Hitachi High-Tech

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Financial Section

Annual Report 2016

Year ended March 31, 2016

Hitachi High-Technologies Corporation

Consolidated Financial Statements

Consolidated Statements of Financial Position

Millions of yen

	Notes	As of March 31, 2015	As of March 31, 2016
Assets			
Current assets			
Cash and cash equivalents	5,28,31	153,942	169,375
Trade receivables	6,28,31	136,586	134,583
Investments in securities and other financial assets	28	21,629	6,366
Inventories	7	90,709	93,306
Income taxes receivable		938	2,299
Other current assets		4,344	5,460
Subtotal		408,148	411,388
Assets held for sale	8	269	383
Total current assets		408,417	411,771
Non-current assets			
Property, plant and equipment	9	71,665	70,752
Intangible assets	10	13,271	10,330
Investments accounted for using the equity method	11	314	323
Trade receivables	6,28	503	966
Investments in securities and other financial assets	28,32	15,011	13,977
Deferred tax assets	12	24,454	21,761
Other non-current assets	15	3,070	1,152
Total non-current assets		128,289	119,261
Total assets		536,705	531,032

Millions of yen

	Notes	As of March 31, 2015	As of March 31, 2016
Liabilities			
Current liabilities			
Trade payables	13,28,31,32	121,637	109,975
Other financial liabilities	15,28	14,294	16,494
Income taxes payable		8,205	1,149
Accrued expenses		22,198	21,591
Advances received		18,431	15,486
Provisions	14	2,102	1,812
Other current liabilities		1,347	1,190
Total current liabilities		188,214	167,697
Non-current liabilities			
Other financial liabilities	15,28	196	7,038
Retirement and severance benefits	15	43,972	33,067
Provisions	14	1,778	1,467
Deferred tax liabilities	12	135	87
Other non-current liabilities		714	623
Total non-current liabilities		46,795	42,282
Total liabilities		235,009	209,979
Equity			
Hitachi High-Technologies Corporation stockholders' equity			
Common stock	16	7,938	7,938
Capital surplus	16	35,662	35,662
Retained earnings	16	239,553	267,903
Accumulated other comprehensive income	16	18,567	9,636
Treasury stock, at cost	16	(343)	(349)
Total Hitachi High-Technologies Corporation stockholders' equity		301,378	320,790
Non-controlling interests		319	264
Total equity		301,696	321,054
Total liabilities and equity		536,705	531,032

Consolidated Statements of Profit or Loss and Consolidated Statements of Comprehensive Income

Consolidated Statements of Profit or Loss

Years ended March 31, 2015 and 2016 — Millions of yen

	Notes	2015	2016
Revenues	31	619,632	628,984
Cost of sales	19,20	(483,671)	(487,993)
Gross profit		135,961	140,991
Selling, general and administrative expenses	18,19,20	(88,257)	(93,945)
Other income	22	582	4,969
Other expenses	19,21,22	(1,358)	(2,660)
Operating profit		46,928	49,356
Financial income	23	219	312
Financial expenses	23	(2,382)	(1,510)
Share of profits of investments accounted for using the equity method		12	51
EBIT (Earnings before interest and taxes)		44,778	48,209
Interest income	23	450	409
Interest charges	23	(39)	(52)
Income from continuing operations, before income taxes		45,189	48,566
Income taxes	12	(13,053)	(12,575)
Income from continuing operations		32,136	35,991
Loss from discontinued operations	24	(1,005)	—
Net income		31,131	35,991
Net income attributable to:			
Hitachi High-Technologies Corporation stockholders			
Continuing operations		32,098	35,989
Discontinued operations		(1,005)	—
Total		31,093	35,989
Non-controlling interests		38	1
Total		31,131	35,991
Earnings (loss) per share from continuing and discontinued operations, attributable to Hitachi High-Technologies Corporation stockholders	25		
Basic and diluted earnings (loss) per share from continuing and discontinued operations, attributable to Hitachi High-Technologies Corporation stockholders			(Yen)
Continuing operations		233.38	261.68
Discontinued operations		(7.30)	—
Total		226.08	261.68

Consolidated Statements of Comprehensive Income

Years ended March 31, 2015 and 2016 Millions of yen

	Notes	2015	2016
Net income		31,131	35,991
Other comprehensive income (OCI)			
Items not to be reclassified into net income			
Net changes in financial assets measured at fair value through OCI	26	1,445	(752)
Remeasurements of defined benefit plans	26	(82)	(6,951)
Total items not to be reclassified into net income		1,363	(7,704)
Items that can be reclassified into net income			
Foreign currency translation adjustments	26	4,050	(3,157)
Net changes in cash flow hedges	26	(268)	1,132
Total items that can be reclassified into net income		3,781	(2,025)
Other comprehensive income (OCI)		5,144	(9,729)
Comprehensive income		36,275	26,262
Comprehensive income attributable to:			
Hitachi High-Technologies Corporation stockholders		36,192	26,295
Non-controlling interests		83	(34)
Total		36,275	26,262

