297
31 MARCH 2018				**222,210,471**	**1,555,473,297**
Share capital increase resulting from the exercise of options and ORA(*) (30 April 2018)	8,782	61,474	144,027	222,219,253	1,555,534,771
Share capital increase resulting from the exercise of options (31 May 2018)	54,137	378,959	1,045,490	222,273,390	1,555,913,730
Share capital increase resulting from the exercise of options (06 June 2018)	23,350	163,450	-	222,296,740	1,556,077,180
Share capital increase resulting from the exercise of options and ORA(*) (30 June 2018)	7,441	52,087	538,919	222,304,181	1,556,129,267
Share capital increase resulting from the exercise of options and ORA(*) (13 July 2018)	6	42	-	222,304,187	1,556,129,309
Share capital increase resulting from the exercise of options (31 July 2018)	12,150	85,050	245,546	222,316,337	1,556,214,359
Share capital increase resulting from the exercise of options (31 August 2018)	42,364	296,548	823,780	222,358,701	1,556,510,907
Share capital increase resulting from free share allocations not linked to performance under the "We are Alstom 2016" plan (25 September 2018)	638,610	4,470,270	-	222,997,311	1,560,981,177
Share capital increase resulting from the exercise of options (30 September 2018)	61,057	427,399	1,085,775	223,058,368	1,561,408,576
Share capital increase resulting from the exercise of options (31 October 2018)	93,764	656,348	1,991,595	223,152,132	1,562,064,924
Share capital increase resulting from the exercise of options (30 November 2018)	103,888	727,216	2,129,657	223,256,020	1,562,792,140
Share capital increase resulting from the exercise of options (31 December 2018)	169,579	1,187,053	3,627,210	223,425,599	1,563,979,193
Share capital increase resulting from the exercise of options (31 January 2019)	26,781	187,467	451,906	223,452,380	1,564,166,660
Share capital increase resulting from the exercise of options (28 February 2019)	105,263	736,841	1,702,745	223,557,643	1,564,903,501
Share capital increase resulting from the exercise of options (31 March 2019)	14,670	102,690	244,353	223,572,313	1,565,006,191
31 MARCH 2019				**223,572,313**	**1,565,006,191**

(*) Subordinated bonds reimbursable with shares issue 2% December 2008.

OWNERSHIP OF ALSTOM SHARES

(Disclosure pursuant to Article L. 225-102 and L. 233-13 of the French Commercial Code)

To the Company's knowledge based on notifications received by the Company, the table below shows the voting rights and the shares held by shareholders with more than 0.50% of the Company's share capital as of 31 March 2019:

	Share capital as of 31 March 2019			
	Number of shares	% of the share capital (1)	Number of voting rights	% of the voting rights (1)
Public	90,023,441	40.27%	90,798,023	39.23%
Bouygues SA	62,086,226	27.77%	68,186,092	29.46%
State Street Corporation	6,295,305	2.82%	6,295,305	2.72%
Wellington Management	5,443,454	2.43%	5,443,454	2.35%
Amundi	5,351,970	2.39%	5,351,970	2.31%
Aviva plc	5,113,366	2.29%	5,113,366	2.21%
BNP Paribas Asset Management	4,328,175	1.94%	4,389,481	1.90%
Norges Bank	3,289,789	1.47%	3,289,789	1.42%
Employees (2)	2,721,522	1.22%	3,931,195	1.70%
Susquehanna International Holdings LCC	2,494,900	1.12%	2,494,900	1.08%
Prudential plc	2,332,099	1.04%	2,332,099	1.01%
DNCA Investments	2,284,041	1.02%	2,284,041	0.99%
Citadel Advisors LLC	2,210,742	0.99%	2,210,742	0.96%
Covea Finance	1,996,760	0.89%	1,996,760	0.86%
Oppenheimer Funds	1,514,586	0.68%	1,514,586	0.65%
Eton Park	1,502,300	0.67%	1,502,300	0.65%
Standard Life Aberdeen PLC	1,459,674	0.65%	1,459,674	0.63%
Franklin Resources Inc.	1,425,626	0.64%	1,425,626	0.62%
Legal & General Group plc	1,405,078	0.63%	1,112,008	0.48%
Groupama Asset Management	1,403,076	0.63%	1,403,076	0.61%
Lloyds Banking Group	1,400,970	0.63%	1,400,970	0.61%
Artisan Partners	1,393,382	0.62%	1,393,382	0.60%
York Capital Management	1,350,000	0.60%	1,350,000	0.58%
Crédit Suisse Group AG	1,329,352	0.59%	1,329,352	0.57%
HSBC Holdings plc	1,319,326	0.59%	1,319,326	0.57%
Richelieu Finance	1,312,000	0.59%	1,312,000	0.57%
Groupe Fradim	1,300,000	0.58%	1,300,000	0.56%
Lansdowne Partners LLP	1,293,719	0.58%	1,293,719	0.56%
Marsico Capital Management	1,245,255	0.56%	1,245,255	0.54%
La Banque Postale AM	1,225,938	0.55%	1,225,938	0.53%
FIL Limited	1,207,278	0.54%	1,207,278	0.52%
Moneta AM	1,150,000	0.51%	1,150,000	0.50%
Marshall Wace	1,145,234	0.51%	1,145,234	0.49%
HSBC Global Asset Management	1,110,748	0.50%	1,110,748	0.48%
FMR LLC	1,106,981	0.50%	1,106,981	0.48%
UBS Asset Management	(5)	(5)	(5)	(5)
Schroders plc	(5)	(5)	(5)	(5)
Caisse des Dépôts et Consignations	(5)	(5)	(5)	(5)
AFFM SA	(5)	(5)	(5)	(5)
Fonds de Réserve pour les Retraites (FRR)	(5)	(5)	(5)	(5)
Edmond de Rothschild Asset Management	(5)	(5)	(5)	(5)
Financière de l'Échiquier	(5)	(5)	(5)	(5)
Crédit Agricole SA	(5)	(5)	(5)	(5)
APE	-	-	-	-
Alken Luxembourg S.A.	-	-	-	-
TOTAL	**223,572,313**	**100.00%**	**231,424,670**	**100.00%**

(1) % calculated based on the share capital and voting rights as of 31 March of each year and not based on the share capital and voting rights on the date of the declaration.
(2) Shares held by employees and former employees of the Group as of 31 March 2019, including approximately 0.42% of the capital and 0.40% of the voting rights held through an employee mutual Fund (FCPE).
(3) Shareholders with less than 0.5% of the Company's share capital as of 31 March 2017.
(4) Shareholders with less than 0.5% of the Company's share capital as of 31 March 2018.
(5) Shareholders with less than 0.5% of the Company's share capital as of 31 March 2019.

