ALSTOM

Consolidated financial statements

Year ended 31 March 2023

ALSTOM

CONSOLIDATED INCOME STATEMENT

(in € million)	Note	Year ended At 31 March 2023	At 31 March 2022
Sales	**(3)**	**16,507**	**15,471**
Cost of sales		(14,541)	(13,746)
Research and development expenses	(4)	(580)	(604)
Selling expenses	(5)	(375)	(354)
Administrative expenses	(5)	(721)	(642)
Other income/(expense)	(6)	(369)	(281)
Earnings Before Interests and Taxes		**(79)**	**(156)**
Financial income	(7)	36	70
Financial expense	(7)	(139)	(95)
Pre-tax income		**(182)**	**(181)**
Income Tax Charge	(8)	(34)	(27)
Share in net income of equity-accounted investments	(13)	112	(347)
Net profit (loss) from continuing operations		(104)	(555)
Net profit (loss) from discontinued operations	(9)	(4)	(5)
NET PROFIT (LOSS)		**(108)**	**(560)**
Net profit (loss) attributable to equity holders of the parent		(132)	(581)
Net profit (loss) attributable to non controlling interests		24	21
Net profit (loss) from continuing operations attributable to:			
• Equity holders of the parent		(128)	(576)
• Non controlling interests		24	21
Net profit (loss) from discontinued operations attributable to:			
• Equity holders of the parent		(4)	(5)
• Non controlling interests		-	-
Earnings (losses) per share (in €)			
• Basic earnings (losses) per share	(10)	(0.35)	(1.56)
• Diluted earnings (losses) per share	(10)	(0.35)	(1.55)

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

ALSTOM

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

(in € million)	Note	Year ended At 31 March 2023	At 31 March 2022
Net profit (loss) recognised in income statement		**(108)**	**(560)**
Remeasurement of post-employment benefits obligations	(29)	256	341
Equity investments at FVOCI	(13)/(14)	9	(1)
Income tax relating to items that will not be reclassified to profit or loss	(8)	(6)	(15)
Items that will not be reclassified to profit or loss		**259**	**325**
of which from equity-accounted investments		-	-
Fair value adjustments on cash flow hedge derivatives		1	-
Costs of hedging reserve		57	(10)
Currency translation adjustments (*)	(23)	(220)	177
Income tax relating to items that may be reclassified to profit or loss	(8)	(5)	-
Items that may be reclassified to profit or loss		**(167)**	**167**
of which from equity-accounted investments	*(13)*	*(73)*	*77*
TOTAL COMPREHENSIVE INCOME		**(16)**	**(68)**
Attributable to:			
• Equity holders of the parent		(27)	(96)
• Non controlling interests		11	28
Total comprehensive income attributable to equity shareholders arises from			
• Continuing operations		(23)	(91)
• Discontinued operations		(4)	(5)
Total comprehensive income attributable to non controlling interests arises from :			
• Continuing operations		11	28
• Discontinued operations		-	-

(*) Includes currency translation adjustments on actuarial gains and losses for €(7) million as of 31 March 2023 (€8 million as of 31 March 2022).

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

ALSTOM

CONSOLIDATED BALANCE SHEET

Assets

(in € million)	Note	At 31 March 2023	At 31 March 2022
Goodwill	(11)	9,380	9,368
Intangible assets	(11)	2,606	3,002
Property, plant and equipment	(12)	2,481	2,550
Investments in joint-venture and associates	(13)	1,131	1,179
Non consolidated investments	(14)	82	79
Other non-current assets	(15)	569	644
Deferred Tax	(8)	596	452
Total non-current assets		**16,845**	**17,274**
Inventories	(17)	3,729	3,274
Contract assets	(18)	4,533	3,846
Trade receivables	(19)	2,670	2,747
Other current operating assets	(20)	2,728	2,337
Other current financial assets	(25)	65	54
Cash and cash equivalents	(26)	826	810
Total current assets		**14,551**	**13,068**
Assets held for sale		-	173
TOTAL ASSETS		**31,396**	**30,515**

Equity and Liabilities

(in € million)	Note	At 31 March 2023	At 31 March 2022
Equity attributable to the equity holders of the parent	(23)	8,997	8,911
Non controlling interests		105	113
Total equity		**9,102**	**9,024**
Non current provisions	(22)	442	437
Accrued pensions and other employee benefits	(29)	923	1,203
Non-current borrowings	(27)	2,657	2,663
Non-current lease obligations	(27)	501	566
Deferred Tax	(8)	128	127
Total non-current liabilities		**4,651**	**4,996**
Current provisions	(22)	1,779	1,966
Current borrowings	(27)	396	313
Current lease obligations	(27)	144	143
Contract liabilities	(18)	6,781	6,155
Trade payables	(16)	3,640	3,323
Other current liabilities	(21)	4,903	4,309
Total current liabilities		**17,643**	**16,209**
Liabilities related to assets held for sale		-	286
TOTAL EQUITY AND LIABILITIES		**31,396**	**30,515**

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

ALSTOM

CONSOLIDATED STATEMENT OF CASH FLOWS

(in € million)	Note	Year ended At 31 March 2023	At 31 March 2022
Net profit (loss)		**(108)**	**(560)**
Depreciation, amortisation and impairment	(11)/(12)	886	876
Expense arising from share-based payments	(30)	66	42
Cost of net financial debt and costs of foreign exchange hedging, net of interest paid and received (a), and other change in provisions		33	12
Post-employment and other long-term defined employee benefits		4	6
Net (gains)/losses on disposal of assets		28	(1)
Share of net income (loss) of equity-accounted investments (net of dividends received)	(13)	2	446
Deferred taxes charged to income statement	(8)	(138)	(49)
Net cash provided by operating activities - before changes in working capital		**773**	**772**
Changes in working capital resulting from operating activities (b)	**(16)**	**(167)**	**(1,349)**
Net cash provided by/(used in) operating activities		**606**	**(577)**
Of which operating flows provided / (used) by discontinued operations		-	-
Proceeds from disposals of tangible and intangible assets		24	13
Capital expenditure (including capitalised R&D costs)		(431)	(428)
Increase/(decrease) in other non-current assets	(15)	24	39
Acquisitions of businesses, net of cash acquired		(30)	(63)
Disposals of businesses, net of cash sold		(65)	(4)
Net cash provided by/(used in) investing activities		**(478)**	**(443)**
Of which investing flows provided / (used) by discontinued operations	*(9)*	*(11)*	*(8)*
Capital increase/(decrease) including non controlling interests		90	2
Dividends paid including payments to non controlling interests		(62)	(52)
Issuances of bonds & notes	(27)	-	1,200
Changes in current and non-current borrowings	(27)	56	(419)
Changes in lease obligations	(27)	(150)	(148)
Changes in other current financial assets and liabilities	(27)	5	(25)
Net cash provided by/(used in) financing activities		**(61)**	**558**
Of which financing flows provided / (used) by discontinued operations		-	-
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		**67**	**(462)**
Cash and cash equivalents at the beginning of the period		810	1,250
Net effect of exchange rate variations		(53)	19
Transfer to assets held for sale		2	3
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	**(26)**	**826**	**810**
(a) Net of interests paid & received		*(43)*	*(13)*
(b) Income tax paid		*(130)*	*(141)*

(in € million)	**Year ended** At 31 March 2023	At 31 March 2022
Net cash/(debt) variation analysis		
Changes in cash and cash equivalents	67	(462)
Changes in other current financial assets and liabilities	(5)	25
Changes in bonds and notes	-	(1,200)
Changes in current and non-current borrowings	(56)	419
Net debt of acquired/disposed entities at acquisition/disposal date and other variations	(56)	32
Decrease/(increase) in net debt	(50)	(1,186)
Net cash(debt) at the begining of the period	(2,085)	(899)
NET CASH/(DEBT) AT THE END OF THE PERIOD	**(2,135)**	**(2,085)**

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 2021	**371,201,793**	**2,598**	**5,315**	**1,907**	**(173)**	**3**	**(611)**	**9,039**	**78**	**9,117**
Movements in other comprehensive income				(6)	333	(6)	164	485	7	492
Net income for the period				(581)				(581)	21	(560)
Total comprehensive income				**(587)**	**333**	**(6)**	**164**	**(96)**	**28**	**(68)**
Change in controlling interests and others				(39)			(3)	(42)	14	(28)
Dividends convertible into shares				(48)				(48)		(48)
Dividends paid in cash				(45)				(45)	(7)	(52)
Capital increase by issuance of new shares	1,401,876	10	38					48		48
Effect of the change of method relating to employee benefits				11				11		11
Issue of ordinary shares under long term incentive plans	699,487	5		(5)						
Recognition of equity settled share-based payments	88,590	1	1	42				44		44
At 31 March 2022	**373,391,746**	**2,614**	**5,354**	**1,236**	**160**	**(3)**	**(450)**	**8,911**	**113**	**9,024**
Movements in other comprehensive income				61	242	2	(200)	105	(13)	92
Net income for the period				(132)				(132)	24	(108)
Total comprehensive income				**(71)**	**242**	**2**	**(200)**	**(27)**	**11**	**(16)**
Change in controlling interests and others				(1)	4			3		3
Dividends convertible into shares				(50)				(50)		(50)
Dividends paid in cash				(43)				(43)	(19)	(62)
Capital increase by issuance of new shares	2,432,331	17	35					52		52
Issue of ordinary shares under long term incentive plans	4,629,377	32	56	(3)				85		85
Recognition of equity settled share-based payments				66				66		66
At 31 March 2023	**380,453,454**	**2,663**	**5,445**	**1,134**	**406**	**(1)**	**(650)**	**8,997**	**105**	**9,102**

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

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 9 May 2023. In accordance with French legislation, they will be final once approved by the shareholders of Alstom at the Annual General Meeting convened for 11 July 2023.

A. MAJOR EVENTS AND CHANGES IN SCOPE OF CONSOLIDATION

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

1.1. Major events

1.1.1. The acquisition of Bombardier Transportation

Alstom acquired Bombardier Transportation on 29 January 2021. Leveraging on its clear Alstom in Motion strategy and its strong operational fundamentals and financial trajectory, Alstom, integrating Bombardier Transportation, strengthens its leadership in the growing sustainable mobility market by reaching a critical size in all geographies and integrating further solutions and assets to better serve its customers worldwide.

Anti-trust requirements: closing of the remedies

Alstom completed in 2022/23 all its divestment obligations required by the European Commission for the clearance of the acquisition of Bombardier Transportation.

On 1 July 2022, Alstom concluded the transfer of the Bombardier Transportation's contribution to the joint V300 Zefiro very high-speed train platform to its historical partner Hitachi Rail. This transfer involves passing over the maintenance activities, the intellectual property rights and the branding. Alstom will henceforth reduce its involvement in new contracts for the V300 Zefiro train while completing its scope for existing orders on Rolling Stock.

On 1 August 2022, Alstom completed the sale of the Coradia Polyvalent regional train platform together with all operations of the Reichshoffen production site in France and the Talent 3 regional train platform developed in Hennigsdorf, Germany to CAF. Alstom will carry out its remaining post-sale obligations for Talent 3 and will operate in consortium with CAF to fulfill existing contracts for rolling stock delivery from the Reichshoffen site. Alstom has also committed on certain undertakings to ensure the viability of the Reichshoffen site during a transitional period (in particular through allocation of workload).

For signalling, long-term commitments required by the European Commission on the supply of certain signalling onboard units and train control management systems have been addressed.

These transactions complied with all applicable social processes and consultations with employee representative bodies and were subject to regulatory approvals.

The loss arising from these remedies net of costs to sell stood at €(30) million recognized in Other Operating Expenses (see Note 6) associated with a negative impact on Investing cash flow for €(63) million as of 31 March 2023. Following the completion of the sale of the remedies, there are no longer any assets held for sale, nor liabilities related to assets held for sale in the Group Consolidated Financial Statements, as of 31 March 2023 (compared to respectively €173 million and €286 million, as of 31 March 2022).

1.1.2. Uncertainties linked to the current economic and political context

The current economic and political context creates uncertainties on business activities (namely inflation, price volatility of certain commodities, energy, increases of interest rates, supply chain disruptions or electronic components shortage…). Nevertheless, the Group carefully follows and monitors the potential increase in its cost structures (raw materials prices, supply chain and wages inflation), being quite well protected (71% of the backlog being covered by price escalation clauses on global inflation - commodities, energy and labour indexes).

Impairment tests have been performed on goodwill, technology and other intangible assets (see Note 11), with no impairment risks identified as of 31 March 2023. Recognition of deferred tax assets has been assessed based on reasonable estimates and on the information available as at March 2023 (see Note 8).

The Group took into consideration the potential impacts due to the specific context described above in the key assumptions as well as in the business plan used for, based on its best reasonable estimates and the visibility available for its operations at 31 March 2023. Some enlarged sensitivity analyses were performed with regards to the key assumptions that would not lead to an impairment loss of goodwill as the recoverable amount still exceeds its carrying value.

1.2. Scope of consolidation

SpeedInnov

Through its affiliate SpeedInnov, a joint venture created in 2015 with ADEME, Alstom focused on its 'Very high-speed train of the future' project, aiming to promote a new generation of very high-speed trainset which will reduce acquisition and operating costs by at least 20%, optimize the environmental footprint and develop the commercial offer to improve passenger experience. In this context, Alstom subscribed to a capital increase in this joint venture in an amount of €26 million in June 2022 increasing its stake from 75.35% to 75.48% with no change in the consolidation method (Joint control).

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 2023, 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 2023;
- using the same accounting policies and measurement methods as at 31 March 2022, 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 2022

Three amendments are applicable at 1 April 2022 and endorsed by European Union:

- Amendments to IFRS 3 Business Combinations – Reference to the Conceptual Framework;
- Amendments to IAS 16 Property, Plant and Equipment – Proceeds before intended Use;
- Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets– Onerous Contracts – Cost of Fulfilling a Contract;
- Annual Improvements to IFRS Standards 2018-2020.

All these amendments effective at 1 April 2022 for Alstom have no material impact on the Group’s consolidated financial statements. On the specific Amendments to IAS 37, Alstom’s approach was already aligned with amended requirements.

2.3. New standards and interpretations not yet mandatorily applicable

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

- Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2: Disclosure of Accounting policies;
- Amendments to IAS 8 Accounting policies, Changes in Accounting Estimates and Errors: Definition of Accounting Estimates;
- Amendments to IAS 12 Income Taxes: Deferred Tax related to Assets and Liabilities arising from a Single Transaction.

These 3 amendments will be applicable for annual periods beginning after 1 January 2023.

New standards and interpretations not yet approved by the European Union:

- Amendments to IAS 1 Presentation of Financial Statements: Classification of Liabilities as Current or Non-current;
- Amendments to IFRS 16 Leases: Lease Liability in a Sale and Leaseback.

These 2 amendments will be applicable for annual periods beginning after 1 January 2024.

The potential impacts of all those new pronouncements are currently being analysed.

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, Business 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, as well as Right-of-Use related to leased 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.

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. 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.

2.5.4. 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.

2.5.5. Sales and costs generated by operating activities

Identification of performance obligations

Most contracts with customers do not contain more than a single performance obligation. Only a contract which is executed in two stages starting with the supply of goods to a customer followed by services performed on the assets built (maintenance) include two distinct performance obligations. The transaction price is allocated among the performance obligations in proportion to the stand-alone selling prices of goods and services.

Contracts may provide customers with the option to acquire additional goods or services. Additional goods sold in the frame of an option subsequently exercised or through a contract modification are accounted on a cumulative catch-up basis with the first goods sold and treated, accordingly, as a single performance obligation.

Maintenance contract renewals are accounted for separately from the initial contract.

Service-type warranties are recognised as distinct performance obligations.

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 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, 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 control of the promised goods is 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.

2.5.6. Impairment of goodwill, tangible and intangible assets as well as Right-of-Use related to leased assets

Assets that have an indefinite useful life – mainly goodwill and intangible assets not yet ready to use – are not amortised. Those assets as well as capitalised R&D are tested for impairment at least annually or when there are indicators that they may be impaired. Other intangible and tangible assets as well as Right-of-Use related to leased assets subject to amortisation 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.

2.6. Climate change consequences

The Group has initiated an in-depth analysis of the risks and opportunities related to the consequences of climate change, that could affect its business.

This consideration led the Group to conduct an assessment of the resilience and adaptation of its sites and facilities to identify any physical risk, to which it could be exposed due to climate change. Based on a detailed review carried out by an independent third party, the Group measured its exposure to potential physical risks on the basis of various global warming scenarios of +1.9° up to +3°C by 2030 – 2050. These scenarios could lead to a potential increase of operating and/or capital expenditure, especially in extreme scenarios. On this basis, the Group has not identified any risk of impairment as of 31 March 2023.

The Group is committed to achieve carbon neutrality in its value chain by 2050. The projects decided and deployed in this trajectory might have an impact on the Group's investment strategy, research and development expenditure or in the valuation of certain long-term assets and liabilities. Also, the Group is integrating more systematically the transition risks and opportunities into the assessment of its financial performance and the valuation of its assets and liabilities. At this stage, none of the projects decided or risks or opportunities identified have led to review accounting judgements or estimates. The group will continuously update and improve its analysis. New projects or elements identified could lead, in the future, to review certain accounting judgments or estimates.

The Group's internal business plan used for the impairment tests takes into account growth assumptions which are consistent with the trends observed in the industry by independent market studies and, confirming a growing demand for smart and green mobility solutions in the next generations of products and services and for alternatives to diesel. These impacts are reflected in the long-term growth rate used by the Group, which has increased this year from 2.5% to 3% (see Note 11). The Group has also set carbon reduction targets for its own operations and supply chain leading to an increase in some operating and investment costs (eg. processes or systems targeting energy efficiency in factories, development of external or in-house supply of green energy), which have been reflected in the cash flow projections.

The commitments made by the Group in the fight against global warming are reflected in the variable compensation targets set for the Group's senior executives and managers as well. The Alstom Short Term Incentive (STI) Scheme relies on the Group's performance criteria, which have included since 2022/23 a target of reduction in direct and indirect CO_2 emissions in the operations (Scopes 1 & 2). 24,796 managers benefit from such annual variable compensation. The share-based payment plans, set on an annual basis, have included since 2020 a performance condition related to the reduction of energy consumption in the Group's products and services offerings. These plans concern nearly 1,500 beneficiaries. In the latest plan (PSP 2022 – launched in May 2022), this criterion stood for 15% of the shares allocation (see Note 30).