Share capital as of 31 March 2018				Share capital as of 31 March 2017			
Number of shares	% of the share capital (1)	Number of voting rights	% of the voting rights (1)	Number of shares	% of the share capital (1)	Number of voting rights	% of the voting rights (1)
82,854,841	37.29%	83,568,157	36.76%	96,353,193	43.85%	96,883,135	43.06%
62,086,226	27.94%	65,347,092	28.75%	18,260,866	8.31%	21,521,732	9.57%
6,295,305	2.83%	6,295,305	2.77%	6,295,305	2.87%	6,295,305	2.80%
6,574,392	2.96%	6,574,392	2.89%	-	-	-	-
2,328,094	1.05%	2,328,094	1.02%	(3)	(3)	(3)	(3)
5,113,366	2.30%	5,113,366	2.25%	5,113,366	2.33%	5,113,366	2.27%
4,452,283	2.00%	4,541,817	2.00%	2,320,362	1.06%	2,320,362	1.03%
2,139,879	0.96%	2,139,879	0.94%	2,139,879	0.97%	2,139,879	0.95%
2,569,390	1.16%	3,882,733	1.71%	2,667,642	1.21%	4,164,574	1.85%
-	-	-	-	-	-	-	-
4,336,879	1.95%	4,336,879	1.91%	-	-	-	-
3,187,957	1.43%	3,187,957	1.40%	4,171,960	1.90%	4,171,960	1.85%
-	-	-	-	-	-	-	-
1,996,760	0.90%	1,996,760	0.88%	1,996,760	0.91%	1,996,760	0.89%
1,514,586	0.68%	1,514,586	0.67%	1,514,586	0.69%	1,514,586	0.67%
1,502,300	0.68%	1,502,300	0.66%	1,502,300	0.68%	1,502,300	0.67%
-	-	-	-	-	-	-	-
1,425,626	0.64%	1,425,626	0.63%	1,425,626	0.65%	1,425,626	0.63%
1,378,282	0.62%	1,107,354	0.49%	1,330,144	0.61%	1,330,144	0.59%
1,403,076	0.63%	1,403,076	0.62%	1,403,076	0.64%	1,403,076	0.62%
1,400,970	0.63%	1,400,970	0.62%	1,400,970	0.64%	1,400,970	0.62%
1,393,382	0.63%	1,393,382	0.61%	1,393,382	0.63%	1,393,382	0.62%
1,350,000	0.61%	1,350,000	0.59%	1,350,000	0.62%	1,350,000	0.60%
2,206,894	0.99%	2,206,894	0.97%	(3)	(3)	(3)	(3)
1,319,326	0.59%	1,319,326	0.58%	1,319,326	0.60%	1,319,326	0.59%
1,312,000	0.59%	1,312,000	0.58%	1,312,000	0.60%	1,312,000	0.58%
1,300,000	0.59%	1,300,000	0.57%	1,300,000	0.59%	1,300,000	0.58%
-	-	-	-	-	-	-	-
1,245,255	0.56%	1,245,255	0.55%	1,245,255	0.57%	1,245,255	0.55%
1,225,938	0.55%	1,225,938	0.54%	-	-	-	-
1,387,923	0.62%	1,387,923	0.61%	1,387,923	0.63%	1,387,923	0.62%
1,150,000	0.52%	1,150,000	0.51%	-	-	-	-
1,100,522	0.50%	1,100,522	0.48%	-	-	-	-
1,110,748	0.50%	1,110,748	0.49%	1,110,748	0.51%	1,110,748	0.49%
1,106,981	0.50%	1,106,981	0.49%	1,153,867	0.53%	1,153,867	0.51%
1,110,753	0.50%	1,110,753	0.49%	(3)	(3)	(3)	(3)
4,585,056	2.06%	4,585,056	2.02%	4,429,438	2.02%	4,429,438	1.97%
(4)	(4)	(4)	(4)	1,092,807	0.50%	1,092,807	0.49%
2,809,715	1.26%	2,809,715	1.24%	-	-	-	-
(4)	(4)	(4)	(4)	1,181,722	0.54%	1,181,722	0.53%
1,872,016	0.84%	1,872,016	0.82%	1,872,016	0.85%	1,872,016	0.83%
2,063,750	0.93%	2,063,750	0.91%	3,374,020	1.54%	3,374,020	1.50%
(4)	(4)	(4)	(4)	1,104,501	0.50%	1,104,501	0.49%
-	-	-	-	43,825,361	19.95%	43,825,361	19.48%
-	-	-	-	3,363,429	1.53%	3,363,429	1.49%
222,210,471	**100.00%**	**227,316,602**	**100.00%**	**219,711,830**	**100.00%**	**224,999,570**	**100.00%**

To the knowledge of the Company, on the basis of declarations of threshold crossing received, excluding notifications received from registered brokers, no other shareholder holds, directly or indirectly, more than 0.50% of the share capital or voting rights of the Company as of 31 March 2019.

Following declarations of threshold crossing received after 31 March 2019, the following shareholders hold:

- Standard Life Aberdeen notified that it held, on 1 April 2019, 1,685,642 shares (0.75% of the share capital of Alstom);
- DNCA Investments notified that it held, on 4 April 2019, 2,009,041 shares (less than 1% of the share capital of Alstom);
- Crédit Agricole S.A. notified that it held, on 16 April 2019, 2,806,599 shares and voting rights (1.25% of the share capital of Alstom and 1.21% of the voting rights of Alstom);
- Credit Suisse Group notified that it held, on 18 April 2019, 854,052 shares (0.37% of the share capital of Alstom);
- Aviva plc notified that it held, on 3 May 2019, 4,586,287 shares (2.05% of the share capital of Alstom);
- Standard Life Aberdeen plc notified that it held, on 10 May 2019, 2,764,243 shares and voting rights (1.24% of the share capital of Alstom and 1.19% of the voting rights of Alstom);
- Wellington Management Group LLP notified that it held, on 20 May 2019, 5,621,917 shares and voting rights (2.51% of the share capital of Alstom).

On 22 June 2014 Bouygues concluded with the French Republic (the "State"), represented by the *Agence des participations de l'État* (State Shareholdings Agency, "APE"), an agreement under which the State, or any other entity of its choice controlled by it, could purchase part of the Alstom shares held by Bouygues. A detailed description of the agreement is provided in notice 214C1292 published by the French financial markets authority (AMF) on 3 July 2014 in which the AMF concludes, after examining said agreement, that the State and Bouygues are acting in concert in respect of Alstom.

Following the AMF's decision of 3 July 2014, the APE, controlled by the State, and Bouygues SA formally recorded that they are acting in concert in respect of Alstom under Article L. 233-10 of the French Commercial Code. In the notification received by the Company from the members of the concert on 10 July 2014, they indicated that no members of the abovementioned concert other than Bouygues SA held, alone or in concert, shares or securities giving access to Alstom's capital and that only Bouygues SA held Alstom shares, *i.e.* 90,543,867 Alstom shares representing 29.29% of this company's share capital and voting rights.

In addition, in accordance with the provisions of Articles L. 233-7-VII and 233-9-I-3 of the French Commercial Code and Article 223-17-I of the AMF's General Regulation, the APE stated in the notification:

- that it was not acting in concert with persons other than Bouygues SA;
- that the shares that will be acquired in the event of the exercise of the sale undertaking granted by Bouygues SA to the APE under the terms of the agreement signed on 22 June 2014 between the French Republic represented by the APE and Bouygues SA (the "Agreement") will be financed out of its own funds;
- that it reserves the right to acquire shares on the market or from third parties, it being specified that the aim of the APE is to hold a stake equal to 20% of Alstom's capital and that it does not intend to increase its holding in Alstom's capital beyond the mandatory tender offer threshold or take control of Alstom;
- that it supports Alstom's strategy within the framework of the agreement signed between the French Republic, Alstom and General Electric on 21 June 2014;
- that is not planning to propose a merger, reorganisation, liquidation or transfer project for Alstom assets nor a change in Alstom's business, other than those detailed in the agreement signed with General Electric on 21 June 2014, or a change in its Articles of Association or an issuance by Alstom of financial securities or the withdrawal of securities from the financial markets;
- that it will decide whether to exercise the sale undertakings described in the Agreement depending on market conditions;
- that under the terms of the Agreement, Bouygues SA will loan, under the terms of a loan ("prêt de consommation") to the APE, from the first stock exchange trading day following the Reference Date (*e.g.* the Reference Date being defined in the Agreement as the payment date of the exceptional dividend or any transaction with an equivalent effect following the completion of the transactions announced by Alstom on 21 June 2014) and up to the payment/delivery of the third sale undertaking, if it is exercised, or the expiry of the exercise period of the third sale undertaking, if it is not exercised, a number of shares such that the number of Alstom voting rights held by the APE (taking into account the voting rights acquired by the APE) including after the Reference Date is equal to 20% of the Alstom voting rights; and
- that it intends to request the appointment of the two representatives on Alstom's Board of Directors as from the Reference Date.

Bouygues SA had indicated that it was under no obligation to issue a declaration of intent since it already held more than 25% of the capital and the voting rights prior to the concert being established, but nevertheless declared that, should it be necessary:

- it is not planning to acquire Alstom shares or control over Alstom;
- it supports the strategy decided upon by Alstom's general management and, in particular, the signing of the agreement concluded with General Electric on 21 June 2014;
- it is not planning to propose a merger, reorganisation, liquidation or asset transfer project for Alstom assets or a change in Alstom's business or a change to its Articles of Association or an issue of Alstom financial securities or the withdrawal of securities from the financial markets;
- it has granted sale undertakings and a securities lending agreement to the APE under the terms of the Agreement; and
- that it is not planning to request the appointment of additional representatives on Alstom's Board of Directors (given that Bouygues SA currently has two representatives on Alstom's Board of Directors and will keep one representative after the Reference Date).

In accordance with the terms of the agreement signed between the French State and Bouygues, Bouygues submitted a resolution at the General Shareholders' Meeting dated 18 December 2015 convened to approve the distribution to the shareholders of a portion of the proceeds in the form of public share buyback offer ("offre publique de rachat d'actions" or "OPRA") by proposing the appointment of Mr. Olivier Bourges as Director on the Board of Directors of the Company as from the settlement-delivery of the OPRA. The General Shareholders' Meeting dated 18 December 2015 approved the appointment of Mr. Olivier Bourges as Director. Pascal Faure was appointed as French State representative on the Alstom Board of Directors, by Ministerial Order on 25 July 2016.

On 17 October 2017, the restitution to Bouygues SA of the shares of the Company which were held by the French state took place based on the French state's decision to (i) not exercise its option to acquire the shares of the Company it held pursuant to the agreement of 22 June 2014 with Bouygues SA and (ii) to terminate the shareholder loan with Bouygues SA regarding 43,825,360 shares of the Company dated 4 February 2016. The Board of Directors acknowledged the resignations of Mr. Pascal Faure and Mr. Olivier Bourges following the restitution of the shares to Bouygues SA.

The French State sold the remaining share it held on 15 December 2017.

The Company is not aware of the existence of a shareholders' agreement relating to the Company's capital.

As of 6 May 2019, to the knowledge of the Company, 104,312 shares are held by the individual Directors of the Company representing less than 0.1% of Alstom's share capital and voting rights.