Finally, in July 2022, the Group extended its Committed Guarantee Facility Agreement ("CGFA") and included an incentive-based mechanism linked to sustainability performance criteria. The CGFA is used by the Group for the issuance of commercial bank guarantees issued for the benefit of its customers in order to guarantee the performance commitments or any contingent liabilities that it may have towards its customers (see Note 32).

To the best of the Group's knowledge and at the stage of completion of the projects in progress, the Group has not identified any significant impact in the preparation of its Consolidated Financial Statements as of 31 March 2023.

2.7. Amortisation of Purchase Price Allocation

Since the acquisition of Bombardier Transportation, amortisation expense of assets exclusively acquired in the context of business combinations, and previously recognized in Other Expenses, is now accounted in costs of sales for backlog, product and project as well as customer relationships, in R&D costs for acquired technology, and in share in net income of equity-accounted investment for investments in Joint Ventures and Associates. The PPA amortisation impacting the pre-tax income (meaning cost of sales and R&D costs) amounts to €(416) million at 31 March 2023, compared to €(431) million at 31 March 2022, while the PPA amortisation impacting the share in net income of equity-accounted investment amounts to €(11) million at 31 March 2023, compared to €(13) million at 31 March 2022.

In addition to 2022/23 expected amortisation plan amounting to €(416) million, an impairment of tangible assets of €(29) million linked to restructuring plan in Germany has been recognized in the Other income/ (expense) line (see Note 6).

C. SEGMENT INFORMATION

NOTE 3. SEGMENT INFORMATION

The Group financial information is reviewed through multiple axes of analysis (regions, sites, contracts, functions, products) reflective of the whole organization and the integrated manufacturing process and nature of its products and services, in particular turnkey solutions. None of these axes taken individually allows for a full comprehensive analysis of the operating profit nor a segmental information in the balance sheet.

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)	**At 31 March 2023**	**At 31 March 2022**
Rolling stock	8,784	8,647
Services	3,817	3,406
Systems	1,476	1,155
Signalling	2,430	2,263
TOTAL GROUP	**16,507**	**15,471**

3.2. Key indicators by geographic area

Sales by country of destination

	Year ended	
(in € million)	**At 31 March 2023**	**At 31 March 2022**
Europe	9,936	9,584
of which France	*2,540*	*2,633*
Americas	2,843	2,563
Asia/Pacific	2,378	2,172
Africa/Middle-East /Central Asia	1,350	1,152
TOTAL GROUP	**16,507**	**15,471**

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).

(in € million)	At 31 March 2023	At 31 March 2022
Europe	3,800	4,111
of which France	1,587	*1,629*
Americas	816	852
Asia/Pacific	1,532	1,641
Africa/Middle-East/Central Asia	286	351
Total excluding goodwill	**6,434**	**6,955**
Goodwill	**9,380**	**9,368**
TOTAL GROUP	**15,814**	**16,323**

3.3. Orders Backlog

Product breakdown

(in € million)	At 31 March 2023	At 31 March 2022
Rolling stock	42,806	40,832
Services	30,741	26,789
Systems	6,330	6,282
Signalling	7,510	7,110
TOTAL GROUP	**87,387**	**81,013**

Geographic breakdown

(in € million)	At 31 March 2023	At 31 March 2022
Europe	49,146	44,202
of which France	*13,121*	*12,947*
Americas	13,796	13,116
Asia/Pacific	12,191	11,622
Africa/Middle-East /Central Asia	12,254	12,073
TOTAL GROUP	**87,387**	**81,013**

During budget exercises, Alstom re-assesses how the company backlog evolution impacts the future sales cycles. Budget processes are designed to estimate, based on the latest contract costs and planning assumptions, how the contract sales from backlog can develop over time. The March 2023 backlog contribution to the next three fiscal years revenue is expected to reach €38 billion to €40 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 also cover product sustainability costs booked when incurred.

	Year ended	
(in € million)	At 31 March 2023	At 31 March 2022
Research and development gross cost	(682)	(667)
Financing received (*)	103	82
Research and development spending, net	**(579)**	**(585)**
Development costs capitalised during the period	142	124
Amortisation expenses (**)	(143)	(143)
RESEARCH AND DEVELOPMENT EXPENSES	**(580)**	**(604)**

(*) Financing received includes public funding amounting to €65 million at 31 March 2023, compared to €47 million at 31 March 2022.

(**) Including €(61) million of amortisation expenses related to purchase price allocation compared to €(74) million at 31 March 2022.

As of end of March 2023, Alstom Group invested €682 million in Research and Development, notably to develop:

- its very high-speed trains Avelia Horizon™;
- its Coradia stream™ range;
- its Coradia iLint™ regional trains;
- its TRAXX™ Multi-system 3 locomotives;
- its Green re-tractioning initiatives (battery and hydrogen);
- its ERTMS level 2 on-board solution;
- its Atlas™ ETCS convergence;
- its CBTC solutions Urbalis Fluence™ and Urbalis 400™;
- its Citadis™ DNA a light rail vehicle addressing the specificities of the market in the USA;
- its ICONIS™ and EbiScreen™ suites for Operational Control Centers;
- its Autonomous Freight, where Alstom had a successful GoA4 (Grade of Automation 4) test with SNCF under real mainline operating conditions.

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.

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 former 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)	**At 31 March 2023**	**At 31 March 2022**
Capital gains / (losses) on disposal of business	(30)	-
Restructuring and rationalisation costs	(65)	(138)
Integration costs, impairment loss and other	(274)	(144)
OTHER INCOME / (EXPENSES)	**(369)**	**(282)**

As of 31 March 2023, capital gains and losses on disposal of business are mainly related to the sale of remedies in the frame of Bombardier Transportation acquisition (see Note 1.1.1) and restructuring and rationalisation costs are mainly related to the adaptation of the means of production, especially in Germany.

Over the period ended at 31 March 2023, Integration costs, impairment loss and other include mainly:

- €(181) million of integration costs related to Bombardier Transportation's integration;
- €(43) million related to some legal fees mainly linked to Bombardier Transportation's integration;
- €(29) million of impairment of tangible assets related to PPA linked to the restructuring plan in Germany (see Note 2.7).

NOTE 7. FINANCIAL INCOME (EXPENSES)

Financial income and expenses 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 obligations);
- 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.
- Other expenses paid to financial institutions for financing operations;

Interest income and expense related to respectively cash remuneration and financial debt are presented on a gross basis and are respectively classified in financial income and financial expense in the consolidated income statement.

All other financial items listed above are presented on a net basis. Positive amounts are presented in financial income, negative amounts are presented in financial expense in the consolidated income statement.

	Year ended	
(in € million)	**At 31 March 2023**	**At 31 March 2022**
Interest income	10	20
Interest expense on borrowings and on lease obligations	(62)	(37)
NET FINANCIAL INTERESTS ON DEBT	**(52)**	**(17)**
Net gains/(losses) of foreign exchange hedging	26	40
Net financial expense from employee defined benefit plans	(26)	(22)
Financial component on contracts	(1)	10
Other financial income/(expenses)	(50)	(36)
NET FINANCIAL INCOME/(EXPENSES)	**(103)**	**(25)**
Total financial income	36	70
Total financial expense	(139)	(95)

Net financial income/(expenses) on debt is the cost of borrowings net of income from cash and cash equivalents.

As of 31 March 2023, interest income amounts to €10 million, representing mainly the remuneration of the Group's cash position over the period, while interest expenses amount to €(62) million including €(14) million of interest expenses on lease obligations.

The net cost of foreign exchange hedging of €26 million includes primarily the amortized 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 €(26) million represents the interest costs on obligations net of interest income from fund assets calculated using the same discount rate.

The financial component of €(1) million represents the recognition of financial revenue under IFRS15.

Other net financial income/expenses of €(50) million include mainly bank and other fees of which a large part relates to commitment fees paid on guarantee facilities, revolving facilities and fees paid on bonds.

Net Financial income and net financial expenses presentation has been realigned between this note and consolidated income statement of the primary statement for both Fiscal Year ended 31 March 2023 and 31 March 2022 as explained in the accounting principle above.

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)	**At 31 March 2023**	**At 31 March 2022**
Current income tax charge	(170)	(74)
Deferred income tax charge	136	47
INCOME TAX CHARGE	**(34)**	**(27)**

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)	**At 31 March 2023**	**At 31 March 2022**
Pre-tax income	**(182)**	**(181)**
Statutory income tax rate of the parent company	25.83%	28.41%
Expected tax charge	**47**	**51**
Impact of:		
- Difference between normal tax rate applicable in France and normal tax rate in force in jurisdictions outside France	13	(27)
- Changes in unrecognised deferred tax assets	(70)	(67)
- Changes in tax rates	(1)	4
- Additional tax expenses (withholding tax, CVAE in France and IRAP in Italy)	(34)	(23)
- Permanent differences and other	11	35
INCOME TAX CHARGE	**(34)**	**(27)**
Effective tax rate*	**n.m.**	**n.m.**

(*) Due to negative pre-tax income, effective tax rate of the period is not meaningful: excluding the €445 million amortisation and impairment of Purchase Price Allocation related to tangibles and intangibles assets (see Note 2.7), effective tax rate is 27%, flat as compared to 31 March 2022.

8.2. Deferred tax assets and liabilities

	Year ended	
(in € million)	**At 31 March 2023**	**At 31 March 2022**
Deferred tax assets	596	452
Deferred tax liabilities	(128)	(127)
DEFERRED TAX ASSETS, NET	**468**	**325**

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

(in € million)	**At 31 March 2022**	**Change in P&L**	**Change in equity**	**Translation adjustments and other**	**At 31 March 2023**
Differences between carrying amount and tax basis of tangible and intangible assets	(240)	18	-	81	(141)
Accruals for employee benefit costs not yet deductible	49	2	(5)	(21)	25
Provisions and other accruals not yet deductible	146	(2)	-	31	175
Differences in recognition of margin on "construction contracts"	68	11	-	1	80
Tax loss carry forwards	232	156	-	(8)	380
Other	70	(49)	(7)	(65)	(51)
NET DEFERRED TAXES ASSET/(LIABILITY)	**325**	**136**	**(12)**	**19**	**468**

(in € million)	At 31 March 2021	At 31 March Adjusted (*)	Change in P&L	Change in equity	Translation adjustments and other	At 31 March 2022
Differences between carrying amount and tax basis of tangible and intangible assets	(236)	(256)	26	-	(10)	(240)
Accruals for employee benefit costs not yet deductible	57	52	26	(34)	5	49
Provisions and other accruals not yet deductible	252	134	8	-	4	146
Differences in recognition of margin on "construction contracts"	106	106	(39)	-	1	68
Tax loss carry forwards	202	187	44	-	1	232
Other	52	71	(18)	20	(3)	70
NET DEFERRED TAXES ASSET/(LIABILITY)	**433**	**294**	**47**	**(14)**	**(2)**	**325**

(*) March 2021 adjusted figures include the impact of the final Bombardier Transportation's Purchase Price Allocation.

The review of the extrapolation of the latest three-year business plan leads to a reasonable assurance on the utilization of net deferred tax assets within a maximum period of 5 years in accordance with the Group's strategy, for an amount of €468 million at the end of March 2023, mainly in the United States of America, in Germany, in France and in the United Kingdom for a total amount of €238 million.

At 31 March 2023, based on the best estimate of operating and taxable results, the net deferred tax assets relating to tax loss carry forwards and deductible temporary differences recognised in the balance sheet in France amount to €44 million out of a total of €644 million. Tax losses can be carried forward indefinitely in France on 50% of taxable income of the year. Part of France revenues are subject to a patent box regime with a reduced tax rate, limiting deferred tax assets recognition.

In the United States of America, the deferred tax assets relating to tax loss carry forwards are recognised for a total amount of €98 million out of a total of €256 million deferred tax assets relating to tax losses carry forwards. From 2018 onwards, the tax losses generated can be carried forward indefinitely.

In Germany and in the United Kingdom, tax losses can be carried forward indefinitely. Net deferred tax assets recognized as at 31 March 2023 amount to €96 million out of €788 million deferred tax assets relating to tax losses carry forwards.

Unrecognised deferred tax assets amount to €2,436 million at 31 March 2023 (€2,493 million at 31 March 2022).

Most of these unrecognised deferred taxes are originated from tax losses carried forward (€2,072 million at 31 March 2023 and €2,145 million at 31 March 2022), out of which €1,547 million are not subject to expiry at 31 March 2023 (€1,268 million at 31 March 2022).

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.

Discontinued Operations

The line "Net profit from discontinued operations", recognized in the Consolidated Income Statement, includes the reassessment of liabilities related to the disposal of previous activities. Over the fiscal year ended 31 March 2023, Alstom recognized a loss for €(4) million.

Cash flows related to the disposal of previous activities arising from discontinued operations for the fiscal year amounts to €(11) 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 amount of €4 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).

ALSTOM

10.1. Earnings

(in € million)	Year ended At 31 March 2023	At 31 March 2022
Net Profit (Loss) attributable to equity holders of the parent :		
• From continuing operations	(128)	(576)
• From discontinued operations	(4)	(5)
EARNINGS (LOSSES) ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT	**(132)**	**(581)**

10.2. Number of shares

number of shares	Year ended At 31 March 2023	At 31 March 2022
Weighted average number of ordinary shares used to calculate basic earnings per share	**375,523,158**	**372,724,670**
Effect of dilutive instruments other than bonds reimbursable with shares:		
• Stock options and performance shares (LTI plan)	2,326,630	1,681,595
WEIGHTED AVERAGE NUMBER OF ORDINARY SHARES USED TO CALCULATE DILUTED EARNINGS PER SHARES	**377,849,788**	**374,406,265**

10.3. Earnings per share

(in €)	Year ended At 31 March 2023	At 31 March 2022
Basic earnings (losses) per share	(0.35)	(1.56)
Diluted earnings (losses) per share	(0.35)	(1.55)
Basic earnings (losses) per share from continuing operations	(0.34)	(1.55)
Diluted earnings (losses) per share from continuing operations	(0.34)	(1.54)
Basic earnings (losses) per share from discontinued operations	(0.01)	(0.01)
Diluted earnings (losses) per share from discontinued operations	(0.01)	(0.01)

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 (i.e. inflation, geopolitical crises, etc) or the assumptions (i.e. contract execution, procurement, etc). An impairment loss is recognised when the recoverable value of the assets tested becomes 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). As a result, 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 2022	Acquisition and adjustments on preliminary goodwill	Disposals	Translation adjustments and other changes	At 31 March 2023
GOODWILL	**9,368**	**-**	**-**	**12**	**9,380**
Of which:					
Gross value	9,368	-	-	12	9,380
Impairment	-	-	-	-	-

Goodwill impairment test

As of 31 March 2023, 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 and the extrapolation of the two following years.

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).

Alstom has opted for the inclusion of the share in net income of the equity-accounted investments into the aEBIT when these are considered to be part of the operating activities of the Group (because there are significant operational flows and/or common project execution with these entities). This mainly includes Chinese joint-ventures, namely CASCO, Alstom Sifang (Qingdao) Transportation Ltd, Jiangsu ALSTOM NUG Propulsion System Co. Ltd. (former Bombardier NUG Propulsion) and Changchun Changke Alstom Railway Vehicles Company Ltd.

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

- net restructuring expenses (including rationalisation costs);
- tangibles and intangibles impairment;
- capital gains or loss/revaluation on investments disposals or controls changes of an entity;
- any other non-recurring items, such as some costs incurred to realise 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;
- and including the share in net income of the operational equity-accounted investments.

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

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

Net carrying amount of goodwill at 31 March 2023 (in € million)	9,380
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 2023	**3.0%**
Long-term growth rate at 31 March 2022	2.5%
After tax discount rate at 31 March 2023 (*)	**9.0%**
After tax discount rate at 31 March 2022(*)	8.5%

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

The discount rate has been updated from 8.5% to 9.0% compared to last year as a result of the combination of the increase in the interest rates and a risk premium now integrated in the cash flows thus removed from the WACC.

The increase in long-term grow rate compared to previous year is consistent with the growth rates observed in the industry by independent market studies. This variation is also substantiated by the positive evolution of the Group backlog which provides strong visibility over future revenues.

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

(in € million)		
aEBIT Margin	-25bp	+25bp
	(448)	448
After tax discount rate	-25bp	+25bp
	920	(846)
Long-term growth rate	-10 bp	+10 bp
	(287)	296

The current economic and political context creates uncertainties on business activities (namely inflation, increase of the price of certain commodities, energy, supply chain disruptions or electronic components shortage…).This led the Group to take those into consideration in the key assumptions as well as in the business plan used for the impairment test performed in the frame of the preparation of the Group’s consolidated financial statements, based on its best reasonable estimates and the visibility available for its operations at 31 March 2023.

The impairment tests confirmed that the recoverable amount comfortably exceeds its carrying value at 31 March 2023. Some enlarged sensitivity analyses were performed with regards to key assumptions, that would not change the conclusions of the impairment test. Namely, a (100) basis point change in the discount rate or in the long-term growth rate or in the Adjusted EBIT margin (versus the usual sensitivities disclosed in the table above) would lead to a recoverable amount still exceeding its carrying value at 31 March 2023.

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 is recognized in costs of sales for backlog, product and project as well as customer relationships and in R&D for acquired technology (formerly in 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.

Intangible assets not yet ready to use (not yet amortised) as well as capitalised R&D are reviewed for impairment individually, at least annually and whenever events or changes in circumstances indicate the carrying amount of the intangible assets may not be recoverable. Due to a lack of quoted market prices for intangible assets, their recoverable value is usually determined based on the present value of future cash flows expected through their use or sale. An impairment of intangible assets is booked when the carrying amount exceeds its recoverable value. Other intangibles are subject to amortisation, as a result, they are tested for impairment only if there are indicators of impairment.

(in € million)	At 31 March 2022	Additions / disposals / amortisation / impairment	Other changes including translation adjustments	At 31 March 2023
Development costs	1,552	132	(25)	1,659
Other intangible assets	3,648	12	(86)	3,574
Gross value	**5,200**	**144**	**(111)**	**5,233**
Development costs	(1,170)	(81)	21	(1,230)
Other intangible assets	(1,028)	(388)	19	(1,397)
Amortisation and impairment	**(2,198)**	**(469)**	**40**	**(2,627)**
Development costs	382	51	(4)	429
Other intangible assets	2,620	(376)	(67)	2,177
NET VALUE	**3,002**	**(325)**	**(71)**	**2,606**

(in € million)	At 31 March 2021	At 31 March 2021 Adjusted (*)	Additions / disposals / amortisation / impairment	Other changes including translation adjustments and other scope variation	At 31 March 2022
Development costs	1,411	1,411	124	17	1,552
Other intangible assets	3,040	3,509	33	106	3,648
Gross value	**4,451**	**4,920**	**157**	**123**	**5,200**
Development costs	(1,089)	(1,089)	(67)	(14)	(1,170)
Other intangible assets	(562)	(562)	(436)	(30)	(1,028)
Amortisation and impairment	**(1,651)**	**(1,651)**	**(503)**	**(44)**	**(2,198)**
Development costs	322	322	57	3	382
Other intangible assets	2,478	2,947	(403)	76	2,620
NET VALUE	**2,800**	**3,269**	**(346)**	**79**	**3,002**

(*) Adjusted figures include the update of the final Purchase Price Allocation of Bombardier Transportation.

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.

When the Group is the lessee, leases (except short-term leases and leases of low-value assets below €5,000 when new, for which rentals payable are charged to profit or loss on a straight-line basis over the term of the relevant lease) are recognized as a Right-of-Use asset in Property, plant and equipment at the date at which the leased asset is available for use. 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.

The cost of Right-of-Use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received as well as any restoration costs if an obligation is identified. Generally, Right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. Nevertheless, when the lease transfers ownership of the underlying asset to the lessee by the end of the lease term or the cost of the right-of-use asset reflects that the lessee will exercise a purchase option, the lessee shall depreciate the right-of-use asset from the commencement date to the end of the useful life of the underlying asset. Right-of-Use assets may be subject to impairment.

When the Group is the lessor, assets under operating leases, are also included in Property plant and equipment. Leas-e income from operating leases is recognized on a straight-line basis over the term of the lease.

(in € million)	**At 31 March 2022**	**Additions / amortisation / impairment**	**Disposals**	**Other changes including translation adjustments**	**At 31 March 2023**
Land	279	3	(2)	1	281
Buildings	2,744	137	(6)	(108)	2,767
Machinery and equipment	2,002	58	(20)	24	2,064
Constructions in progress	201	175	(5)	(91)	280
Tools, furniture, fixtures and other	369	31	(9)	(20)	371
Gross value	**5,595**	**404**	**(42)**	**(194)**	**5,763**
Land	(14)	3	-	(1)	(12)
Buildings	(1,328)	(237)	5	101	(1,459)
Machinery and equipment	(1,423)	(136)	18	22	(1,519)
Constructions in progress	(2)	(2)	2	-	(2)
Tools, furniture, fixtures and other	(278)	(33)	8	13	(290)
Amortisation and impairment	**(3,045)**	**(405)**	**33**	**135**	**(3,282)**
Land	265	6	(2)	-	269
Buildings	1,416	(100)	(1)	(7)	1,308
Machinery and equipment	579	(78)	(2)	46	545
Constructions in progress	199	173	(3)	(91)	278
Tools, furniture, fixtures and other	91	(2)	(1)	(7)	81
NET VALUE	**2,550**	**(1)**	**(9)**	**(59)**	**2,481**

The commitments of fixed assets amount to €31 million at 31 March 2023 (compared to €40 million at 31 March 2022), of which €0 million are related to leased assets (compared to €4 million 31 March 2022).

(in € million)	At 31 March 2021	Additions / amortisation / impairment	Disposals	Other changes including translation adjustements	At 31 March 2022
Land	276	2	-	1	279
Buildings	2,594	116	(27)	61	2,744
Machinery and equipment	1,914	81	(57)	64	2,002
Constructions in progress	153	137	(1)	(88)	201
Tools, furniture, fixtures and other	330	28	(11)	22	369
Gross value	**5,267**	**364**	**(96)**	**60**	**5,595**
Land	(14)	-	-	-	(14)
Buildings	(1,143)	(197)	26	(14)	(1,328)
Machinery and equipment	(1,316)	(135)	48	(20)	(1,423)
Constructions in progress	(3)	1	-	-	(2)
Tools, furniture, fixtures and other	(241)	(33)	11	(15)	(278)
Amortisation and impairment	**(2,717)**	**(364)**	**85**	**(49)**	**(3,045)**
Land	262	2	-	1	265
Buildings	1,451	(81)	(1)	47	1,416
Machinery and equipment	598	(54)	(9)	44	579
Constructions in progress	150	138	(1)	(88)	199
Tools, furniture, fixtures and other	89	(5)	-	7	91
NET VALUE	**2,550**	**-**	**(11)**	**11**	**2,550**

Property, Plant and Equipment balances include Right-of-Use related to Leased Assets for the following amounts:

(in € million)	At 31 March 2022	Additions / amortisation / impairment	Decrease (*)	Other changes including translation	At 31 March 2023
Land	9	2	(2)	-	9
Buildings	736	91	(97)	(14)	716
Machinery and equipment	27	7	(2)	(2)	30
Tools, furniture, fixtures and other	52	21	(14)	(2)	57
Gross value	**824**	**121**	**(115)**	**(18)**	**812**
Land	(1)	-	-	-	(1)
Buildings	(252)	(110)	79	7	(276)
Machinery and equipment	(10)	(6)	3	-	(13)
Tools, furniture, fixtures and other	(25)	(16)	13	1	(27)
Amortisation and impairment	**(288)**	**(132)**	**95**	**8**	**(317)**
Land	8	2	(2)	-	8
Buildings	484	(19)	(18)	(7)	440
Machinery and equipment	17	1	1	(2)	17
Tools, furniture, fixtures and other	27	5	(1)	(1)	30
NET VALUE	**536**	**(11)**	**(20)**	**(10)**	**495**

(*) Decrease are included into the “Other changes including translation adjustments” flow of the Property, Plant and Equipment general table above.

(in € million)	At 31 March 2021	Additions / amortisation / impairment	Decrease (*)	Other changes of which translation adjustments	At 31 March 2022
Land	9	-	-	-	9
Buildings	680	80	(35)	11	736
Machinery and equipment	25	9	(4)	(3)	27
Tools, furniture, fixtures and other	44	18	(11)	1	52
Gross value	**758**	**107**	**(50)**	**9**	**824**
Land	(1)	(1)	-	1	(1)
Buildings	(163)	(117)	30	(2)	(252)
Machinery and equipment	(10)	(6)	3	3	(10)
Tools, furniture, fixtures and other	(19)	(16)	10	-	(25)
Amortisation and impairment	**(193)**	**(140)**	**43**	**2**	**(288)**
Land	8	-	-	-	8
Buildings	517	(37)	(5)	9	484
Machinery and equipment	15	3	(1)	-	17
Tools, furniture, fixtures and other	25	2	(1)	1	27
NET VALUE	**565**	**(33)**	**(7)**	**11**	**536**

(*) Decrease are included into the "Other changes including translation adjustments" flow of the Property, Plant and Equipment general table above.

NOTE 13. INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

Financial information

(in € million)	Share in equity		Share of net income	
	At 31 March 2023	At 31 March 2022	Year ended at 31 March 2023	Year ended at 31 March 2022
TMH Limited	-	-	-	(451)
Alstom Sifang (Qingdao) Transportation Ltd.	413	447	30	39
Other Associates	341	335	75	56
Associates	**754**	**782**	**105**	**(356)**
Jiangsu ALSTOM NUG Propulsion System Co. Ltd	190	205	18	21
SpeedInnov JV	94	90	(22)	(24)
Other Joint ventures	93	102	11	12
Joint ventures	**377**	**397**	**7**	**9**
TOTAL	**1,131**	**1,179**	**112**	**(347)**

Movements during the period

(in € million)	At 31 March 2023	At 31 March 2022
Opening balance	**1,179**	**1,466**
Share in net income of equity-accounted investments after impairment	112	(347)
Dividends	(114)	(99)
Acquisitions (*)	27	21
Scope Variations	-	73
Translation adjustments and other	(74)	65
CLOSING BALANCE	**1,131**	**1,179**

(*) Mainly related to capital increase in SpeedInnov joint-venture in June 2022 (see Note 1.2).

13.1. TMH Limited

Due to the international context around the Ukraine/Russia conflict, Alstom Group did not receive the TMH Limited audited Financial Statements, dated 31 December 2022, without any consequences in its own Group Financial Statements because the TMH share in net assets was already fully impaired at 31 March 2022. As a consequence, the summarized financial information (at 100%) presented below are the figures disclosed in the financial statements of TMH Limited at 30 June 2022 and 31 December 2021 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 2023 and 31 March 2022.

The Currency Translation Adjustment (CTA) recognized directly in equity since the acquisition of TMH Ltd amounts to €(202) million at 31 March 2023.

Balance sheet

(in € million)	TMH Limited **At 30 June 2022**	TMH Limited **At 31 December 2021**
Non-current assets	3,505	3,312
Current assets	3,926	3,186
TOTAL ASSETS	**7,431**	**6,498**
Equity-attributable to the owners of the parent company	2,292	2,403
Equity-attributable to non-controlling interests	212	271
Non current liabilities	873	1,103
Current liabilities	4,054	2,721
TOTAL EQUITY AND LIABILITIES	**7,431**	**6,498**
Equity interest held by the Group	20%	20%
NET ASSET	**458**	**481**
Goodwill	39	36
Impairment of share in net asset of equity investments	(449)	(470)
Other (*)	(48)	(47)
CARRYING VALUE OF THE GROUP'S INTERESTS	**-**	**-**

(*) Corresponds to the restatements to TMH historical value before the combined operation, as at 30 June 2018.

Income statement

(in € million)	TMH Limited **half year ended 30 June 2022**	TMH Limited **year ended 31 December 2021**
Sales	2,560	4,460
Net income from continuing operations	(301)	(60)
Share of non-controlling interests	41	(11)
Net income attributable to the owners of the parent company	**(260)**	**(71)**
Equity interest held by the Group	20%	20%
Total share in the net income	**(52)**	**(14)**
Impairment of share in net asset of equity investment	**47**	**(441)**
Other items	5	4
GROUP'S SHARE IN THE NET INCOME	**-**	**(451)**

(*) Correspond to the fair value restatements calculated at the time of acquisition.

The full impairment position taken by the Group at the end of March 2022 considering the context environment, and in particular the adoption of trade and financial sanctions, has been maintained at the end of March 2023. During the first semester 2022/23, TMH Ltd. Group has generated a €(52) million share in the net income and Alstom has released accordingly its March 2022 impairment to offset this loss.

13.2. Alstom Sifang (Qingdao) Transportation Ltd

The table below presents the management summarized financial information (at 100%) of Alstom Sifang (Qingdao) Transportation Ltd at 31 March 2023:

Balance sheet

(in € million)	AST Ltd **At 31 March 2023**	AST Ltd **At 31 March 2022**
Non-current assets	249	296
Current assets	1,151	1,154
TOTAL ASSETS	**1,400**	**1,450**
Equity-attributable to the owners of the parent company	725	785
Current liabilities	675	665
TOTAL EQUITY AND LIABILITIES	**1,400**	**1,450**
Equity interest held by the Group	50%	50%
NET ASSET	**363**	**393**
Goodwill	37	39
Other (*)	14	15
CARRYING VALUE OF THE GROUP'S INTERESTS	**413**	**447**

(*) Correspond to the fair value of acquired assets calculated at the time of the Bombardier Transportation's acquisition.

Income Statement

(in € million)	AST Ltd **Year ended at 31 March 2023**	AST Ltd **Year ended at 31 March 2022**
Sales	371	307
Net income from continuing operations	59	80
Net income attributable to the owners of the parent company	**59**	**80**
Equity interest held by the Group	50%	50%
Share in the net income	**30**	**40**
Other items (*)	-	(1)
GROUP'S SHARE IN THE NET INCOME	**30**	**39**

(*) Correspond to the amortisation of the fair value of acquired assets calculated at the time of the Bombardier Transportation's acquisition.

13.3. Other Joint Ventures and Associates

The Group's investment in other associates comprises investment in Casco, held by the Group at 49%, for €177 million (of which €60 million of net profit), compared to €169 million (of which €50 million of net profit), at 31 March 2022, as well as other associates which are not significant on an individual basis. On aggregate, the net carrying value of Alstom's Investment represents €341 million as of 31 March 2023 (€335 million as of 31 March 2022).

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 2023	At 31 March 2022
Opening balance	**79**	**77**
Change in fair value	9	(1)
Acquisitions / disposals	(4)	3
Translation adjustments and other	(2)	-
Closing balance	**82**	**79**

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.

Certain long-term contract receivables corresponding to incentive payments are classified as FV through P&L. Subsequent changes in the fair value of such financial instruments are recorded in financial expense (income).

Assets subject to finance leases, are initially recognized at an amount equal to the net investment in the lease and are included in financial non-current assets associated to financial debt. Interest income is recognized over the term of the applicable leases based on the effective interest rate method.

(in € million)	At 31 March 2023	At 31 March 2022
Financial non-current assets associated to financial debt (*)	119	146
Long-term loans, deposits and other (**)	450	498
Other non-current assets	**569**	**644**

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

(**) Including NMTC programs implementation (see Note 27) and the pre-paid assets on pension amounting to €316 million at March 2023 vs €351 million at 31 March 2022 (see Note 29).

F. WORKING CAPITAL

NOTE 16. WORKING CAPITAL ANALYSIS

(in € million)	At 31 March 2023	At 31 March 2022	Variation
Inventories	3,729	3,274	455
Contract assets	4,533	3,846	687
Trade receivables	2,670	2,747	(77)
Other current operating assets / (liabilities)	(2,175)	(1,972)	(203)
Contract liabilities	(6,781)	(6,155)	(626)
Provisions	(2,221)	(2,403)	182
Trade payables	(3,640)	(3,323)	(317)
WORKING CAPITAL	**(3,885)**	**(3,986)**	**101**

(in € million)	For the year ended at 31 March 2023
Working capital at the beginning of the period	**(3,986)**
Changes in working capital resulting from operating activities	167
Changes in working capital resulting from investing activities	(16)
Translation adjustments and other changes	(50)
Total changes in working capital	**101**
Working capital at the end of the period	**(3,885)**

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 2023	At 31 March 2022
Raw materials and supplies	2,645	2,348
Work in progress	1,321	1,268
Finished products	174	141
Inventories, gross	**4,140**	**3,757**
Raw materials and supplies	(257)	(303)
Work in progress	(151)	(178)
Finished products	(3)	(2)
Write-down	**(411)**	**(483)**
Inventories, net	**3,729**	**3,274**

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".

The timing of performance differs from the timing when the consideration is received from the customer; this mismatch may turn a contract position from a net liability to a net asset position (or vice versa) during its execution. The Group's policy is to enter into prepayment arrangements with customers and receive advance payments for goods/services to be delivered in future periods.

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 2023	At 31 March 2022	Variation
Cost to fulfil a contract	24	28	(4)
Contract assets (*)	4,509	3,818	691
Total contract assets	**4,533**	**3,846**	**687**
Contract liabilities	(6,781)	(6,155)	(626)
Net contract Assets/(Liabilities)	**(2,248)**	**(2,309)**	**61**

(*) "Contract Assets" increase is impacted by the alignment of the VAT French law with the European VAT Directive according to which VAT is due on all the invoices made to customers including down payments and progress billings (see Note 21).

Net contract Assets/(Liabilities) include down payments as well as, in some specific cases, progress payments received in exchange of irrevocable and unconditional payment undertakings issued by the customer. This transaction is analyzed as an advance payment received on behalf of the customer under the supply contract and it amounts to €198 million at 31 March 2023 compared to €471 million at 31 March 2022.

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 the control of the financial assets is 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 2023	**2,670**	**1,946**	**205**	**47**	**472**
o/w gross	2,725	1,955	205	47	518
o/w impairment	(55)	(9)	-	-	(46)
At 31 March 2022	**2,747**	**2,033**	**151**	**63**	**500**
o/w gross	2,817	2,044	151	63	559
o/w impairment	(70)	(11)	-	-	(59)

NOTE 20. OTHER CURRENT OPERATING ASSETS

(in € million)	**At 31 March 2023**	**At 31 March 2022**
Down payments made to suppliers	230	193
Corporate income tax	61	109
Other taxes	548	483
Prepaid expenses	153	110
Other receivables	383	409
Derivatives relating to operating activities	682	448
Remeasurement of hedged firm commitments in foreign currency	671	585
Other current operating assets	**2,728**	**2,337**

Over the period ended 31 March 2023, the Group entered into an agreement of assignment of receivables that leads to the derecognition of tax receivables for an amount of €43 million in accordance with IFRS 9 criteria. The total disposed amount outstanding at 31 March 2023 is €159 million.

NOTE 21. OTHER CURRENT OPERATING LIABILITIES

(in € million)	At 31 March 2023	At 31 March 2022
Staff and associated liabilities	950	908
Corporate income tax	268	275
Other taxes (*)	831	345
Deferred income	2	3
Trade payables with extended payment terms	303	324
Other payables	1,439	1,503
Derivatives relating to operating activities	668	528
Remeasurement of hedged firm commitments in foreign currency	442	423
Other current operating liabilities	**4,903**	**4,309**

(*)"Other Taxes" increase is mainly due to the alignment of the VAT French law with the European VAT Directive according to which VAT is due on all the invoices made to customers including down payments and progress billings.

Bombardier Transportation negotiated extended payment terms of 210 to 240 days after delivery with certain of its suppliers, that have the possibility to early finance their receivables through a supply chain financing program supported by third parties. Those third parties are not committed, and suppliers have the right to return to original payment terms for future payables upon providing a minimum notice period. The Group considers that the balance of trade payables supported by the supply chain financing program does not have the nature of a financial debt as the extension of the payment terms are not contractually linked to the existence of the supply chain financing program. However, following IFRIC Update issued in December 2020, the Group decided to present the amounts of trade payables supported by the supply chain financing arrangement and exceeding regular payment terms on a dedicated line item of its balance sheet in the other current liabilities.

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 IAS37 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 2022	Additions	Releases	Applications	Translation adjustments and other	At 31 March 2023
Warranties	605	437	(93)	(319)	(33)	597
Risks on contracts	1,361	134	(115)	(231)	33	1,182
Current provisions	**1,966**	**571**	**(208)**	**(550)**	**-**	**1,779**
Tax risks & litigations	130	17	(7)	(9)	(10)	121
Restructuring	152	51	1	(40)	2	166
Other non-current provisions	155	19	(10)	(27)	19	155
Non-current provisions	**437**	**87**	**(16)**	**(76)**	**10**	**442**
Total Provisions	**2,403**	**658**	**(224)**	**(626)**	**10**	**2,221**

(in € million)	At 31 March 2021	At March 2021 Adjusted (*)	Additions	Releases	Applications	Translation adjustments and other	At 31 March 2022
Warranties	591	586	274	(65)	(200)	10	605
Risks on contracts	1,423	1,429	291	(66)	(302)	9	1,361
Current provisions	**2,014**	**2,015**	**565**	**(131)**	**(502)**	**19**	**1,966**
Tax risks & litigations	116	139	13	(9)	(18)	5	130
Restructuring	52	52	145	(28)	(17)	-	152
Other non-current provisions	127	127	29	(8)	(8)	15	155
Non-current provisions	**295**	**318**	**187**	**(45)**	**(43)**	**20**	**437**
Total Provisions	**2,309**	**2,333**	**752**	**(176)**	**(545)**	**39**	**2,403**

(*) March 2021 adjusted figures include the impact of the final Bombardier Transportation's Purchase Price allocation.