The company Bouygues SA, Director of Alstom since 18 March 2008, holds 62,086,226 shares, *i.e.*, 27.77% of the share capital and 29.46% of the voting rights of the Company as of 06 May 2019. The Bouygues SA commitment dated 26 September 2017 to maintain its shareholding in the Company until 31 July 2018 and not to exceed 29.99% of the voting rights terminated.

A table identifying the operations as per Article L. 621-18-2 of the French Monetary and Financial Code is available in section "Corporate governance – Interest of the officers and employees in the share capital".

Alstom does not hold, directly or indirectly through companies it controls, any of its own shares. The Internal Rules of the Board, as amended on 17 March 2015, increased from 500 to 2,000 the number of shares needed to be held by each Director, which corresponds to approximately one year of fees for Board meetings. Each Director shall have a period of two years from 1 January 2015 or the beginning of his or her mandate if later, to increase his or her number of shares at this minimum level. Shares shall be held in registered form.

SECURITIES AND RIGHTS GIVING ACCESS TO THE SHARE CAPITAL

The securities and rights giving access to the Company's share capital are composed of:

- the rights resulting from free allocations of shares; and
- stock options to subscribe shares.

The subordinated 2% bonds due December 2008 reimbursable in Company's shares ("ORA") were reimbursed in shares on 31 December 2008, as described below.

There are no other securities giving rights to the share capital of the Company.

Subordinated 2% bonds due December 2008 reimbursable in Company's shares ("ORA")

In December 2003, the Company issued subordinated 2% bonds due December 2008 for €901,313,660.80 and reimbursable in Company's shares ("ORA") with preferential subscription rights which may lead to the issue of a maximum of 643,795,472 new shares with a ratio of 0.0628 Alstom shares with a par value of €7, after adjustments of the redemption ratio following the operations on the share capital of the Company.

On 31 December 2008 the ORA were reimbursed in shares pursuant to the terms and conditions of the bonds.

As of 31 March 2019, 73,338 ORA, representing 0.01% of the issue, were held by bondholders who did not yet notify the Company if they request at redemption the number of shares resulting either from the rounding down to the nearest whole number (with cash compensation by the Company) or the rounding up to the nearest whole number (with cash payment by the bondholder).

Free allocations of shares

See sections:

- "Corporate governance – Interest of the officers and employees in the share capital – Stock options and performance share plans"; and
- "Corporate governance – Interest of the officers and employees in the share capital – Allocation of free shares».

Stock options

See section "Corporate governance – Interest of the officers and employees in the share capital – Stock options and performance share plans".

POTENTIAL SHARE CAPITAL

	Total number of shares that may be issued	Amount of corresponding share capital increase *(in €)*	% of the share capital as of 31 March 2019
Shares that may result from the exercise of existing stock option plans(*)	504,201	3,529,407	0.23%
Shares that may be issued on the basis of performance share plans(*)	3,732,688	26,128,616	1.67%
TOTAL(*)	**4,236,889**	**29,658,223**	**1.90%**

(*) Subject to satisfaction of all performance conditions. See section "Corporate governance – Interests of the officers and employees in the share capital – Stock options and performance share plans" and Note 30 to the Consolidated Financial Statements at 31 March 2019.

SHARE BUYBACKS

(Information as per Articles 241-1 *et seq.* of the General Regulation of the French financial markets authority (AMF))

Use by the Board of Directors of the authorisation granted by the Shareholders' Meeting

Acting pursuant to Articles L. 225-209 *et seq.* of the French Commercial Code, the Ordinary and Extraordinary General Meeting held on 17 July 2018 authorised the Board of Directors to purchase Alstom's shares on a stock exchange or over the counter, and by any means, within the limit of 10% of Alstom's share capital as of 31 March 2018, *i.e.,* a theoretical number of 22,221,047 shares for a maximum purchase price of €55, subject to adjustments in relation to operations on the share capital and for a duration of 18 months after the Shareholders' Meeting, *i.e.* until 17 January 2020. The Company did not use this authorisation during fiscal year 2018/19.

Presentation of the Alstom share buy-back programme submitted to the 2019 Annual Shareholder Meeting for approval

The section below constitutes the presentation of the share buy-back programme which will be submitted to 2019 Annual Shareholder Meeting for approval, pursuant to Article 241-2-I of the General Regulation of the French financial markets authority (AMF).

Number of shares and portion of the share capital held directly or indirectly by Alstom

Alstom does not hold directly or indirectly any shares composing its share capital and any securities giving access to its share capital.

Split by objectives of shares purchased

Not applicable.

Objectives of the share buy-back programme

The share buy-back programme may be implemented in order to purchase or arrange the purchase of the Company's shares, and in particular, as described in the report of the Board of Directors, to:

- cancel all or part of the shares acquired, under the conditions set forth by law;
- allocate or transfer shares to employees, former employees or corporate officers of the Company and its subsidiaries within the meaning of Articles L. 225-180 and L. 233-16 of the French Commercial Code, in particular through employee savings plans, stock options (notably pursuant to the provisions of Articles L. 225-177 *et seq.* of the French Commercial Code), free share allocations (notably pursuant to the provisions of Articles L. 225-197-1 *et seq.* of the French Commercial Code), employee shareholder transactions (in particular under the conditions set forth in Articles L. 3332-1 *et seq.* and L. 3344-1 of the French Labour Code) or any share-based compensation scheme, under the conditions provided for by the market authorities and at the times when the Board of Directors or the person acting on the authority of the Board of Directors decides to allocate or transfer such shares;
- hold the shares purchased, or sell, transfer or exchange the shares purchased as part of or following any external growth transactions within the limit set forth in the sixth paragraph of Article L. 225-209 of the French Commercial Code and in accordance with common market practices;
- deliver shares upon the exercise of rights attached to securities giving access by any means, either immediately or in the future, to shares of the Company;
- deliver shares (as an exchange, a payment or other) in the context of any external growth transactions, mergers, spin-off or contributions;
- maintain a secondary market in, or the liquidity of, the Company's shares through an investment services provider, in connection with a liquidity agreement that complies with the Code of Ethics agreed upon by the French financial markets authority ("AMF");
- implement any market practice that could potentially be allowed by law or the AMF and, more generally, to carry out any other transaction in compliance with applicable regulations.