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 uncertain tax treatments and 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 unfavorable 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. Following IFRIC 23 application in April 2019, it is reminded that liabilities for uncertainty over income tax treatments are now presented as tax liabilities on the line corporate income tax in the other current operating liabilities.

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

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.

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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 2023, the share capital of Alstom amounts to €2,663,174,178 consisting of 380,453,454 ordinary shares with a par value of €7 each. For the year ended 31 March 2023, the weighted average number of outstanding ordinary shares amounts to 377,849,788 after the effect of all dilutive instruments.

During the period ended 31 March 2023:

- 2,432,331 ordinary shares were issued under dividends;
- 4,236,222 ordinary shares were issued under equity settled share-based payments for We Share Alstom 2023 (See Note 30.2);
- 393,110 ordinary shares were issued under long term incentive plans and 45 ordinary shares were issued under equity settled share-based payments for We Are Alstom 2021.

23.2. Currency translation adjustment in shareholders' equity

At 31 March 2023, the currency translation reserve amounts to €(649) million.

The currency translation adjustment, presented within the consolidated statement of comprehensive income for € (200) million, primarily reflects the effect of variations of the US Dollar (€37 million), Chinese Yuan (€(76) million), Swedish Krona (€(60) million), Egyptian Pound (€(35) million), Indian Rupee (€(34) million), South African Rand (€(18) million) against the Euro for the year ended 31 March 2023.

NOTE 24. DISTRIBUTION OF DIVIDENDS

The Combined Shareholders' Meeting, which took place on 12 July 2022, approved the dividend related to the 2021/22 fiscal year for an amount of €0.25 gross per share, and has decided to offer to each shareholder an option, for payment of such dividend to be made in cash or in new shares. The period to exercise the option ran from 22 July to 22 August 2022 included. At the end of the option period, 2,432,331 new shares were issued at a share price of 21.13 euros and amounted to €51 million. The cash dividend to be paid to the shareholders who did not elect to receive 2021/22 dividend in shares amounted to €42 million and the date for the payment was 26 August 2022.

H. FINANCING AND FINANCIAL RISK MANAGEMENT

NOTE 25. OTHER CURRENT FINANCIAL ASSETS

At 31 March 2023, other current financial assets comprise the positive market value of derivatives instruments hedging financing activities.

(in € million)	At 31 March 2023	At 31 March 2022
Derivatives related to financing activities and others	65	54
OTHER CURRENT FINANCIAL ASSETS	**65**	**54**

NOTE 26. CASH AND CASH EQUIVALENTS

Cash equivalents are held to meet short-term cash commitments. 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 2023	At 31 March 2022
Cash	806	654
Cash equivalents	20	156
CASH AND CASH EQUIVALENT	**826**	**810**

In addition to bank open deposits classified as cash for €806 million, the Group invests in cash equivalents:

- Bank term deposits that can be terminated at any time with less than three months notification period for an amount of €18 million (€154 million at 31 March 2022).
- Euro money market funds for an amount of €2 million (€2 million at 31 March 2022) qualified as "monetary" or "monetary short-term" under the French AMF classification.

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.

The lease liability, when Alstom is the lessee, is measured at the present value of lease payments to be made over the lease term, discounted using the marginal borrowing rate of the lessee at the lease commencement date if the interest rate is implicit in the lease and cannot be readily determined. Lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate and amounts expected to be paid under residual value guarantees. Lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payment of penalties for termination of a lease when the lease term reflects the lessee exercising a termination option. Lease payments are apportioned between finance charges and repayment of the lease obligation to achieve a constant rate of interest on the remaining balance of the liability.

		Cash movements	Non-cash movements	
(in € million)	At 31 March 2022	Net cash variation	Translation adjustments and other	At 31 March 2023
Bonds	2,627	-	4	2,631
Commercial paper program (NEU CP)	250	(2)	-	248
Bank debt & other financial debt (*)	39	59	4	102
Derivatives relating to financing activities	56	(1)	3	58
Accrued interests and other (**)	4	-	10	14
Borrowings	**2,976**	**56**	**21**	**3,053**
Lease obligations (***)	**709**	**(150)**	**86**	**645**
Total financial debt	**3,685**	**(94)**	**107**	**3,698**

(*) Includes New Markets Tax Credit (NMTC) 7-year $40 million loan (€36 million at 31 March 2023) implemented during fiscal year 2021/22 and covered by a 7-year deposit of $29 million (€27 million at 31 March 2023).

(**) 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 €(35) million and those related to lease obligations amount to €(8) million over the year.

(***) Lease obligations include lease obligations on trains and associated equipment for €119 million at 31 March 2023 and €146 million at 31 March 2022 (see Note 15). Non-cash movements for €86 million are linked to lease inceptions, reductions and FX gain/loss.

The financial debt's variation over the period is mainly due to:

- the reimbursement of €2 million Negotiable European Commercial Papers;
- €41 million overdraft from subsidiary mainly in France and Germany.

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

	Initial Nominal value (in € million)	Maturity date (dd/mm/yyyy)	Nominal interest rate	Effective interest rate	Accounting value At 31 March 2023	Market value at 31 March 2023
Alstom October 2026	700	14/10/2026	0.25%	0.38%	697	633
Alstom July 2027	500	27/07/2027	0.13%	0.21%	498	440
Alstom January 2029	750	11/01/2029	0.00%	0.18%	742	609
Alstom July 2030	700	27/07/2030	0.50%	0.62%	694	554
Total and weighted average rate			**0.22%**	**0.35%**	**2,631**	**2,237**

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

(in € million)	At 31 March 2023	At 31 March 2022
Euro	3,293	3,226
British Pound	154	190
US Dollar	75	80
Australian Dollar	46	37
Indian Rupee	41	48
Canadian Dollar	30	33
Polish Zloty	15	10
Swedish Krona	7	13
Other currencies	39	48
FINANCIAL DEBT IN NOMINAL VALUE	**3,698**	**3,685**

The €154 million external debt in GBP is mainly explained by a €119 million long-term lease scheme of trains, involving London Underground. This lease in GBP is counter-balanced by long-term receivables recognised as non-current assets for the same amount, with the same maturity and denominated in GBP (see Note 15 and above).

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, cash, and cash equivalents.

The Group is exposed to foreign exchange and interest rate volatility risks, credit and liquidity risks.

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 equivalent to the carrying value, due to their short maturities, or to the market value in the case of money market funds;
- the fair value of FX derivative instruments is calculated primarily based on foreign exchange spot and forward rates at “mid-market” at closing date or alternatively based on relevant yield curves per currency.

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

Year ended 31 March 2023

Balance sheet positions at 31 March 2023

At 31 March 2023 (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	82	-	-	82	-	-	82	-	82	-	82
Other non-current assets	569	314	67	-	188	-	255	-	255	-	255
Trade receivables	2,670	-	-	-	2,670	-	2,670	-	2,670	-	2,670
Other current operating assets	2,728	993	670	-	383	682	1,735	-	1,735	-	1,735
Other current financial assets	65	-	-	-	-	65	65	-	65	-	65
Cash and cash equivalents	826	-	2	-	824	-	826	2	824	-	826
ASSETS	**6,940**	**1,307**	**739**	**82**	**4,065**	**747**	**5,633**	**2**	**5,631**	**-**	**5,633**
Non-current borrowings	2,657	-	-	-	2,657	-	2,657	2,631	26	-	2,657
Non-current lease obligations	501	-	-	-	501	-	501	-	501	-	501
Current borrowings	396	-	-	-	338	58	396	-	396	-	396
Current lease obligations	144	-	-	-	144	-	144	-	144	-	144
Trade payables	3,640	-	-	-	3,640	-	3,640	-	3,640	-	3,640
Other current liabilities	4,903	2,356	441	-	1,438	668	2,547	441	2,106	-	2,547
LIABILITIES	**12,241**	**2,356**	**441**	**-**	**8,718**	**726**	**9,885**	**3,072**	**6,813**	**-**	**9,885**

(*) 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.

Financial income and expense arising from financial instruments for the year ended 31 March 2023

(in € million)	FV P/L	FV OCI	LRL at amortised cost & DER	Total
Interests	-	-	(38)	(38)
Interest income	-	-	*10*	*10*
Interest expense	-	-	*(48)*	*(48)*
Foreign currency and other	-	-	(51)	(51)
NET INCOME/EXPENSE FOR THE YEAR ENDED 31 MARCH 2023	**-**	**-**	**(89)**	**(89)**

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Year ended 31 March 2022

Balance sheet positions at 31 March 2022

			Carrying amount of financial instruments by categories (*)					Fair value of items classified as financial instruments			
At 31 March 2022 (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	79	-	-	79	-	-	79	-	79	-	79
Other non-current assets	644	352	70	-	222	-	292	-	292	-	292
Trade receivables	2,747	-	-	-	2,747	-	2,747	-	2,747	-	2,747
Other current operating assets	2,337	899	583	-	408	447	1,438	-	1,438	-	1,438
Other current financial assets	54	-	-	-	-	54	54	-	54	-	54
Cash and cash equivalents	810	-	1	-	809	-	810	1	809	-	810
ASSETS	**6,671**	**1,251**	**654**	**79**	**4,186**	**501**	**5,420**	**1**	**5,419**	**-**	**5,420**
Non-current borrowings	2,663	-	-	-	2,663	-	2,663	2,627	36	-	2,663
Non-current lease obligations	566	-	-	-	566	-	566	-	566	-	566
Current borrowings	313	-	-	-	257	56	313	-	313	-	313
Current lease obligations	143	-	-	-	143	-	143	-	143	-	143
Trade payables	3,323	-	-	-	3,323	-	3,323	-	3,323	-	3,323
Other current liabilities	4,309	1,523	423	-	1,835	528	2,786	-	2,786	-	2,786
LIABILITIES	**11,317**	**1,523**	**423**	**-**	**8,787**	**584**	**9,794**	**2,627**	**7,167**	**-**	**9,794**

(*) 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.

Financial income and expense arising from financial instruments for the year ended 31 March 2022

(in € million)	**FV P/L**	**FV OCI**	**LRL at amortised cost & DER**	**Total**
Interests	-	-	(7)	(7)
Interest income	-	-	*20*	*20*
Interest expense	-	-	*(27)*	*(27)*
Foreign currency and other	-	-	(6)	(6)
NET INCOME/EXPENSE FOR THE YEAR ENDED 31 MARCH 2022	**-**	**-**	**(13)**	**(13)**

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 treatment 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 mainly correspond to fair value hedge which is used to cover the exposure to the risk of a change in the fair value of a financial asset, a financial liability or unrecognised firm commitment. Net investment hedge is applied to minimize the exchange rate risk relating to the net investment in a foreign entity.

Derivatives are recognised and re-measured at fair value. Changes in fair value from period to period are recognised differently depending on whether the instrument is designated for accounting purposes as a fair value hedge, a cash flow hedge or a hedge of a net investment in a foreign entity.

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 the ineffective portions 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.

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. The change in fair value of the ineffective portion is recognized in other financial income or expenses.

Gains or losses accumulated under other comprehensive income are taken to the income statement when the hedged cash flows occur.

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.

Hedge of a net investment in a foreign entity

A net investment hedge is used to reduce or eliminate the exchange rate risk relating to the Group's interest in the net assets of a foreign operation. Changes in the fair value of the hedging instrument that is determined to be an effective hedge is recognized in other comprehensive income, allowing a natural offset in the translation differences between the effective part of the derivative and the re-measurement of the net investment. Gains and losses previously recognized in other comprehensive income are reclassified to profit or loss upon the disposal of the foreign entity. The ineffective portion is reported in profit or loss.

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 gain/cost of which is included in net gain/cost of foreign exchange (see Note 7).

Occasionally, the group may enter into a net investment hedge strategy. At 31 March 2023, the change in the fair value of the net investment hedge recognized in equity had a positive impact of 15m€.

At 31 March 2023, net derivatives positions amount to a net asset of €7 million and comprise mainly forward sale contracts of Mexican Peso, Singapore dollar and Swedish krona.

(in € million)	Net derivatives positions		2024		2025		2026-2028		2029 and thereafter	
Currency 1 / Currency 2 (*)	Net notional	Fair value	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
EUR/SEK	489	(10)	-	489	-	-	-	-	-	-
EUR/BRL	367	3	-	367	-	-	-	-	-	-
EUR/CHF	321	(2)	-	321	-	-	-	-	-	-
EUR/MXN	301	12	-	301	-	-	-	-	-	-
EUR/SGD	234	11	-	99	-	135	-	-	-	-
EUR/ZAR	(210)	6	-	(210)	-	-	-	-	-	-
EUR/AUD	137	(4)	-	229	-	(31)	-	(61)	-	-
EUR/CNH	128	(5)	-	128	-	-	-	-	-	-
EUR/GBP	(103)	2	-	(103)	-	-	-	-	-	-
EUR/PLN	(86)	(8)	-	(29)	-	(57)	-	-	-	-
Other		2								
Net derivatives related to financing activities		**7**								

(*) 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

During 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 currencies triggering a significant exposure as of 31 March 2023 are the Polish zloty, Chinese yuan, Romanian Leu and Indian rupee.

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 as the hedged item. Generally, the tenor of hedging derivatives corresponds to the tenor of the hedged items. However, depending on market conditions, the Group may decide to enter into derivatives with shorter tenors and to roll them subsequently. Finally, in some cases, the Group can derogate from its hedging policy because of the cost of the hedge or absence of efficient market.

The portfolio of operating foreign exchange forward contracts has a weighted maturity around 2 years. However, some forward contracts may mature beyond five years to reflect the long-term nature of some 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 revaluation through Income Statement at fair market value of derivatives.

At 31 March 2023, net derivatives amount to a net asset of €15 million. They are summarized as follows:

(in € million)	Net derivatives positions		2024		2025		2026-2028		2029 and thereafter	
Currency 1 / Currency 2 (*)	Net notional	Fair value	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
EUR/PLN	1,481	29	-	393	-	374	-	714	-	-
EUR/CNH	783	20	-	228	-	143	-	411	-	-
EUR/RON	(387)	(17)	-	(222)	-	(153)	-	(13)	-	-
EUR/INR	355	7	-	220	-	32	-	100	-	3
EUR/MXN	(349)	(19)	-	(176)	-	(168)	-	(5)	-	-
EUR/AUD	(322)	4	-	(137)	-	(45)	-	(128)	-	(12)
CNH/PLN	(288)	(5)	-	(72)	-	(75)	-	(141)	-	-
EUR/GBP	(277)	(3)	-	(101)	-	16	-	(32)	-	(159)
EUR/USD	(239)	(38)	-	(176)	-	(5)	-	(59)	-	-
USD/CAD	(217)	35	-	(86)	-	(96)	-	(36)	-	-
Other		1								
Net derivatives related to operating activities		**15**								

(*) 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 the Group Treasury.

Overall derivatives positions

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

(in € million)	At 31 March 2023 Assets	At 31 March 2023 Liabilities	At 31 March 2022 Assets	At 31 March 2022 Liabilities
Derivatives qualifying for fair value hedge	747	726	502	582
Of which derivatives relating to financing activities	*65*	*58*	*54*	*54*
Of which derivatives relating to operating activities	*682*	*668*	*448*	*528*

Since derivatives have been set up, the change in foreign exchange spot rates, and the relative change in interest rate curves related to the hedged currencies, during the periods ended 31 March 2022 and 31 March 2023 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.

With its banking counterparties, Alstom enters into 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 2023 (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: Financial instruments	Related amount not set off in the balance sheet: Cash collateral received	Net amount
Derivatives assets	747	-	747	664	-	84
Derivatives liabilities	(726)	-	(726)	(664)	-	(62)

At 31 March 2022 (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		
				Financial instruments	Cash collateral received	Net amount
Derivatives assets	502	-	502	468	-	34
Derivatives liabilities	(582)	-	(582)	(468)	-	(114)

28.3. Interest rate risk management

The Group may enter into hedges for the purpose of managing its exposure to interest rate volatility. 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.

At 31 March 2023, the Group keeps short dated floating rate financial assets on its balance sheet, while its debt is merely made of fixed rate bonds and commercial papers.

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 2023 *(in € million)*	Fixed rate	Floating rate	Total
Financial assets	178	901	1,079
Financial debt bearing interests	(2,882)	(171)	(3,053)
Total position before hedging	**(2,704)**	**730**	**(1,974)**
Hedging position	-	-	-
Total position after hedging	**(2,704)**	**730**	**(1,974)**

At 31 March 2022 *(in € million)*	Fixed rate	Floating rate	Total
Financial assets	146	1,045	1,191
Financial debt bearing interests	(2,683)	(293)	(2,976)
Total position before hedging	**(2,537)**	**752**	**(1,785)**
Hedging position	-	-	-
Total position after hedging	**(2,537)**	**752**	**(1,785)**

Sensitivity is analysed based on the group’s net cash position at 31 March 2023, 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 €1 million while a fall of 0.1% would decrease it by €1 million.

28.4. Credit risk management

Credit risk is the risk that counterparty will not meet its payment obligations under financial instrument or commercial 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.

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 25 different counterparties and the risk is therefore highly diluted, the largest exposure with one single counterparty (rated A-) being limited to €28million.

28.5. Liquidity risk management

In addition to its available cash and cash equivalents, amounting to €826 million at 31 March 2023, the Group benefits from strong liquidity with:

- €1.75 billion short term Revolving Credit Facility maturing in January 2026;
- €2.5 billion Revolving Credit Facility maturing in January 2028.

Both facilities have a one-year extension option remaining at lenders' discretion and are undrawn at 31 March 2023. Both facilities have been successfully extended by 1 year.

As per its conservative liquidity policy, the €2.5 billion Revolving Credit Facility serves as a back-up of the Group €2.5 billion NEU CP program in place. With these RCF lines (undrawn at 31 March 2023), the €248 million of Negotiable European Commercial Papers outstanding and the €41 million overdraft at 31 March 2023, the Group benefits from a €4.8 billion liquidity available.

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 invests 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 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 €233 million at 31 March 2023 and €204 million at 31 March 2022.

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 2023 and 31 March 2022.

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 period.

Financial instruments held at 31 March 2023

Cash flow arising from instruments included in net cash/(debt) at 31 March 2023

		2024		2025		2026 - 2028		2029 and thereafter	
(in € million)	**Carrying amount**	**Interests**	**Repayment**	**Interests**	**Repayment**	**Interests**	**Repayment**	**Interests**	**Repayment**
Other non-current assets (*)	27	-	-	-	-	-	-	-	27
Other current financial assets	65	-	65	-	-	-	-	-	-
Cash and cash equivalents	826	-	826	-	-	-	-	-	-
Assets	**918**	**-**	**891**	**-**	**-**	**-**	**-**	**-**	**27**
Non-current borrowings	(2,657)	(6)	-	(6)	-	(16)	(1,200)	(11)	(1,457)
Current borrowings	(396)	-	(396)	-	-	-	-	-	-
Liabilities	**(3,053)**	**(6)**	**(396)**	**(6)**	**-**	**(16)**	**(1,200)**	**(11)**	**(1,457)**
Net cash/(debt)	**(2,135)**	**(6)**	**495**	**(6)**	**-**	**(16)**	**(1,200)**	**(11)**	**(1,430)**

(*) Other non-current assets represent external loan related to New Markets Tax Credit Program scheme in the United States of America (see Note 15).

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Cash flow arising from operating derivatives at 31 March 2023

(in € million)	Carrying amount	2024 Interests	2024 Repayment	2025 Interests	2025 Repayment	2026 - 2028 Interests	2026 - 2028 Repayment	2029 and thereafter Interests	2029 and thereafter Repayment
Other current operating assets	682	-	287	-	197	-	198	-	-
Assets	**682**	**-**	**287**	**-**	**197**	**-**	**198**	**-**	**-**
Other current operating liabilities	(668)	-	(281)	-	(209)	-	(171)	-	(7)
Liabilities	**(668)**	**-**	**(281)**	**-**	**(209)**	**-**	**(171)**	**-**	**(7)**
Derivatives	**14**	**-**	**6**	**-**	**(12)**	**-**	**27**	**-**	**(7)**

Cash flow arising from instruments included in other financial assets and liabilities at 31 March 2023

(in € million)	Carrying amount	2024 Interests	2024 Repayment	2025 Interests	2025 Repayment	2026 - 2028 Interests	2026 - 2028 Repayment	2029 and thereafter Interests	2029 and thereafter Repayment
Non consolidated investments	82	-	-	-	-	-	-	-	82
Other non-current assets	450	-	-	-	-	-	-	-	450
Trade receivables	2,670	-	2,670	-	-	-	-	-	-
Other current operating assets	1,054	-	1,054	-	-	-	-	-	-
Assets	**4,266**	**-**	**3,734**	**-**	**-**	**-**	**-**	**-**	**532**
Trade payables	(3,640)	-	(3,640)	-	-	-	-	-	-
Other current operating liabilities	(2,341)	-	(2,341)	-	-	-	-	-	-
Liabilities	**(5,981)**	**-**	**(5,981)**	**-**	**-**	**-**	**-**	**-**	**-**
Other financial assets and liabilities	**(1,725)**	**-**	**(2,257)**	**-**	**-**	**-**	**-**	**-**	**532**

Financial instruments held at 31 March 2022

Cash flow arising from instruments included in net cash/(debt) at 31 March 2022

(in € million)	Carrying amount	2023 Interests	2023 Repayment	2024 Interests	2024 Repayment	2025 - 2027 Interests	2025 - 2027 Repayment	2028 and thereafter Interests	2028 and thereafter Repayment
Other non-current assets	27	-	-	-	-	-	-	-	27
Other current financial assets	54	-	54	-	-	-	-	-	-
Cash and cash equivalents	810	-	810	-	-	-	-	-	-
Assets	**891**	**-**	**864**	**-**	**-**	**-**	**-**	**-**	**27**
Non-current borrowings	(2,663)	(6)	-	(6)	-	(18)	(700)	(11)	(1,963)
Current borrowings	(313)	-	(313)	-	-	-	-	-	-
Liabilities	**(2,976)**	**(6)**	**(313)**	**(6)**	**-**	**(18)**	**(700)**	**(11)**	**(1,963)**
Net cash/(debt)	**(2,085)**	**(6)**	**551**	**(6)**	**-**	**(18)**	**(700)**	**(11)**	**(1,936)**

Cash flow arising from operating derivatives at 31 March 2022

(in € million)	Carrying amount	2023 Interests	2023 Repayment	2024 Interests	2024 Repayment	2025 - 2027 Interests	2025 - 2027 Repayment	2028 and thereafter Interests	2028 and thereafter Repayment
Other current operating assets	448	-	195	-	96	-	156	-	1
Assets	**448**	**-**	**195**	**-**	**96**	**-**	**156**	**-**	**1**
Other current operating liabilities	(528)	-	(235)	-	(104)	-	(174)	-	(15)
Liabilities	**(528)**	**-**	**(235)**	**-**	**(104)**	**-**	**(174)**	**-**	**(15)**
Derivatives	**(80)**	**-**	**(40)**	**-**	**(8)**	**-**	**(18)**	**-**	**(14)**

Cash flow arising from instruments included in other financial assets and liabilities at 31 March 2022

		2024		2025		2026 - 2028		2029 and thereafter	
(in € million)	Carrying amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
Non consolidated investments	79	-	-	-	-	-	-	-	79
Other non-current assets	234	-	-	-	-	-	-	-	234
Trade receivables	2,747	-	2,747	-	-	-	-	-	-
Other current operating assets	952	-	952	-	-	-	-	-	-
Assets	**4,012**	**-**	**3,699**	**-**	**-**	**-**	**-**	**-**	**313**
Trade payables	(3,323)	-	(3,323)	-	-	-	-	-	-
Other current operating liabilities	(1,729)	-	(1,729)	-	-	-	-	-	-
Liabilities	**(5,052)**	**-**	**(5,052)**	**-**	**-**	**-**	**-**	**-**	**-**
Other financial assets and liabilities	**(1,040)**	**-**	**(1,353)**	**-**	**-**	**-**	**-**	**-**	**313**

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 2023.

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 increases 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 €(3,467) million as at 31 March 2023 (see Note 29.2) is analysed as follows:

- several pension plans for €(3,241) million;
- other post-employment benefits for €(172) million which include mainly end-of-service benefits in France and Italy;
- other long-term defined benefits for €(53) 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 2023**	**At 31 March 2022**
Defined benefit obligations	**(3,467)**	**(4,543)**
Fair value of plan assets	2,953	3,731
Unfunded status of the plans	**(514)**	**(812)**
Impact of asset ceiling	(93)	(40)
NET OF ACCRUED AND PREPAID BENEFIT COSTS AFTER ASSET CEILING	**(607)**	**(852)**
Of which:		
Accrued pension and other employee benefit costs	*(923)*	*(1,203)*
Prepaid pension and other employee benefit costs	*316*	*351*

As detailed in this note, net provisions for post-employment benefits total €(607) million, as at 31 March 2023, compared with €(852) million, as at 31 March 2022.

The net asset of €316 million related to pension schemes in the United Kingdom and Canada is supported by appropriate refund expectations, as requested by IFRIC 14.

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 the United Kingdom, the United States of America, Canada, Germany, Switzerland 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 nine defined benefit pension plans covering different populations. Six of these are Sections of the large UK Railways Pension Scheme and provide a pension in the form of an indexed annuity. In addition there is one post-retirement plan for train passes. All of the Schemes are closed to new hires who 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 Canada, there are six defined benefit pension plans covering different populations (three plans are subject to collective bargaining agreements). From 2012 to 2016, five plans were closed to new members. Since 2023, non-unionized employees are no longer required to contribute to the defined contribution component of the plans. The unionized pension plans are based on a flat dollar benefit and the remaining plans are based on the best average earnings. Two unionized pension plans offer indexation per their collective bargaining agreements.

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. For legacy BT Germany there is one cash balance plan that is open for active employees and new participants. It provides cover for pension, disability or death. The plan was introduced in 2008 – old pension promises for active employees were integrated as an initial pension component (Initialbaustein). It is unfunded and entirely employer financed. There are various old defined benefit pension plans, which - with very few exceptions – only apply for vested entitlements and pensioners. All plans are accounted for as defined benefit plans under IAS 19.

In the United States of America, following consolidation and merger initiatives performed at the end of 2022, there is now one major and two minor pension schemes (except for collective agreements) and three post-retirement medical plans. New hires are mainly provided with the enhanced defined contribution pensions under 401(k) schemes.

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 Sweden and Switzerland.

29.2. Defined benefit obligations

(in € million)	At 31 March 2023	United Kingdom	Euro Zone	North America	Other
Defined benefit obligations at beginning of year	**(4,543)**	**(2,309)**	**(964)**	**(786)**	**(485)**
Service cost	(88)	(20)	(33)	(20)	(14)
Plan participant contributions	(12)	(6)	-	-	(6)
Interest cost	(113)	(61)	(15)	(29)	(7)
Administration costs	(8)	(3)	(1)	(3)	-
Plan amendments	(3)	-	(2)	(1)	-
Business combinations / disposals	(3)	-	(2)	-	(1)
Curtailments	3	-	1	-	2
Settlements	20	-	-	-	20
Actuarial gains (losses) - due to experience	(95)	(96)	(2)	5	(1)
Actuarial gains (losses) - due to changes in demographic assumptions	(0)	1	(1)	(4)	3
Actuarial gains (losses) - due to changes in financial assumptions	1,110	743	194	121	52
Benefits paid	181	79	46	38	19
Foreign currency translation and others	84	76	1	12	(5)
DEFINED BENEFIT OBLIGATIONS AT END OF YEAR	**(3,467)**	**(1,596)**	**(777)**	**(668)**	**(425)**
Of which:					
Funded schemes	*(2,778)*	*(1,590)*	*(231)*	*(621)*	*(335)*
Unfunded schemes	*(689)*	*(6)*	*(546)*	*(47)*	*(90)*

(in € million)	At 31 March 2022	United Kingdom	Euro Zone	North America	Other
Defined benefit obligations at beginning of year	**(4,713)**	**(2,455)**	**(1,042)**	**(799)**	**(417)**
Service cost	(103)	(25)	(37)	(24)	(17)
Plan participant contributions	(13)	(7)	-	-	(6)
Interest cost	(84)	(51)	(7)	(23)	(3)
Administration costs	(8)	(4)	(1)	(3)	-
Business combinations / disposals	(5)	-	(5)	-	-
Actuarial gains (losses) - due to experience	20	26	11	(2)	(15)
Actuarial gains (losses) - due to changes in demographic assumptions	19	12	1	(1)	8
Actuarial gains (losses) - due to changes in financial assumptions	266	82	62	78	43
Benefits paid	181	72	51	35	25
Foreign currency translation and others	(103)	41	3	(46)	(102)
DEFINED BENEFIT OBLIGATIONS AT END OF YEAR	**(4,543)**	**(2,309)**	**(964)**	**(786)**	**(485)**
Of which:					
Funded schemes	*(3,689)*	*(2,299)*	*(292)*	*(726)*	*(372)*
Unfunded schemes	*(854)*	*(10)*	*(672)*	*(60)*	*(113)*

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, Canada, Germany, Sweden, Switzerland and the United States of America.

(in € million)	At 31 March 2023	United Kingdom	Euro Zone	North America	Other
Fair value of plan assets at beginning of year	**3,732**	**2,603**	**101**	**631**	**397**
Interest income	98	69	2	23	4
Actuarial gains (losses) on assets due to experience	(694)	(593)	(5)	(69)	(27)
Company contributions	46	27	1	8	11
Plan participant contributions	12	6	-	-	6
Settlements	(20)	-	-	-	(20)
Benefits paid from plan assets	(127)	(79)	(2)	(34)	(13)
Foreign currency translation and others	(94)	(89)	1	(17)	11
FAIR VALUE OF PLAN ASSETS AT END OF YEAR	**2,953**	**1,944**	**97**	**543**	**369**

(in € million)	At 31 March 2022	United Kingdom	Euro Zone	North America	Other
Fair value of plan assets at beginning of year	**3,519**	**2,498**	**102**	**600**	**319**
Interest income	70	52	1	17	-
Actuarial gains (losses) on assets due to experience	55	71	(2)	(10)	(3)
Company contributions	55	28	1	15	10
Plan participant contributions	13	7	-	-	6
Benefits paid from plan assets	(121)	(71)	(1)	(31)	(17)
Foreign currency translation and others	141	19	-	40	82
FAIR VALUE OF PLAN ASSETS AT END OF YEAR	**3,731**	**2,603**	**101**	**631**	**397**

29.4. Components of plan assets

(in € million)	At 31 March 2023	%	United Kingdom	Euro Zone	North America	Other
Equities	696	24%	19%	20%	37%	31%
Bonds	1,950	66%	75%	58%	52%	40%
Insurance contracts	8	-	-	2%	-	2%
Other	299	10%	6%	20%	11%	27%
TOTAL	**2,953**	**100%**	**100%**	**100%**	**100%**	**100%**

(in € million)	At 31 March 2022	%	United Kingdom	Euro Zone	North America	Other
Equities	1,570	42%	46%	17%	39%	31%
Bonds	1,908	51%	53%	58%	47%	42%
Insurance contracts	6	0%	-	2%	-	-
Other	247	7%	1%	23%	14%	27%
Total	**3,731**	**100%**	**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 2023, plan assets do not include securities issued by the Group.

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29.5. Assumptions (weighted average rates)

Actuarial valuations of the Group's benefit obligation have been made as at 31 March 2023 and 31 March 2022.

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 2023	United Kingdom	Euro Zone	North America	Other
Discount rate	4.42	4.95	3.67	5.04	2.78
Rate of compensation increase	2.70	3.08	2.88	2.03	2.00

(in %)	At 31 March 2022	United Kingdom	Euro Zone	North America	Other
Discount rate	2.61	2.75	1.73	3.87	1.65
Rate of compensation increase	3.16	3.45	3.19	2.81	1.95

As of 31 March 2023, the weighted average durations of the defined benefit obligations are the following:

(in years)	At 31 March 2023	United Kingdom	Euro Zone	North America	Other
Weighted average duration	13	14	11	14	10

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 3.42% in the year ended 31 March 2023 and reduces thereafter to an ultimate rate of 1.35%.

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 2023
Impact of a 25bp increase or decrease in the discount rate	-104 / 110
Impact of a 25bp increase or decrease in the rate of compensation increase	16 / -16

29.6. Analysis of post-employment and other long-term defined benefit expense

As at 31 March 2023, the benefit expense for the whole Group is the following:

(in € million)	Year ended at 31 March 2023	United Kingdom	Euro Zone	North America	Other
Service cost	**(88)**	**(20)**	**(33)**	**(20)**	**(14)**
Defined contribution plans	(163)	(11)	(93)	(18)	(41)
Actuarial gains (losses) on other long-term benefits	12	-	10	-	2
Past service gain (cost)	(3)	-	(2)	(1)	-
Curtailments/settlements	3	-	1	-	2
EBIT impact	**(238)**	**(31)**	**(117)**	**(40)**	**(51)**
Financial income (expense)	**(26)**	**1**	**(14)**	**(9)**	**(4)**
TOTAL BENEFIT EXPENSE	**(264)**	**(30)**	**(131)**	**(49)**	**(55)**

(in € million)	Year ended at 31 March 2022	United Kingdom	Euro Zone	North America	Other
Service cost	**(103)**	**(25)**	**(37)**	**(24)**	**(17)**
Defined contribution plans	(142)	(5)	(78)	(14)	(45)
Actuarial gains (losses) on other long-term benefits	**(10)**	**-**	**(11)**	**-**	**1**
EBIT impact	**(255)**	**(30)**	**(126)**	**(39)**	**(61)**
Financial income (expense)	**(22)**	**(3)**	**(8)**	**(9)**	**(2)**
TOTAL BENEFIT EXPENSE	**(277)**	**(33)**	**(134)**	**(48)**	**(62)**

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 2023 amounted to €54 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:

- €63 million in the year ending 31 March 2024;
- €56 million in the year ending 31 March 2025;
- €59 million in the year ending 31 March 2026.

Total cash spent for defined contribution plans in the year ended 31 March 2023 amounted to €119 million.

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 or the Monte Carlo model. 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

	Plan issued by Shareholders Meeting on 17 July 2018	Plan issued by Shareholders Meeting on 10 July 2019	Plans issued by Shareholders Meeting on 4 July 2021			Plan issued by Shareholders Meeting on 28 July 2021
	PSP 2019	**PSP 2020**	**PSP 2021**	**PSP Special**	**We Are Alstom 2021**	**PSP 2022**
	Performance shares	Performance shares	Performance shares	Performance shares	Free shares	Performance shares
Grant date	12/03/2019	10/03/2020	04/07/2021	04/07/2021	04/07/2021	10/05/2022
Number of beneficiaries	820	878	1,375	18	63,717	1,474
Adjusted number granted (*)	1,176,801	1,252,619	1,867,325	243,000	955,755	2,481,612
Adjusted number exercised since the origin	392,585	575	1,050	-	45	-
Adjusted number cancelled since the origin	784,216	62,805	109,650	-	144,585	47,286
Adjusted number outstanding at 31 March 2023	-	1,189,239	1,756,625	243,000	811,125	2,434,326
inc. to the members of the Leadership team at 31 March 2023	-	259,247	306,000	228,000		419,000
Fair value at grant date (in €)	28.92	36.58	35.60	41.01	42.01	23.04

(*) The number of performance shares have been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.

The long-term incentive plans set up since 2016 allocate only performance shares.

The grant of these instruments is conditioned by the satisfaction of performance indicators.

PSP 2019 granted on 12 March 2019

This plan has been agreed by the board of directors of 12 March 2019. 1,080,150 performance shares have been initially granted to 820 beneficiaries.

The final allocation depends on two internal performance condition based on Group adjusted EBIT margin (Excluding the share of net income of CASCO) and cash conversion rate for fiscal years ended 31 March 2022, and one relative condition linked to the performance of the Company's share. Based on the performance conditions of the year ended a March 22, 53.5 % of the initial grant (150%) has been achieved and 96.5 % of the performance shares have been cancelled. On 17 May 2022, 392,585 performance shares have been delivered.

PSP 2020 granted on 10 March 2020

This plan has been agreed by the board of directors of 10 March 2020. 1,145,625 performance shares have been initially granted to 878 beneficiaries.

The final allocation depends on three internal performance conditions based on Group adjusted EBIT margin, Free Cash Flows and objective of reduction in the energy consumption of the solutions offered to clients for the fiscal year ended 31 March 2023, as well as one relative 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 2023 results.