The purchase, sale, transfer or exchange of these shares may occur, in whole or in part, in accordance with the rules set by the relevant regulatory bodies, on regulated markets or off the market, including *via* multilateral trading facilities (MTFs) or *via* a systematic internaliser, by any means, including a block transfer of securities, the use or exercise of financial instruments, derivatives and, in particular through optional transactions such as the purchase and sale of options, or by delivery of shares following the issue of securities giving access to the Company's ordinary shares by conversion, exchange, redemption or exercise of a warrant, either directly or indirectly through an investment service provider, or in any other way (without limiting the share of the buy-back programme that may be carried out by any of these means), and at any time within the limits set forth by laws and regulations, excluding during any take-over period on the Company's share capital. The portion of the programme carried out in the form of a block transfer may constitute the entire programme.

Maximum portion of share capital and maximum number of shares which may be repurchased

Purchases of the Company's own shares may relate to a number of shares such that, at the date of each purchase, the total number of shares purchased by the Company since the beginning of the buy-back programme (including shares subject to said buy-back), does not exceed 10% of the shares that make up the Company's share capital at that time (taking into account transactions affecting the share capital subsequent to this General Meeting), *i.e.*, for illustration purposes, as of 31 March 2019, a theoretical maximum number of 22,357,231 shares with a par value of €7 each and a theoretical maximum amount of around €1.34 billion based upon the maximum purchase price set hereafter. However, (i) the number of shares acquired by the Company to be held as treasury shares to be used at a later date as payment or in exchange in the context of an external growth transaction cannot exceed 5% of the share capital and (ii) if the shares are purchased to ensure liquidity under the conditions defined by the General Regulation of the French financial markets authority (AMF), the number of shares taken into account for calculating the 10% limit provided for above corresponds to the number of shares purchased, less the number of shares sold during the period of the authorisation.

Maximum purchase price

The purchase price may not exceed €60 (excluding charges) per share (or the equivalent of that amount in other currencies at the same date). In the event of a change in the par value of the shares, a share capital increase through the capitalisation of reserves, an allotment of free or performance shares, a stock split or reverse stock split, a distribution of reserves or of any other assets, an amortisation of capital or any other transactions affecting the share capital or the shareholders' equity, the Shareholders' Meeting delegates to the Board of Directors the power to decide whether to adjust the aforementioned maximum purchase price in order to take into account the impact of these transactions on the value of the share. The total amount allocated to the share buy-back programme authorised below may not exceed €1.35 billion.

Duration

The share buy-back programme will be valid for 18 months as from the 2019 Annual Shareholder Meeting.

Characteristics of the shares which may be repurchased

Shares listed on NYSE Euronext Paris (Compartment A).

Name: Alstom.

ISIN Code: FR0010220475.

Stock code: ALO.

ISSUE OF DEBT SECURITIES

On 25 September 2018, the Board of Directors renewed the delegations of authority to the Chairman and Chief Executive Officer, for a one-year period, to issue, in one or more issuances, bonds within a maximum nominal amount of €750,000,000.

During fiscal year 2018/19, the Company did not issue any debt securities.

DIVIDENDS PAID OVER THE THREE PREVIOUS FISCAL YEAR

(Information as per Article 243 *bis* of the French General Tax Code)

The fiscal year ended 31 March 2019 resulted in a net profit of €1,529,438,701.67. It is proposed to the 2019 Annual Shareholder Meeting to distribute a dividend of a total amount of €1,229,647,721.50, corresponding to €5.50 per share with a par value of €7, to be paid as from 17 July 2019.

The total amount distributed, as indicated above, is based on the number of shares entitled to dividends as of 31 March 2019, *i.e.* 223,572,313 shares, and may vary if the number of shares entitled to dividends changes between 1 April 2019 and the ex-date, depending in particular on the number of treasury shares, the final acquisition of performance shares (in particular, those resulting from the Performance Shares Plan 2016 ("PSP 2016") with a delivery date on 15 May 2019 and representing, on 31 March 2019, up to 754,983 shares) and options exercised (if the beneficiary is entitled to dividends in accordance with the provisions of the relevant plans).

The dividends paid over the three previous fiscal years were as follows:

Fiscal year ended on:	31 March 2018	31 March 2017	31 March 2016
Dividend per share *(in €)*	€0.35	€0.25	0
TOTAL	**€77,773,664.85**	**€54,932,304.75**	**0**

See section "Financial statements – Statutory accounts – Appropriation of the net income".

ELEMENTS WHICH COULD HAVE AN IMPACT IN THE EVENT OF A PUBLIC OFFERING

(Disclosure pursuant to Article L. 225-37-5 of the French Commercial Code)

Structure of the Company's share capital

A table detailing the structure of Alstom's share capital is presented in section "Additional information – Information on the share capital – Ownership of Alstom shares".

Provisions of the Articles of Association restricting the exercise of the voting rights

There is no statutory restriction other than those mentioned in Article 7 of the Articles of Association which provides the loss of the voting rights under certain conditions, for not disclosing to the Company any shareholding or voting rights that crossed certain levels set forth in the Articles of Association. See section "Additional information – Summary of key provisions of the Articles of Association – Notification of holdings exceeding certain percentages".

Agreements of which the Company is aware in application of Article L. 233-11 of the French Commercial Code

None.

Direct or indirect shareholdings in the Company

As of 31 March 2019, Bouygues SA held 27.77% of the share capital and 29.46% of the voting rights of Alstom.

See also section "Additional information – Information on the share capital – Ownership of the capital".

List of holders of any security granting special control rights

None.

Control mechanisms within employee shareholding schemes

The rules of the Alstom employees shareholding scheme ("FCPE Alstom") provide that the Supervisory Board of the FCPE Alstom is entitled to vote in Alstom Shareholders' Meetings, and not employees directly.