PSP 2021 granted on 4 July 2021

This plan has been agreed by the board of directors of 4 July 2021. 1,867,325 performance shares have been initially granted to 1,375 beneficiaries.

The final allocation depends on three internal performance conditions based on Group adjusted EBIT margin, Free Cash Flows and objective of reduction in the energy consumption of the solutions offered to clients for the fiscal year ended 31 March 2024, as well as one relative condition linked to the performance of the Company's share. The final delivery will take place at the latest two business days after the end of the vesting period, the 4 July 2024.

Special PSP granted on 4 July 2021

This plan has been agreed by the board of directors of 4 July 2021 and aims to reward integration of Bombardier Transportation success. 243,000 performance shares have been initially granted to 18 beneficiaries.

The final allocation depends on three internal performance conditions based on Alstom margin evolution on specific projects, achievement of synergies and earnings per share and a relative performance condition based on the employee engagement score of the Group. These conditions will be assessed at the end of the fiscal year ended 31 March 2025. The final delivery will take place at the latest two business days following the Vesting Period, i.e 4 July 2025.

2021 free share plan named "We Are Alstom 2021"

On 4 July 2021, the Board of Directors approved the grant of a worldwide free share Plan named "We are Alstom 2021". The 15-shares-award concerns all employees within Alstom at the grant date, on the condition they are still employees of Alstom Group at the end of a 2-years-vesting period, representing a maximum of 955,755 new shares of €7 of nominal value each to be issued in favour of a maximum of 63,717 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. The shares will be delivered on the first business day following the date of expiry of the Vesting Period, i.e. 5 July 2023.

PSP 2022 granted on 10 May 2022

This plan has been agreed by the board of directors of 10 May 2022. 2,481,612 performance shares have been initially granted to 1,474 beneficiaries.

The final allocation depends on four internal performance conditions based on Group adjusted EBIT margin, Free Cash Flows, objective of reduction in the energy consumption of the solutions offered to clients and Alstom employee engagement level for the fiscal year ended 31 March 2025, as well as one relative condition linked to the performance of the Company's share. The final delivery will take place at the latest fifth business day following the end of the vesting period.

Movements

	Number of options	Weighted average exercise price per share in €	Number of performance shares
OUTSTANDING AT 31 March 2021	**121,468**	**21.24**	**3,352,234**
Granted (*)	-	-	3,066,080
Exercised	(88,590)	21.24	(699,487)
Cancelled	(32,878)	21.24	(486,210)
OUTSTANDING AT 31 March 2022	**0**		**5,232,617**
Granted (**)			2,481,612
Exercised			(393,155)
Cancelled			(886,759)
OUTSTANDING AT 31 March 2023	**0**		**6,434,315**

(*) Includes 955,755 free shares granted through "We Are Alstom 2021", 243,000 shares granted through Special PSP and 1,867,325 shares granted through PSP 2021.

(**) Includes 2,481,612 shares granted through PSP 2022.

Valuation

	PSP 2019	PSP 2020	PSP 2021	PSP Special	We Are Alstom 2021	PSP 2022
	performance shares	performance shares	performance shares	performance shares	Free shares	performance shares
Grant date	12/03/2019	10/03/2020	04/07/2021	04/07/2021	04/07/2021	10/05/2022
Expected life (in years)	3.2	3.2	3.0	4.0	2.0	3.0
End of vesting period	31/05/2022	31/05/2023	04/07/2024	04/07/2025	04/07/2023	31/05/2025
Share price at grant date (in €)	37.75	42.82	35.60	41.01	42.01	23.04
Volatility	19%	17%	25%	23%	28%	52%
Risk free interest rate	-0.3%	-0.7%	-0.6%	-0.5%	-0.6%	0.6%
Dividend yield	1.5%	1.5%	1.2%	1.2%	1.2%	1.5%

The plan valuation method follows either a Black & Scholes model (for Special PSP and We Are Alstom) or a Monte Carlo model (for PSP 2020, PSP 2021, PSP 2022 as well as performance shares anticipated). Expenses related to each plan are spread over the vesting period on a linear basis.

The volatility factor applied corresponds to Alstom's volatility quotation for all the plans.

The Group booked a total expense of €48 million for the year ended 31 March 2023 (to be compared to €42 million for the year ended 31 March 2022).

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.

30.2. We Share Alstom

The Group launched during the year ended 31 March 2023 an Employee Share Purchase Scheme covering 21 countries allowing employees to purchase Alstom shares with preferred conditions and assorted with a 5-year lock in period, through two formulas:

- Multiple formula at a 20% discounted price offering capital guarantee, matching of 50% of the employee's investment and a multiple of the protected average increase of the share during the lock-in period;
- Classic formula allowing employees to benefit from a 30% discount on the reference price (only in France).

The €18 million total expense relating to this scheme recorded in the income statement for the year ended 31 March 2023 has been assessed on the following basis:

- Number of shares created on 26 March 2023: 4,236,222;
- 20-day share price average: €26.92; Subscription price for the Multiple offer: €21.54 ; Subscription price for the Classic offer: €18.85; risk free interest rate: (2,80%).

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)	At 31 March 2023	At 31 March 2022
Wages and salaries	4,398	3,949
Social charges	1,082	982
Post-employment and other long-term benefit expense (see Note 29)	163	269
Share-based payment expense (see Note 30)	66	42
TOTAL EMPLOYEE BENEFIT EXPENSE	**5,709**	**5,242**

	Year ended	
	At 31 March 2023	At 31 March 2022
Staff of consolidated companies at year end		
Managers, engineers and professionals	47,677	39,011
Other employees	32,506	35,084
HEADCOUNT	**80,183**	**74,095**

	Year ended	
	At 31 March 2023	At 31 March 2022
Average staff of consolidated companies over the period		
Managers, engineers and professionals	41,721	36,808
Other employees	34,903	35,896
HEADCOUNT	**76,624**	**72,704**

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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 €12,7 billion Committed Guarantee Facility Agreement ("CGFA") with sixteen tier one banks allowing issuance until 22 July 2025 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 replace outstanding bonds or to provide cash collateral.

At 31 March 2023, the total outstanding bonding guarantees related to contracts from continuing operations, issued by banks or insurance companies, amounted to €26.2 billion (€25.8 billion at 31 March 2022). The available amount under the Committed Guarantee Facility Agreement at 31 March 2023 amounts to €5.3 billion (€2.8 billion at 31 March 2022).

NOTE 33. DISPUTES

33.1. 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.

33.2. Other Disputes

Asbestos

Some of the Group's subsidiaries are subject to civil proceedings in relation to the use of asbestos in France essentially as well as in Spain, in the United Kingdom and in the United States of America. 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

Brazil

In July 2013, the Brazilian Competition Authority ("CADE") raided a number of companies involved in transportation activities in Brazil, including the subsidiaries of Alstom and Bombardier Transportation, following allegations of anti-competitive practices. After a preliminary investigation stage, CADE notified in March 2014 the opening of an administrative procedure against several companies, of which the Alstom's and Bombardier Transportation's subsidiaries in Brazil, and certain current and former employees of the Group.

CADE ruled in July 2019 a financial fine of BRL 133 million (approximately €24 million) on Alstom's subsidiary in Brazil as well as a ban to participate in public procurement bids in Brazil conducted by the Federal, State, and Municipal Public Administration over a period of 5 years. In parallel, CADE applied a financial penalty of BRL 23 million (approximately €4 million) on Bombardier Transportation's subsidiary in Brazil (there is no ban to participate in public procurement bids in Brazil).

In September and December 2020, both Alstom and Bombardier Transportation's subsidiaries in Brazil filed a civil lawsuit before the Brasilia civil court aiming at suspending and ultimately cancelling the July 2019 ruling. Both subsidiaries obtained an injunction to suspend the effects of the administrative ruling until a final judgment is issued on the merits.

The public prosecutor of the State of Sao Paulo launched in May 2014 a civil action against the Group's subsidiaries in Brazil, along with a number of other companies, for a total amount asserted against all companies of BRL 2.5 billion (approximately €453 million) excluding interests and possible damages in connection with a transportation project.

In December 2014, the public prosecutor of the State of Sao Paulo also initiated a lawsuit against Alstom's subsidiaries in Brazil, along with a number of other companies (including now Bombardier Transportation's local subsidiary) related to alleged anti-competitive practices regarding the first phase of a train maintenance project, and in the last quarter of 2016, regarding a second phase of the said maintenance project.

The Group's subsidiaries are actively defending themselves against these two actions.

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 subsidiaries involved.

Italy

On 23 June 2020, a series of searches and arrests have been carried out by the Milan police under instructions of the Milan Prosecution Office as part of a preliminary investigation into alleged bribes and bid-rigging in connection with public tenders for Azienda Transporte Milanesi ("ATM"), the municipal public transport company and operator of the Milan Subway. The investigation concerns at least seven companies and 28 individuals, including three current employees and one former employee of Alstom Ferroviaria S.p.A (the "Alstom Italy employees").

The Prosecution Office alleges that the Alstom Italy employees engaged in bid-rigging under Article 353 of the Italian Criminal Code, including colluding with an employee of ATM, to obtain confidential technical information in order to secure an undue advantage in the tender process for a 2019 contract for the Milan subway. Alstom did not ultimately submit a bid in respect of this contract.

Alstom Ferroviaria S.p.A. is also subject to investigation regarding alleged violation of Legislative Decree No. 231/2001 ("Decree 231/2001") for not having implemented (or not having efficiently applied) a system of control capable to avoid the commission by its employees of corruption. A company may only be held liable under Decree 231 if the criminal misconduct of its employees is established. In such a case, a company may seek to defend itself from corporate liability under Decree 231/2001 by showing that it had adopted and effectively implemented an organizational model (known as a "Modello") to prevent misconduct and established an independent supervisory body (known as an "organismo di vigilenza") to oversee compliance with the Modello. Alstom Ferroviaria S.p.A. has adopted a Modello and has established an "organismo di vigilenza".

Alstom is conducting an internal investigation into the allegations discussed above in coordination with external counsel and has taken certain interim measures in response to the allegations of the Prosecution Office, in particular by suspending one of its employees of Alstom Ferroviaria S.p.A.

In August 2022, the Prosecution Office determined (i) withdrawal of the bribery charges against Alstom Ferroviaria S.p.A. and the individuals and (ii) is seeking for indictment of two former and two current employees of Alstom Ferroviaria S.p.A for bid rigging. The judge of Preliminary Investigations is now to decide on such determinations.

In November 2022, ATM and the Milan Municipality joined the proceedings as offended parties ("*costituzione di parte civile*").

Spain

The Spanish Competition Authority ("CNMC") opened a formal procedure end of August 2018 in connection with alleged irregularities in public tenders with the Spanish Railway Infrastructures Administrator ("ADIF") against eight competing companies active in the Spanish signaling market including Bombardier European Investments, S.L.U (BEI) and its parent company Bombardier Transportation (Global Holding) UK Limited, and Alstom Transporte SA and its parent Alstom SA. The inclusion of the parent company is typical of European competition authorities at the early stage of the proceedings. No Alstom or Bombardier managers were included in the file. In September 2020, the companies obtained access to the Statement of Objections in which the CNMC discloses the evidence gathered against the various participants in the alleged cartel in the Spanish signaling market. Both Alstom and Bombardier have submitted their defense paper rejecting all of CNMC allegations on the basis of absence of evidence. The Sub-directorate of the CNMC submitted a Proposed Resolution end of March 2021 which both Alstom and Bombardier rejected. Both companies submitted their defence to the Council of the CNMC.

The Council of the CNMC ruled in September 2021 a financial fine of €22 million and €3.7 million on Alstom's subsidiary and Bombardier Transportation's subsidiary in Spain respectively. The Council also ruled a ban to participate in public procurement bids in Spain. The scope and duration of the ban to participate in public procurement both for Alstom's and Bombardier Transportation's subsidiaries in Spain remain to be set by the State Public Procurement Advisory Board (*Junta Consultiva de Contratación Pública del Estado*).

On 29 November and 7 December 2021 Alstom's subsidiary and Bombardier Transportation's subsidiary in Spain respectively lodged an appeal against this ruling of the Council of the CNMC before the National High Court ("*Audiencia Nacional*"). The Group believes that the grounds of appeal are solid. On 23 September 2022, Alstom's subsidiaries in Spain filed their respective statement of claim under the appeal proceedings.

In parallel to these appeals, Alstom's and Bombardier Transportation's subsidiaries in Spain have respectively requested to the National High Court, as an interim measure, to suspend the implementation of the Council ruling regarding (i) the payment of the financial fine and (ii) the prohibition to tender in public procurement bids in Spain. On the 1 and on the 14 February 2022 respectively, the National High Court accepted both requests for interim measures and granted such suspension.

ALSTOM

Pending investigations which relate to Bombardier Transportation

The matters described in this section relate to historical conduct involving Bombardier Transportation that occurred prior to Alstom's acquisition.

Bombardier Transportation is the subject of an audit of the World Bank Integrity Vice Presidency and is participating in several investigations relating to allegations of corruption including by the Swedish Prosecution authority, the Special Investigation Unit (SIU) and National Prosecuting Authority (NPA) in South Africa and the DOJ.

With respect to these above-mentioned matters, Alstom and/or Bombardier Inc. are 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's subsidiaries from tenders and third-party actions. In this context, Alstom has obtained a number of contractual protections in the acquisition of Bombardier Transportation to mitigate potential risks.

The matter under investigation by the Swedish authorities, the World Bank and the U.S. Department of Justice (DOJ) (cf. details below) is in relation to a 2013 contract for the supply of equipment and services to Azerbaijan Railways in the amount of approximately $340 million (principally financed by the World Bank) awarded to a bidding consortium composed of Bombardier Transportation's Sweden's subsidiary (BT Sweden), a Russian Bombardier Transportation affiliate (with third party shareholders) and a third party (the "ADY Contract"). Ownership of the affiliate was subsequently transferred to an entity well established in the Russian and CIS market with which BT Sweden had a historical relationship, and an affiliate of which had been added post-bid approval as a project sub-contractor. There remains uncertainty as to the services provided by these entities in return for some of the payments they received.

Sweden

The Swedish authorities commenced an investigation in relation to the ADY Contract in 2016, and in 2017 filed charges against the former head of Sales, North Region, RCS, BT Sweden (the "former BTS employee") for aggravated bribery, and alternatively, influence trafficking. The authorities alleged that the former BTS employee had contacts and correspondence with a representative of the third-party member of the consortium who was also employed by Azerbaijan railways during the bidding period with a view towards illicitly influencing the outcome of the tender.

After a trial the former BTS employee was acquitted on both counts in 2017. The authorities appealed the decision and as of today only the aggravated bribery charge is pending. Although no charges have been filed against BT Sweden to date, the Swedish authorities are investigating other former BT Sweden employees and made mutual legal assistance treaty requests to authorities in numerous jurisdictions. The Swedish authorities recently concluded investigations on another former BT Sweden employee and filed charges. In December 2021, the Swedish Court issued a decision acquitting the former BTS employee. The authorities appealed such decision, and the matter is pending.

World Bank

The World Bank audited the ADY Contract and in 2018 the World Bank's Integrity Vice Presidency ("INT") issued a strictly confidential show cause letter which was leaked. The letter outlines INT's position regarding alleged collusion, corruption and fraud in the ADY Contract and obstruction of the INT's investigation. The audit could result in some form of debarment of Bombardier Transportation and BT Sweden from bidding on contracts financed by the World Bank for a number of years.

U.S. Department of Justice – DOJ

On 10 February, 2020, the DOJ notified Bombardier that it had opened an investigation. The DOJ has made information requests since March 2020 to Bombardier Inc. regarding the ADY Contract and may be doing so in the near term in relation to other projects in CIS countries. The DOJ has also made information requests regarding contracts with Transnet (cf. below South-Africa and Project related litigation- South-Africa) and a Bombardier Transportation South Africa signaling contract with the Passenger Rail Agency of South Africa (PRASA).

South Africa

Bombardier Transportation South Africa's contract to supply locomotives to Transnet Freight Rail is one of the matters among numerous other matters under investigation by the judicial commission of inquiry into allegations of State Capture (the "Zondo Commission"), by the Special Investigation Unit in South Africa ("SIU"), and by the National Prosecuting Authority ("NPA").

Project execution related litigation

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 authorized the parties to submit their claims for compensation of the damages arising from such termination.

The set off of the various amounts awarded by the tribunal to both parties after more than ten years of proceedings resulted, in a net amount, after set-off, of €27.4 million payable by the AMD consortium to DLH. AMD partners paid their respective proportionate share to the Ministry (Alstom share being €8.5 million) during the summer of 2021. Bonds were released and the case is therefore closed subject to the process of release of counter-guarantees respectively issued by AMD's partners which is ongoing.

On the other hand, 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 on account of the suspension. In January 2021, Dogus filed an application to resume arbitration proceedings while Alstom filed a successful application seeking an order of payment according to partners' net proportionate shares (see above). In accordance with the timetable defined by the case management team, Dogus and Marubeni filed their respective statements of claims on 30 September 2021 and Alstom submitted its defense and counterclaims on 14 February 2022. On 28 April 2022, the arbitral tribunal issued an order to close the document production phase of the proceedings. On 9 September 2022 and on 13 February 2023, Dogus and Marubeni filed their respective replies and statements of defense to Alstom's counterclaims and their rejoinder to which Alstom responded on 30 November 2022 and on 20 February 2023 by filing its rejoinder and reply on counterclaims. The arbitral tribunal hearing started on 20 March and ended on 29 March 2023, following which a final decision on the dispute is expected before the end of 2023.

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 on 26 June 2019, the Court of Cuneo issued its decision, which Alstom after careful and detailed analysis considered to be wrong for various legal reasons. On 24 January 2020 Alstom appealed, and on 12 May 2020 Trenitalia counter appealed, the decision before the Court of Appeal of Turin. Proceedings took place and on 24 December 2021 ALSTOM received the Court of Appeal's decision. The Court of Appeal notably (i) rejected Alstom's request to order supplementary technical expertise and (ii) did not recognize Alstom's economic dependence *vis-à-vis* Trenitalia, which led consequently to the rejection of Alstom's request to have the penalties clause declared null, as opposed to the first-degree decision. However, the Court of Appeal confirmed the first-degree decision regarding (i) the amount of the penalties due to Trenitalia and (ii) the fact that Trenitalia could not obtain the corresponding payment based on procedural grounds. On 21 June 2022, Alstom appealed the decision by filling a recourse to the Supreme Court to which Trenitalia responded by filing its defense and a counter recourse on 1 August 2022. The preliminary decision of the Filter Section ("*Sezione Filtro*") of the Supreme Court, that shall be limited to the admissibility of the recourse, is not expected before end of 2023.