Therefore only the Supervisory Board is entitled to decide on the answer to be given in case of a public offer. The FCPE Alstom held 0.42% of the Company's share capital and 0.40% of the voting rights as of 31 March 2019.

Shareholders' agreements that may restrict the transfer of shares and the exercise of the voting rights

To the knowledge of Alstom, there are no shareholders' agreements that may restrict the transfer of Alstom's shares and/or the exercise of Alstom's voting rights. See also section "Additional information – Information on the share capital – Ownership of the capital".

Specific rules governing the appointment and replacement of Directors, and amendments of the Company's Articles of Association

None.

Board of Directors' powers

The Annual Shareholder Meeting held on 17 July 2018 authorised the Board of Directors to acquire the Company's shares, within the limits set forth by laws and regulations, excluding during any take-over period in respect of the Company's share capital.

It will be proposed to the next Annual Shareholder Meeting 2019 to renew this authorisation under the conditions detailed page 286, excluding during any take-over on the Company's share capital. See also section "Additional information – Information on the share capital – Share buybacks".

Agreements that may be amended or terminated in case of a change of control of the Company

The financing agreements, the terms of bonds issues and certain bonding programmes of the Group include change of control clauses.

The remaining two Alstom's bond issues contain a change of control clause that allows any bondholder to request the early repayment of its bonds, in whole or in part, during a specific period of time, for an amount equal to 101% of the principal amount of such bonds, following a change of control of Alstom.

The revolving credit facility, amounting to €400 million, maturing in June 2022 contains a change of control clause that allows each financial institution party to this agreement to request the early repayment of its participation in the facility and the cancellation of its credit commitment in the event of a change of control of Alstom. The revolving facility was not drawn on 31 March 2019.

The committed bonding facility of a maximum amount of €3 billion maturing in November 2020 also contains a change of control clause which may result, in the event of a change of control, in the programme being suspended, with the obligation to procure new bonds to replace outstanding bonds or to provide cash collateral, as well as a potential cross default. For further information on this facility and the revolving committed bonding facilities, see Note 28 to the consolidated financial statements.

Agreements providing indemnities to Directors or employees if they resign or are dismissed without actual and serious reason or if their employment ends due a public offer

None. See section "Corporate governance – Corporate governance and Executive and Corporate officers' compensation report".

RELATIONS WITH SHAREHOLDERS

The mission of the Investor Relations team is to provide the financial community (institutional investors or financial analysts) with complete and up to date information on the financial situation of the Group, its strategy and evolution.

Stock market news

On 29 March 2019, the share price closed at €38.62 and the Group's stock market capitalisation stood at €8.6 billion.

Keeping investors informed

www.alstom.com

The Investors' section of the Alstom website has been especially designed to provide shareholders with easy access to all of the Group's financial communications: share price quotes, the possibility to download historical data, as well as financial results, presentations, Registration Documents, dates of important meetings and frequently asked questions. Printed copies of the Registration Document can be obtained in French and English by sending a request to the Investor Relations Department.

Contacts

E-mail: investor.relations@alstomgroup.com

France: Toll free number from France – 0800 50 90 51, from Monday to Friday, from 9 am to 6 pm.

From abroad: + 33 1 57 06 87 78 (call will be charged at your local operator's standard international rate).

Alstom – Investors Relations

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LISTING OF THE SHARES

Alstom share as of 31 March 2019

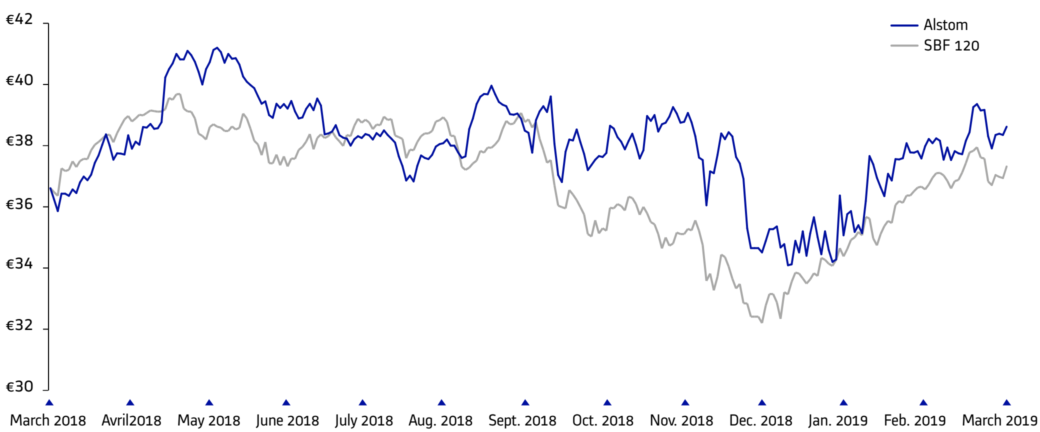
ALO
LISTED
NYSE
EURONEXT
PARIS

Market of listing:	**Euronext Paris**
ISIN Code:	FR0010220475
Stock code:	ALO
Par value:	€7
Number of shares:	223,572,313
Stock market capitalisation:	€8,634,362,728
Main indices:	CAC Next 20, SBF 120, Euronext 100

The Alstom shares have not been listed on the London Stock Exchange since 17 November 2003, or on the New York Stock Exchange since 10 August 2004.

The Company has chosen not to create or otherwise sponsor an American Depositary Receipt (ADR) facility in respect of its shares. Any ADR facility currently in existence is "unsponsored" and has no ties whatsoever to the Company. This means that the Company cannot be relied upon to ensure the proper operation of such facility or to protect the rights of ADR holders, and the Company expressly disclaims any liability or submission to jurisdiction to any courts in the United States in respect of such facility. Persons choosing to deposit Alstom shares into such a facility or to acquire ADRs issued from such a facility do so at their own risk and on the basis of their own analysis of such facility.

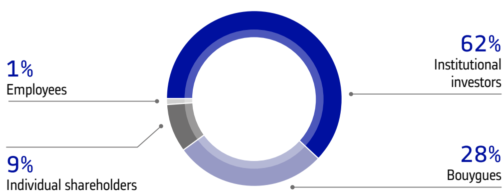
SHARE PRICE CHANGES *(in €)* **– APRIL 2018/MARCH 2019**



Alstom basis as of 29st March 2018: €36.61
Source: Nasdaq IR Insight

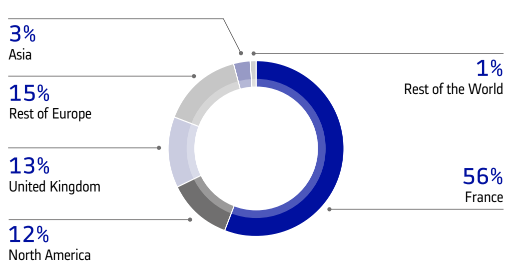
Shareholder structure

According to a shareholder study carried out by Euroclear France and Orient Capital on 13 March 2019, the share capital was distributed as follows:



Source : Alstom

CAPITAL STRUCTURE BY REGION(*)

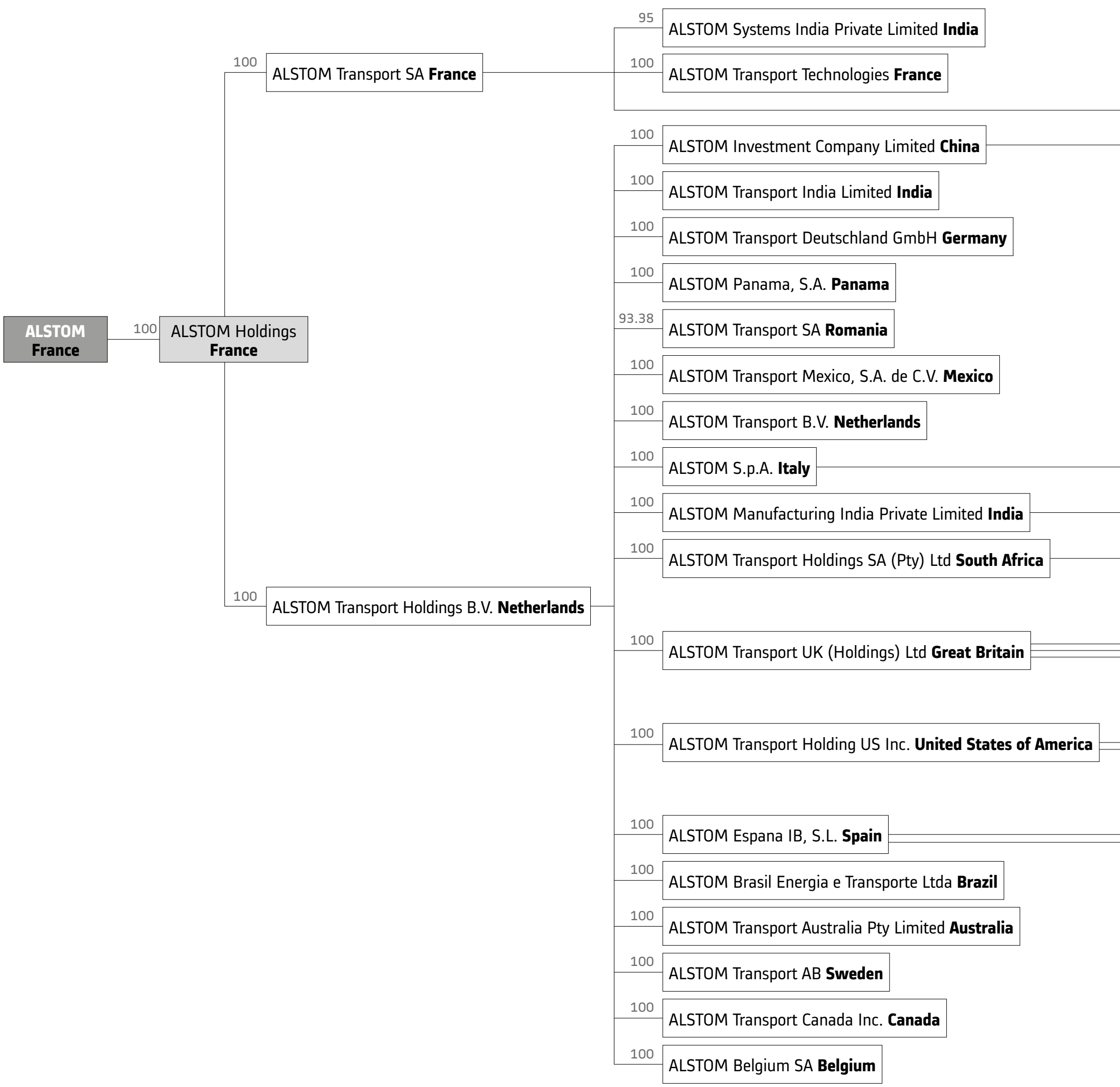


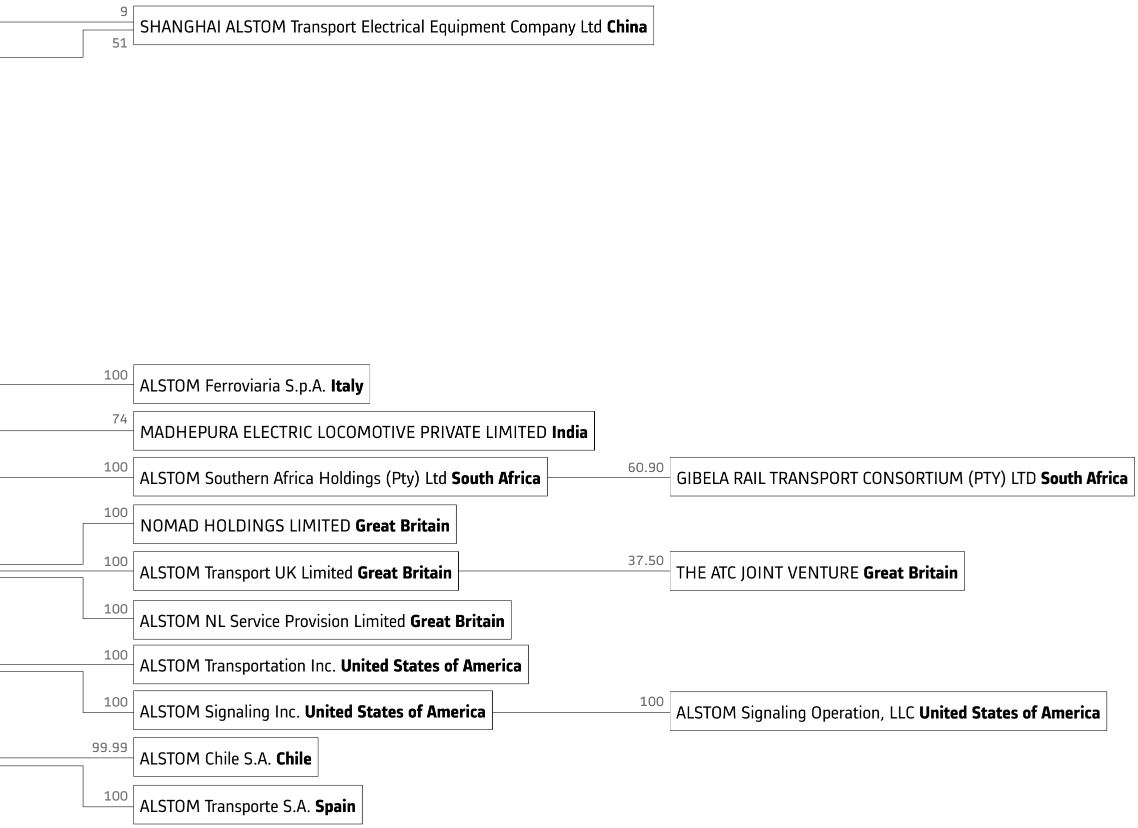
Source : Alstom

(*) Based on identified shareholders only.

SIMPLIFIED ORGANISATION CHART
AS OF 31 MARCH 2019

The full list of companies included in the scope of consolidation as of 31 March 2019 is available in Note 38 of the consolidated financial statements.




9
51
SHANGHAI ALSTOM Transport Electrical Equipment Company Ltd **China**
100
ALSTOM Ferroviaria S.p.A. **Italy**
74
MADHEPURA ELECTRIC LOCOMOTIVE PRIVATE LIMITED **India**
100
ALSTOM Southern Africa Holdings (Pty) Ltd **South Africa**
60.90
GIBELA RAIL TRANSPORT CONSORTIUM (PTY) LTD **South Africa**
100
NOMAD HOLDINGS LIMITED **Great Britain**
100
ALSTOM Transport UK Limited **Great Britain**
37.50
THE ATC JOINT VENTURE **Great Britain**
100
ALSTOM NL Service Provision Limited **Great Britain**
100
ALSTOM Transportation Inc. **United States of America**
100
ALSTOM Signaling Inc. **United States of America**
100
ALSTOM Signaling Operation, LLC **United States of America**
99.99
ALSTOM Chile S.A. **Chile**
100
ALSTOM Transporte S.A. **Spain**

INFORMATION ON THE **ANNUAL FINANCIAL REPORT**

The Annual Financial Report for fiscal year 2018/19, established pursuant to Article L. 451-1-2 of the French Monetary and Financial Code and Article 222-3 of the General Regulation of the French financial markets authority (AMF), is made up of the sections or sub-sections of the French Registration Document identified in the table below:

INFORMATION ON THE **REGISTRATION DOCUMENT**

INFORMATION INCLUDED BY REFERENCE

Pursuant to Article 28 of EC Regulation No. 809-2004 of the Commission of 29 April 2004 regarding prospectuses, the following information is included by reference in this Registration Document:

- the consolidated and statutory financial statements for the fiscal year ended 31 March 2018, the Auditors' reports thereto and the Group's management report, as shown at pages 36 to 104, 109 to 124, 105 to 108, 125 to 127, and 22 to 34 respectively, of the Registration Document No. D.18-0517 filed with the French financial markets authority (AMF) on 29 May 2018;