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 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 the delay damages claimed by Trenitalia. 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. Alstom appealed the decision on 7 October 2019. On 15 January 2020 Trenitalia filed its defense and counter-appeal. After postponement of the initial date the Court of Appeal of Rome fixed the first hearing to 30 September 2022 during which the parties to the dispute summarized their respective positions. The Court of Appeal of Rome ordered Alstom and Trenitalia to file (i) their final briefs on 29 November 2022 and (ii) their respective reply to the other party's final briefs on 19 December 2022. On 10 January 2023 the Court of Appeal of Rome issued its decision that was notified to Alstom on 22 February 2023. The Court of Appeal confirmed the ruling of the first-degree judgment in favour of Alstom in its entirety except for the recognition of the economic dependence of Alstom *vis-à-vis* Trenitalia. Alstom filed a recourse before the Supreme Court against this decision.

Saturno – Italy

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 Appeal of Milan decided on 3 March 2017 in favor of Alstom's subsidiary by confirming definitively the suspension of this arbitration decision pending the outcome of the proceedings relating to the cancellation of such decision. The Court of Appeal of Milan ruled on the merits in March 2019 in favour of the Alstom's subsidiary and cancelled the arbitration award of August 2016 including the €22 million of damage compensation. The members of the consortium (excluding Alstom) appealed the decision of the Court of Appeal of Milan on 19 October 2019. On 27 November 2019 Alstom filed its defense and counter-appeal. The parties are still waiting for a decision on the admissibility of the recourse, to be given by the so-called "Filter Section" of the Supreme Court.

South-Africa

On 17 March 2014, Bombardier Transportation South Africa (BTSA) entered into a locomotive supply agreement with Transnet for the supply of 240 electric locomotives (LSA). The LSA is part of Transnet's 1064 locomotive project concluded between Transnet and four Original Equipment Manufacturers including BTSA.

On 9 March 2021, Transnet and the Special Investigating Unit (SIU), alleging unlawfulness and irregularities in the procurement process and subsequent award of the 1064 locomotive project, launched review application proceedings in the High Court of South Africa (High Court) for, amongst other things, the review and setting aside of the respective LSA's concluded with the four Original Equipment Manufacturers including BTSA. The relief sought by Transnet as it relates to BTSA includes: (i) the review and setting aside of the LSA concluded between BTSA and Transnet on 17 March 2014; (ii) that Transnet be entitled to retain the locomotives delivered by BTSA; and (iii) that BTSA be ordered to make restitution to Transnet of the advance payments and profit and/or excess profit earned in the supply of the locomotives.

On 13 April 2021, the court case team ordered Transnet to provide a properly constituted record of decision (ROD), the ROD being a critical element of Transnet's review application, following the four Original Equipment Manufacturers respective complaints addressing the incompleteness of such ROD filed by Transnet. On 17 July 2021 Transnet submitted a revised ROD to the High Court the completeness of which was again challenged by Alstom (BTSA) end of August 2021.

In parallel, on 2 September 2021 two of the Original Equipment Manufacturers filed an interlocutory motion to dismiss in its entirety the review application, such motion being based on Transnet's and SIU's respective failure to bring such review application in due course. This interlocutory motion has been challenged by Transnet requesting the High Court, via an interlocutory application filed on 15 December 2021, to set it aside. The High Court dismissed the two Original Equipment Manufacturers' interlocutory motion on 12 April 2022. The two Original Equipment Manufacturers brought further procedural applications that remain to be ruled upon by the High Court prior to the setting of the date for the submission of the responding affidavits by the four Original Equipment Manufacturers.

These proceedings are at an early stage and the Group is unable, at this stage, to predict their consequences. These matters are also a subject of the investigation by the DOJ, Zondo Commission and the NPA as referenced above.

Acquisition of Bombardier Transportation – Arbitration Proceedings

With respect to the acquisition of Bombardier Transportation, completed on 29 January 2021, Alstom identified various breaches by Bombardier Inc. ("BI") of its obligations as Seller under the Memorandum of Understanding dated 17 February 2020 (amended and restated on 30 March 2020) and the Sale and Purchase Agreement dated 26 September 2020 (amended on 28 January 2021).

On 15 April 2022, Alstom filed a request for arbitration against BI with the International Chamber of Commerce (in accordance with the Parties' agreements). Alstom's claims against BI concern breaches of the interim covenants in force prior to completion, breaches of warranty, and claims related to the calculation of the final purchase price. Notably, Alstom contends that BI's actions prior to completion wrongfully increased the purchase price paid by Alstom. On 24 June 2022, BI filed its answer to the request for arbitration, denying Alstom's claims and advancing counterclaims. As yet, BI has provided limited information on the underlying facts, and legal bases, for its counterclaims.

The arbitral tribunal was constituted by the International Chamber of Commerce on 26 August 2022. In October 2022, the tribunal established a procedural timetable leading to an evidentiary hearing in late 2025. On 3 March 2023, Alstom filed its full Statement of Claim to which BI is expected to respond in Q2 of the 2023/24 fiscal year.

Sale of Alstom's Energy Businesses in November 2015

Finally, 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.

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. INDEPENDENT AUDITORS' FEES

Fees due to auditors and members of their networks in respect of years ended 31 March 2023 and 31 March 2022 were as follows:

	Year ended at 31 March 2023				Year ended at 31 March 2022			
	Mazars		PricewaterhouseCoopers		Mazars		PricewaterhouseCoopers	
(in € million)	Amount	%	Amount	%	Amount	%	Amount	%
Independent Auditors' diligence, certification, review of individual and consolidated accounts	**5.3**	**73%**	**5.4**	**84%**	**5.0**	**85%**	**5.3**	**78%**
ALSTOM SA	*0.8*	*10%*	**0.9**	**14%**	*0.8*	*14%*	*0.9*	*13%*
Controlled entities	*4.5*	*63%*	**4.5**	**70%**	*4.2*	*71%*	*4.4*	*65%*
Services other than audit of statutory and consolidated financial statements (SACC) (*)	**1.9**	**27%**	**1.0**	**16%**	**0.9**	**15%**	**1.5**	**22%**
TOTAL	**7.2**	**100%**	**6.4**	**100%**	**5.9**	**100%**	**6.8**	**100%**

(*) Other services mainly include services rendered in connection with the Bombardier Transportation integration, as well as agreed-upon procedures, tax compliances services, technical consultations on accounting, tax and regulatory matters.

NOTE 35. RELATED PARTIES

The Group has identified the following related parties:

- Shareholders of the Group
- Associates & joint ventures
- Key management personnel
- Board Members

35.1. Shareholders of the Group

The main shareholders of Alstom are:

- The "Caisse de Dépôt et Placement du Québec" (CDPQ), a major Canadian pension fund, holding 17.38% of Alstom's share capital;
- Bouygues, a French company listed on Paris stock market, holding 0.15% of Alstom's share capital.

CDPQ Infra, a subsidiary of CDPQ, and Alstom are involved in «construction contracts» which are part of the ordinary course of business.
Bouygues and Alstom are involved in various contracts which are part of the ordinary course of business (e.g. phone contracts, facility management contracts, «construction contracts»).
For both, these relations are subject to normal market terms and conditions. Those operating flows are not material at Group's level.

35.2. Associates & joint ventures

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 are considered as not material regarding the overall operational flows (sales and purchases) and the balance sheet positions of the Group (trade receivables and payables).

35.3. Key management personnel

The Group considers that key management personnel as defined by IAS 24 are the members of the Leadership Team.

	Year ended	
(in € thousand)	**At 31 March 2023**	**At 31 March 2022**
Short-term benefits	**14,695**	**22,086**
Fixed gross salaries	7,609	8,494
Variable gross salaries	5,576	5,288
Exceptional amounts (*)	1,510	8,304
Post-employment benefits	**1,159**	**3,271**
Post-employment defined benefit plans	67	588
Post-employment defined contribution plans (**)	1,029	2,603
Other post-employment benefits	63	80
Other benefits	**5,303**	**7,858**
Non monetary benefits	1,067	2,447
Employer social contributions	4,236	5,411
Share-based payments	**7,820**	6,439
TOTAL	**28,977**	**39,653**

(*) Including non-recurring and exceptional amounts paid in 2021/22 to some executives in the context of the acquisition of Bombardier Transportation.

(**) Including amount paid for CEO under art 82 DC plan corresponding to 1/3 of compensation set following loss of rights after closure of Art 39 DB plan.

35.4. Board Members

There is no transaction with Board Members.

NOTE 36. SUBSEQUENT EVENTS

The Group has not identified any other subsequent event to be reported other than the items already described in the previous notes.

ALSTOM

NOTE 37. SCOPE OF CONSOLIDATION

PARENT COMPANY	Country	Ownership %	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 Transportation Rail Argentina S.A.	Argentina	100	Full consolidation
ALSTOM Transport (Customer Support) Australia Pty Limited	Australia	100	Full consolidation
ALSTOM Transport (V/Line) Australia Pty Limited	Australia	100	Full consolidation
ALSTOM Transport Australia Holdings Pty Limited	Australia	100	Full consolidation
ALSTOM Transport Australia Pty Limited	Australia	100	Full consolidation
NOMAD DIGITAL PTY LTD	Australia	100	Full consolidation
ALSTOM Transport Austria GmbH	Austria	100	Full consolidation
ALSTOM Transport Azerbaijan LLC	Azerbaijan	100	Full consolidation
ALSTOM Belgium SA	Belgium	100	Full consolidation
ALSTOM Transportation Belgium NV	Belgium	100	Full consolidation
CABLIANCE BELGIUM	Belgium	100	Full consolidation
NOMAD DIGITAL BELGIUM	Belgium	100	Full consolidation
ALSTOM Brasil Energia e Transporte Ltda	Brazil	100	Full consolidation
BOMBARDIER TRANSPORTATION BULGARIA LLC	Bulgaria	100	Full consolidation
ALSTOM Holdings LP	Canada	100	Full consolidation
ALSTOM Investments GP Inc.	Canada	100	Full consolidation
ALSTOM Investments GP Manitoba Inc.	Canada	100	Full consolidation
ALSTOM Transport Canada Inc.	Canada	100	Full consolidation
ALSTOM Transport Canada Participation Inc.	Canada	100	Full consolidation
ALSTOM Western Pacific Enterprises Electrical Installation General Partnership	Canada	51	Full consolidation
ALSTOM Chile S.A.	Chile	100	Full consolidation
ALSTOM Hong Kong Ltd	China	100	Full consolidation
ALSTOM Investment Company Limited	China	100	Full consolidation
ALSTOM Investment Management and Consulting (Beijing) Co., Ltd.	China	100	Full consolidation
ALSTOM Qingdao Railway Equipment Co., Ltd.	China	51	Full consolidation
ALSTOM Transportation (Engineering Service) Beijing Co., Ltd.	China	100	Full consolidation
ALSTOM Transportation China Limited	China	100	Full consolidation
ALSTOM Transportation Railway Equipment (Qingdao) Co., Ltd.	China	100	Full consolidation
BOMBARDIER RAILWAY TRANSPORTATION EQUIPMENT (SHANGHAI) CO., LTD.	China	100	Full consolidation
BOMBARDIER TRANSPORTATION CONSULTING (SHANGHAI) CO., LTD.	China	100	Full consolidation
Chengdu ALSTOM Transport Electrical Equipment Co., Ltd.	China	60	Full consolidation
SHANGHAI ALSTOM Transport Electrical Equipment Company 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 Transportation Colombia S.A.S.	Colombia	100	Full consolidation

ALSTOM Czech Republic a.s.	Czech Republic	98	Full consolidation
ALSTOM Transport Danmark A/S	Denmark	100	Full consolidation
ALSTOM Transport Danmark Hvidovre A/S	Denmark	100	Full consolidation
ALSTOM Transport Danmark NT Maintenance ApS	Denmark	100	Full consolidation
NOMAD DIGITAL (DENMARK) APS	Denmark	100	Full consolidation
NOMAD DIGITAL APS	Denmark	100	Full consolidation
ALSTOM Egypt for Transport Projects SAE	Egypt	99	Full consolidation
ALSTOM Monorail Egypt for Contracting Works LLC	Egypt	100	Full consolidation
AREVA INTERNATIONAL EGYPT FOR ELECTRICITY TRANSMISSION & DISTRIBUTION	Egypt	100	Full consolidation
BOMBARDIER TRANSPORTATION ETHIOPIA PLC	Ethiopia	100	Full consolidation
ALSTOM Transport (Helsinki) Finland Oy	Finland	100	Full consolidation
ALSTOM Transport Finland Oy	Finland	100	Full consolidation
ALSTOM APTIS	France	100	Full consolidation
ALSTOM Crespin SAS	France	100	Full consolidation
ALSTOM Executive Management	France	100	Full consolidation
ALSTOM Flertex SAS	France	100	Full consolidation
ALSTOM Holdings	France	100	Full consolidation
ALSTOM Hydrogène SAS	France	100	Full consolidation
ALSTOM Ibre	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 Omega 2	France	100	Full consolidation
ALSTOM Shipworks	France	100	Full consolidation
ALSTOM Transport SA	France	100	Full consolidation
CENTRE D'ESSAIS FERROVIAIRES	France	96	Full consolidation
ETOILE KLEBER	France	100	Full consolidation
INTERINFRA (COMPAGNIE INTERNATIONALE POUR LE DEVELOPPEMENT D'INFRASTRUCTURES)	France	50	Full consolidation
LORELEC	France	100	Full consolidation
NOMAD DIGITAL FRANCE	France	100	Full consolidation
STATIONONE	France	100	Full consolidation
ALSTOM Bahntechnologie Holding Germany GmbH	Germany	100	Full consolidation
ALSTOM Drives GmbH	Germany	100	Full consolidation
ALSTOM Lokomotiven Service GmbH	Germany	100	Full consolidation
ALSTOM Signal GmbH	Germany	100	Full consolidation
ALSTOM Transport Deutschland GmbH	Germany	100	Full consolidation
ALSTOM Transportation Germany GmbH	Germany	100	Full consolidation
NOMAD DIGITAL GMBH	Germany	100	Full consolidation
VGT VORBEREITUNGSGESELLSCHAFT TRANSPORTTECHNIK GMBH	Germany	100	Full consolidation
J&P AVAX SA - ETETH SA - ALSTOM TRANSPORT SA	Greece	34	Full consolidation
ALSTOM Hungary Kft.	Hungary	100	Full consolidation
ALSTOM Transport Hungary Zrt.	Hungary	100	Full consolidation
ALSTOM Manufacturing India Private Limited	India	100	Full consolidation
ALSTOM Rail Transportation India Private Limited	India	100	Full consolidation

ALSTOM Systems India Private Limited	India	100	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 (INDIA) 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
ALSTOM 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
NOMAD DIGITAL ITALIA S.R.L.	Italy	100	Full consolidation
ALSTOM Métro d'Abidjan	Ivory Coast	100	Full consolidation
ALSTOM Kazakhstan LLP	Kazakhstan	100	Full consolidation
EKZ Service Limited Liability Partnership	Kazakhstan	100	Full consolidation
ELECTROVOZ KURASTYRU ZAUYTY LLP	Kazakhstan	100	Full consolidation
ALSTOM Baltics SIA	Latvia	100	Full consolidation
ALSTOM Transport Systems (Malaysia) Sdn. Bhd.	Malaysia	100	Full consolidation
ALSTOM Holding Mauritius Ltd.	Mauritius	100	Full consolidation
ALSTOM Mauritius Ltd.	Mauritius	100	Full consolidation
ALSTOM Ferroviaria Mexico, S.A. de C.V.	Mexico	100	Full consolidation
BT ENSAMBLES MÉXICO, S. DE R.L. DE C.V.	Mexico	100	Full consolidation
BT MÉXICO CONTROLADORA , S. DE R.L. DE C.V.	Mexico	100	Full consolidation
BT PERSONAL MÉXICO, S. DE R.L. DE C.V.	Mexico	100	Full consolidation
ALSTOM CABLIANCE	Morocco	100	Full consolidation
BOMBARDIER TRANSPORT MAROC S.A.S	Morocco	100	Full consolidation
ALSTOM Global Holding SE	Netherlands	100	Full consolidation
ALSTOM Holdings Netherlands B.V.	Netherlands	100	Full consolidation
ALSTOM Netherlands B.V.	Netherlands	100	Full consolidation
ALSTOM Traction B.V.	Netherlands	100	Full consolidation
ALSTOM Vastgoed B.V.	Netherlands	100	Full consolidation
NOMAD DIGITAL B.V.	Netherlands	100	Full consolidation
ALSTOM Rail Transportation New Zealand Limited	New Zealand	100	Full consolidation
AT NIGERIA LIMITED	Nigeria	100	Full consolidation
ALSTOM Enio ANS	Norway	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 (SHARED SERVICES) PHILIPPINES, INC.	Philippines	100	Full consolidation
ALSTOM Transport Construction Philippines, Inc	Philippines	100	Full consolidation
BOMBARDIER TRANSPORTATION PHILIPPINES, INC.	Philippines	100	Full consolidation
ALSTOM Konstal Spolka Akcyjna	Poland	100	Full consolidation
ALSTOM Pojazdy Szynowe Sp. z o.o.	Poland	100	Full consolidation
ALSTOM ZWUS sp. z o.o.	Poland	100	Full consolidation
ALSTOM Ferroviária Portugal, S.A.	Portugal	100	Full consolidation
NOMAD TECH, LDA.	Portugal	51	Full consolidation
ALSTOM GSS Romania S.R.L.	Romania	100	Full consolidation
ALSTOM Transport SA. (Romania)	Romania	93	Full consolidation

ALSTOM Transport Rus LLC	Russian Federation	100	Full consolidation
RESOURCE TRANSPORTATION LLC	Russian Federation	100	Full consolidation
BOMBARDIER SAUDI ARABIA LTD.	Saudi Arabia	100	Full consolidation
ALSTOM Transport (Holdings) Systems Singapore Pte. Ltd.	Singapore	100	Full consolidation
ALSTOM Transport (S) Pte Ltd	Singapore	100	Full consolidation
ALSTOM Transport Systems (Singapore) Pte. Ltd.	Singapore	100	Full consolidation
ALSTOM Rolling Stock SA Pty Ltd	South Africa	74	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	100	Full consolidation
BOMBARDIER TRANSPORTATION (ROLLING STOCK) SOUTH AFRICA PROPRIETARY LIMITED (RF)	South Africa	100	Full consolidation
BOMBELA ELECTRICAL AND MECHANICAL WORKS (PTY) LTD.	South Africa	90	Full consolidation
BOMBELA MAINTENANCE (PTY) LTD.	South Africa	90	Full consolidation
GIBELA RAIL TRANSPORT CONSORTIUM (PTY) LTD	South Africa	70	Full consolidation
ALSTOM Korea Transport Ltd	South Korea	100	Full consolidation
ALSTOM Korea Transportation Ltd.	South Korea	100	Full consolidation
ALSTOM Movilidad, S.L.	Spain	100	Full consolidation
ALSTOM Transporte, S.A.	Spain	100	Full consolidation
APLICACIONES TECNICAS INDUSTRIALES, S.A.	Spain	100	Full consolidation
ALSTOM Holding Sweden AB	Sweden	100	Full consolidation
ALSTOM Rail Sweden AB	Sweden	100	Full consolidation
ALSTOM Transport AB	Sweden	100	Full consolidation
ALSTOM Transport Information Systems AB	Sweden	100	Full consolidation
ALSTOM Transportation (Signal) Sweden AB	Sweden	100	Full consolidation
ALSTOM Transportation (Signal) Sweden HB	Sweden	67	Full consolidation
ALSTOM Network Schweiz AG	Switzerland	100	Full consolidation
ALSTOM Schienenfahrzeuge AG	Switzerland	100	Full consolidation
ALSTOM Schweiz AG	Switzerland	100	Full consolidation
ALSTOM Transport Solutions (Taiwan) Ltd.	Taiwan	100	Full consolidation
ALSTOM (Thailand) Ltd.	Thailand	100	Full consolidation
ALSTOM Holdings (Thailand) Ltd.	Thailand	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
ALSTOM Signalling, Limited Liability Company	Ukraine	100	Full consolidation
BOMBARDIER TRANSPORTATION GULF DMCC	United Arab Emirates	100	Full consolidation
ALSTOM (Investment) UK Limited	United Kingdom	100	Full consolidation
ALSTOM (Litchurch) Limited	United Kingdom	100	Full consolidation
ALSTOM (UK) CIF Trustee Limited	United Kingdom	100	Full consolidation
ALSTOM Academy for Rail	United Kingdom	100	Full consolidation
ALSTOM Electronics Limited	United Kingdom	100	Full consolidation
ALSTOM Engineering and Services Limited	United Kingdom	100	Full consolidation
ALSTOM Network UK Ltd	United Kingdom	100	Full consolidation
ALSTOM NL Service Provision Limited	United Kingdom	100	Full consolidation
ALSTOM Product and Services Limited	United Kingdom	100	Full consolidation
ALSTOM Transport Service Ltd	United Kingdom	100	Full consolidation
ALSTOM Transport UK (Holdings) Ltd	United Kingdom	100	Full consolidation

ALSTOM Transport UK Limited	United Kingdom	100	Full consolidation
ALSTOM Transportation (Global Holding) UK Limited	United Kingdom	100	Full consolidation
ALSTOM UK Pension Trustee Limited	United Kingdom	100	Full consolidation
ALSTOM UK VP Pension Trustee Limited	United Kingdom	100	Full consolidation
CROSSFLEET LIMITED	United Kingdom	100	Full consolidation
INFRASIG LTD.	United Kingdom	100	Full consolidation
NOMAD DIGITAL (INDIA) LIMITED	United Kingdom	70	Full consolidation
NOMAD DIGITAL LIMITED	United Kingdom	100	Full consolidation
NOMAD HOLDINGS LIMITED	United Kingdom	100	Full consolidation
PRORAIL LIMITED	United Kingdom	100	Full consolidation
SOUTH EASTERN TRAIN MAINTENANCE LTD.	United Kingdom	100	Full consolidation
WEST COAST SERVICE PROVISION LIMITED	United Kingdom	100	Full consolidation
WEST COAST TRAINCARE LIMITED	United Kingdom	100	Full consolidation
ALSKAW LLC	USA	100	Full consolidation
ALSTOM Mass Transit Corp.	USA	100	Full consolidation
ALSTOM Signaling Inc.	USA	100	Full consolidation
ALSTOM Signaling Operation, LLC	USA	100	Full consolidation
ALSTOM Transit LLC	USA	100	Full consolidation
ALSTOM Transport Holding US Inc.	USA	100	Full consolidation
ALSTOM Transport Services Inc.	USA	100	Full consolidation
ALSTOM Transport USA Inc.	USA	100	Full consolidation
ALSTOM Transportation Inc.	USA	100	Full consolidation
AUBURN TECHNOLOGY, INC.	USA	100	Full consolidation
B&C TRANSIT INC.	USA	100	Full consolidation
NOMAD DIGITAL, INC	USA	100	Full consolidation
SOUTHERN NEW JERSEY RAIL GROUP L.L.C.	USA	100	Full consolidation
ALSTOM Venezuela, S.A.	Venezuela	100	Full consolidation
ALSTOM Transport Vietnam Ltd	Vietnam	100	Full consolidation
BTREN MANTENIMIENTO FERROVIARIO S.A.	Spain	51	Joint Operation
IRVIA MANTENIMIENTO FERROVIARIO, S.A.	Spain	51	Joint Operation
THE ATC JOINT VENTURE	United Kingdom	38	Joint Operation
CITAL	Algeria	49	Equity Method
EDI RAIL - ALSTOM Transport (Maintenance) Pty Limited	Australia	50	Equity Method
EDI RAIL - ALSTOM Transport Pty Limited	Australia	50	Equity Method
NGR HOLDING COMPANY PTY LTD.	Australia	10	Equity Method
NGR PROJECT COMPANY PTY LTD.	Australia	10	Equity Method
GROUPE PMM OPERATIONS AND MAINTENANCE G.P.	Canada	50	Equity Method
TRANSED O&M PARTNERS GENERAL PARTNERSHIP	Canada	60	Equity Method
TRANSED PARTNERS GENERAL PARTNERSHIP	Canada	10	Equity Method
ALSANEO L7 SPA	Chile	50	Equity Method
ALSTOM Sifang (Qingdao) Transportation Ltd.	China	50	Equity Method
BOMBARDIER NUG SIGNALLING SOLUTIONS COMPANY LIMITED	China	50	Equity Method
BOMBARDIER TRANSPORTATION EQUIPMENT (SUZHOU) CO., LTD.	China	50	Equity Method
CASCO SIGNAL LTD	China	49	Equity Method
CHANGCHUN CHANGKE ALSTOM RAILWAY VEHICLES COMPANY LTD.	China	50	Equity Method

CRRC PUZHEN ALSTOM TRANSPORTATION SYSTEMS LIMITED	China	50	Equity Method
GUANGXI LIUZHOU PUZHEN ALSTOM TRANSPORTATION SYSTEM CO., LTD.	China	50	Equity Method
GUANGZHOU CHANGKE ALSTOM RAIL TRANSIT EQUIPMENT COMPANY LTD	China	50	Equity Method
Jiangsu ALSTOM NUG Propulsion System Co Ltd.	China	50	Equity Method
SHANGHAI ALSTOM Transport Company Limited	China	40	Equity Method
SHENTONG ALSTOM (SHANGHAI) RAIL TRANSIT VEHICLE MAINTENANCE COMPANY LIMITED	China	50	Equity Method
TRANSMASHHOLDING LIMITED(*)	Cyprus	20	Equity Method
SPEEDINNOV	France	75	Equity Method
LLP JV KAZELEKTROPRIVOD	Kazakhstan	50	Equity Method
SMART TECHNOLOGY ALMATY COM TOO(*)	Kazakhstan	20	Equity Method
TOO PROMMASHKOMPLEKT(*)	Kazakhstan	10	Equity Method
TOO R.W.S. WHEELSET(*)	Kazakhstan	20	Equity Method
TMHS(*)	Mongolia	20	Equity Method
MALOCO GIE	Morocco	70	Equity Method
RAILCOMP BV(*)	Netherlands	60	Equity Method
TMH-ALSTOM BV(*)	Netherlands	60	Equity Method
RAIL ENGINEERING SP. Z O.O.	Poland	60	Equity Method
AM-TEKH(*)	Russian Federation	20	Equity Method
AVIS OOO(*)	Russian Federation	17	Equity Method
CORPORATE UNIVERSITY OF LOCOMOTIVE TECHNOLOGIES(*)	Russian Federation	20	Equity Method
DEMIKHOVSKY MASHINOSTROITELNY ZAVOD OAO(*)	Russian Federation	20	Equity Method
DIESEL-INSTRUMENT SPB LLC(*)	Russian Federation	10	Equity Method
DIMICROS OAO(*)	Russian Federation	10	Equity Method
DOL BRIGANTINA LLC(*)	Russian Federation	17	Equity Method
ELTK-URAL LLC(*)	Russian Federation	10	Equity Method
ENERGODRIVE OOO(*)	Russian Federation	10	Equity Method
MTR PLANNING AND MANAGEMENT CENTER LLC (*)	Russian Federation	20	Equity Method
IVSK OOO(*)	Russian Federation	12	Equity Method
IZD TMH LLC(*)	Russian Federation	19	Equity Method
KOLOMENSKY ZAVOD OAO(*)	Russian Federation	19	Equity Method
KOLOMNA ENERGO DIESEL LLC(*)	Russian Federation	19	Equity Method
LAZUR OOO(*)	Russian Federation	17	Equity Method
LLC ALMETA(*)	Russian Federation	17	Equity Method
LLC PLAVA(*)	Russian Federation	17	Equity Method
LOCOTECH GLOBAL TRADING(*)	Russian Federation	20	Equity Method
LOCOTECH-FOUNDRY PLANTS(*)	Russian Federation	15	Equity Method
LOCOTECH-KOMPOSIT LLC(*)	Russian Federation	8	Equity Method
LOCOTECH-LEASING(*)	Russian Federation	15	Equity Method
LOCOTECH-PROMSERVICE(*)	Russian Federation	20	Equity Method
LOCOTECH-SERVICE(*)	Russian Federation	20	Equity Method
METROVAGONMASH OAO(*)	Russian Federation	17	Equity Method
METROVAGONMASH SERVICE LLC(*)	Russian Federation	17	Equity Method
MONTAZHNAYA BAZA OAO(*)	Russian Federation	2	Equity Method
NO TIV ZAO(*)	Russian Federation	16	Equity Method

NOVOCHERKASSKY ELEKTROVOZOSTROITELNY ZAVOD PROIZVODSTVENNAY KOMPANIYA OOO(*)	Russian Federation	20	Equity Method
OKHOTRESURS LLC(*)	Russian Federation	20	Equity Method
OKTYABRSKY ELEKTROVAGONOREMONTNY ZAVOD OAO(*)	Russian Federation	15	Equity Method
OSTIUM LLC(*)	Russian Federation	17	Equity Method
OVK TMH ZAO(*)	Russian Federation	20	Equity Method
PENZADIESELMASH OAO(*)	Russian Federation	15	Equity Method
PENZENSKIYE DIESELNIYE DVIGATELY LLC(*)	Russian Federation	20	Equity Method
PO BEZHITSKAYA STAL OAO(*)	Russian Federation	12	Equity Method
PROFIL LLC(*)	Russian Federation	13	Equity Method
RAILCOMP LLC(*)	Russian Federation	60	Equity Method
RAZVITIYE OOO(*)	Russian Federation	20	Equity Method
REKOLD AO(*)	Russian Federation	7	Equity Method
RIVITSA OOO(*)	Russian Federation	17	Equity Method
SALVEO OOO(*)	Russian Federation	20	Equity Method
SAPFIR OOO(*)	Russian Federation	20	Equity Method
STAGNUM LLC(*)	Russian Federation	17	Equity Method
STERZH OOO(*)	Russian Federation	17	Equity Method
TMH ENERGY SOLUTIONS LLC(*)	Russian Federation	15	Equity Method
TMH ENGINEERING ASIA LLC(*)	Russian Federation	10	Equity Method
TMH ENGINEERING LLC(*)	Russian Federation	20	Equity Method
TMH FINANCE LLC(*)	Russian Federation	20	Equity Method
TMH INVESTMENTS LLC(*)	Russian Federation	20	Equity Method
TMH PRO LLC(*)	Russian Federation	20	Equity Method
TMH TECHNOLOGIE LLC(*)	Russian Federation	20	Equity Method
TMH-ELECTROTEKH LLC(*)	Russian Federation	20	Equity Method
TMH-LOCOMOTIVY AO(*)	Russian Federation	20	Equity Method
TMH-PTR LLC(*)	Russian Federation	20	Equity Method
TMHS LOKALIZATSIYA LLC(*)	Russian Federation	10	Equity Method
TORGOVY DOM TMH ZAO(*)	Russian Federation	20	Equity Method
TRAMRUS LLC(*)	Russian Federation	60	Equity Method
TRANSCONVERTER LLC(*)	Russian Federation	13	Equity Method
TRANSHOLDLEASING AO(*)	Russian Federation	4	Equity Method
TRANSMASH OAO(*)	Russian Federation	12	Equity Method
TRANSMASHHOLDING AO(*)	Russian Federation	20	Equity Method
TRTRANS LLC(*)	Russian Federation	60	Equity Method
TSENTR PERSPEKTIVNYKH TECHNOLOGIY TMH LLC(*)	Russian Federation	20	Equity Method
TVER-SAFARI LLC(*)	Russian Federation	17	Equity Method
TVERSKOY VAGONOSTROITELNY ZAVOD OAO(*)	Russian Federation	17	Equity Method
TZENTR PERSPEKTIVNYKH TEKNNOLOGIY TMH LLC(*)	Russian Federation	20	Equity Method
UPRAVLYAUSCHAYA KOMPANIYA BRYANSKY MASHINOSTROITELNY ZAVOD ZAO(*)	Russian Federation	20	Equity Method
VOSKHOD LLC(*)	Russian Federation	9	Equity Method
VSEROSSIYSKY NAUCHNO-ISSLEDOVATELSKY I PROEKTNO-KONSTRUKTORSKY INSTITUT ELEKTROVOZOSTROENIYA OAO(*)	Russian Federation	13	Equity Method
YUZHDIESELMASH OAO(*)	Russian Federation	1	Equity Method
ZAVOD AIT(*)	Russian Federation	7	Equity Method

ZENTROSVARMASH OAO(*)	Russian Federation	20	Equity Method
ZHELDORREMMASH(*)	Russian Federation	15	Equity Method
ZTOV LLC(*)	Russian Federation	3	Equity Method
BOMBELA TKC (PROPRIETARY) LIMITED	South Africa	25	Equity Method
ISITHIMELA RAIL SERVICES (PTY) LTD.	South Africa	50	Equity Method
EK EISENBAHNKOMPONENTEN AG(*)	Switzerland	20	Equity Method
FIRST LOCOMOTIVE HOLDING AG	Switzerland	15	Equity Method
LUGANSKTEPLOVOZ OAO(*)	Ukraine	15	Equity Method
TRANSMASH EAST TRAIN TRADING LLC(*)	United Arab Emirates	20	Equity Method
ABC ELECTRIFICATION LTD	United Kingdom	33	Equity Method
LAX INTEGRATED EXPRESS SOLUTIONS HOLDCO, LLC	USA	10	Equity Method
LAX INTEGRATED EXPRESS SOLUTIONS, LLC	USA	10	Equity Method
V/LINE MAINTENANCE PTY LTD	Australia	100	Non consolidated investment
RTA RAIL TEC ARSENAL FAHRZEUGVERSUCHSANLAGE GMBH	Austria	44	Non consolidated investment
4iTEC 4.0	France	11	Non consolidated investment
AIRE URBAINE INVESTISSEMENT	France	4	Non consolidated investment
CADEMCE SAS	France	16	Non consolidated investment
CAMPUS CYBER	France	3	Non consolidated investment
COMPAGNIE INTERNATIONALE DE MAINTENANCE - C.I.M.	France	1	Non consolidated investment
EASYMILE	France	13	Non consolidated investment
ESPACE DOMICILE SA HABITAT LOYER MODERE	France	1	Non consolidated investment
FRAMECA - FRANCE METRO CARACAS	France	26	Non consolidated investment
MOBILITE AGGLOMERATION REMOISE 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 CONCESSIONNAIRE DU TRANSPORT SUR VOIE RÉSERVÉE DE L'AGGLOMÉRATION CAENNAISE (S.T.V.R) S.A	France	39	Non consolidated investment
SOCIÉTÉ D'ÉCONOMIE MIXTE LOCALE LE PHÉNIX THÉÂTRE DE VALENCIENNES	France	1	Non consolidated investment
SOCIETE IMMOBILIERE DE VIERZON	France	1	Non consolidated investment
SUPERGRID INSTITUTE SAS	France	2	Non consolidated investment
VALUTEC S.A.	France	1	Non consolidated investment
IFB INSTITUT FUR BAHNTECHNIK GMBH	Germany	7	Non consolidated investment
PARTNER FÜR BERLIN HOLDING GESELLSCHAFT FÜR HAUPTSTADT-MARKETING MBH	Germany	1	Non consolidated investment
PARS SWITCH	Iran	1	Non consolidated investment
CYLUS CYBER SECURITY LTD.	Israel	9	Non consolidated investment
CONSORZIO ELIS PER LA FORMAZIONE PROFESSIONALE SUPERIORE	Italy	0	Non consolidated investment
CRIT SRL	Italy	1	Non consolidated investment
METRO 5 SPA	Italy	9	Non consolidated investment
TRAM DI FIRENZE S.p.A.	Italy	9	Non consolidated investment
SUBURBANO EXPRESS, S.A. DE C.V.	Mexico	11	Non consolidated investment
IDEON S.A.	Poland	0	Non consolidated investment
INWESTSTAR S.A.	Poland	0	Non consolidated investment
KOLMEX SA	Poland	2	Non consolidated investment
KRAKOWSKIE ZAKLADY AUTOMATYKI S. A.	Poland	12	Non consolidated investment

NORMETRO ACE AGRUPAMENTO DO METROPOLITANO DO PORTO	Portugal	25	Non consolidated investment
FIRST LOCOMOTIVE COMPANY LLC	Russian Federation	15	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
Consenec AG	Switzerland	5	Non consolidated investment
ARGENTINE CLUB LIMITED	United Kingdom	1	Non consolidated investment
TRAMLINK NOTTINGHAM (HOLDINGS) LTD	United Kingdom	13	Non consolidated investment
WHEREISMYTRANSPORT LIMITED	United Kingdom	3	Non consolidated investment
MASSACHUSETTS BAY COMMUTER RAILROAD COMPANY, LLC	USA	20	Non consolidated investment

(*) Subsidiaries of TMH Limited., consolidated within Alstom financial statements by equity method.