- the consolidated and statutory financial statements for the fiscal year ended 31 March 2017, the Auditors' reports thereto and the Group's management report, as shown at pages 32 to 95, 98 to 113, 96 to 97, 114 to 115, 182 and 20 to 30 respectively, of the Registration Document No. D.17-0558 filed with the French financial markets authority (AMF) on 23 May 2017.

The sections of these documents not included here are either not relevant for the investor or are covered in another part of this Registration Document.

NAMES AND FUNCTIONS OF THE PERSONS RESPONSIBLE

Mr. Henri Poupart-Lafarge
Chairman and Chief Executive Officer
Alstom

DECLARATION BY THE PERSON RESPONSIBLE FOR THE REGISTRATION DOCUMENT

This is a free translation of the statement signed and issued in French language by the Chairman and Chief Executive Officer of the Company and is provided solely for the convenience of English-speaking readers.

I hereby declare, after having taken all reasonable care to ensure that it is case, that the information included in this Registration Document is, to my knowledge, true and accurate and contains no material omission which could make it misleading. I declare, to best of my knowledge, that the accounts have been established in conformity with applicable accounting standards and give an accurate description of the assets and liabilities, the financial position and the results of the Company and all companies included in the consolidation perimeter and that the Management Report included in Chapter 7 of this Registration Document, pages 292 and 293, presents an accurate picture of the evolution of the activity, of the results, of the financial position of the Company and all companies included in the consolidation perimeter and that it describes the main risks and uncertainties that they face.

The Statutory Auditors of the Company, PricewaterhouseCoopers Audit and Mazars, provided me a statement at the end of their assignment in which they indicate that they have conducted a review of the information related to the financial position and financial statements provided in this Registration Document and have reviewed the entire Registration Document.

Saint-Ouen, 28 May 2019.

Henri Poupart-Lafarge
Chairman and Chief Executive Officer

TABLE OF RECONCILIATION

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