Consolidated Statements of Changes in Equity

Millions of yen

	Notes	Common stock	Capital surplus	Retained earnings	Accumulated other comprehensive income		
					Net changes in financial assets measured at FVTOCI	Remeasurements of defined benefit plans	Foreign currency translation adjustments
As of March 31, 2014		7,938	35,662	213,799	5,690	4,813	3,496
Net income				31,093			
Other comprehensive income					1,445	(82)	4,004
Comprehensive income		−	−	31,093	1,445	(82)	4,004
Acquisition of treasury stock	16		(0)				
Sales of treasury stock	16		0				
Dividends	17			(5,501)			
Acquisition (disposal) of non-controlling interests							
Reclassified into retained earnings				162	(2)	(160)	
Total transactions with the owners		−	0	(5,339)	(2)	(160)	−
As of March 31, 2015		7,938	35,662	239,553	7,133	4,570	7,501
Net income				35,989			
Other comprehensive income					(752)	(6,951)	(3,122)
Comprehensive income		−	−	35,989	(752)	(6,951)	(3,122)
Acquisition of treasury stock	16		(0)				
Sales of treasury stock	16						
Dividends	17			(6,877)			
Acquisition (disposal) of non-controlling interests							
Reclassified into retained earnings				(763)	(5)	768	
Total transactions with the owners		−	(0)	(7,639)	(5)	768	−
As of March 31, 2016		7,938	35,662	267,903	6,375	(1,613)	4,379

Millions of yen

	Notes	Accumulated other comprehensive income		Treasury stock, at cost	Total Hitachi High-Technologies Corporation stockholders' equity	Non-controlling interests	Total equity
		Net changes in cash flow hedges	Total accumulated other comprehensive income				
As of March 31, 2014		(368)	13,631	(334)	270,696	204	270,900
Net income			–		31,093	38	31,131
Other comprehensive income		(268)	5,099		5,099	45	5,144
Comprehensive income		(268)	5,099	–	36,192	83	36,275
Acquisition of treasury stock	16		–	(8)	(8)		(8)
Sales of treasury stock	16		–	0	0		0
Dividends	17		–		(5,501)	(39)	(5,540)
Acquisition (disposal) of non-controlling interests			–		–	70	70
Reclassified into retained earnings			(162)		–		–
Total transactions with the owners		–	(162)	(8)	(5,510)	31	(5,478)
As of March 31, 2015		(636)	18,567	(343)	301,378	319	301,696
Net income			–		35,989	1	35,991
Other comprehensive income		1,132	(9,694)		(9,694)	(35)	(9,729)
Comprehensive income		1,132	(9,694)	–	26,295	(34)	26,262
Acquisition of treasury stock	16		–	(6)	(6)		(6)
Sales of treasury stock	16		–		–		–
Dividends	17		–		(6,877)	(21)	(6,898)
Acquisition (disposal) of non-controlling interests			–		–		–
Reclassified into retained earnings			763		–		–
Total transactions with the owners		–	763	(6)	(6,883)	(21)	(6,904)
As of March 31, 2016		496	9,636	(349)	320,790	264	321,054

Consolidated Statements of Cash Flows

Years ended March 31, 2015 and 2016 — Millions of yen

	Notes	2015	2016
Cash flows from operating activities:			
Net income		31,131	35,991
Adjustments to reconcile net income to net cash provided by operating activities			
Depreciation and amortization	9,10	10,574	10,527
Impairment losses	21,24	1,330	1,889
Income taxes	12	12,656	12,575
Share of profits of investments accounted for using the equity method		(12)	(51)
Interest income	23	(450)	(409)
Dividend income	23	(209)	(288)
Interest expense	23	39	52
Profits on sales of property, plant and equipment and intangible assets	22	541	(88)
Increase in trade receivables		(2,233)	(943)
Increase in inventories		(11,440)	(4,112)
Increase (decrease) in trade payables		12,824	(7,682)
Decrease in advances received		(2,508)	(2,893)
Decrease in retirement and severance benefits	15	(4,798)	(7,989)
Other		(1,525)	(2,803)
Subtotal		45,920	33,775
Interest received		453	406
Dividends received		237	346
Interest paid		(40)	(51)
Income taxes paid		(12,389)	(16,201)
Income taxes refund		245	267
Net cash provided by operating activities		34,426	18,541
Cash flows from investing activities:			
Payments into deposits and time deposits		(17,100)	(97)
Proceeds from withdrawal of deposits and time deposits		18,600	12,597
Purchase of property, plant and equipment	9	(10,377)	(9,138)
Purchase of intangible assets	10	(3,033)	(2,099)
Proceeds from sale of property, plant and equipment	9	100	2,596
Proceeds from sale of intangible assets	10	0	2
Purchase of investments in securities and other financial assets	28	(400)	(935)
Proceeds from sale and redemption of investments in securities and other financial assets	28	1,381	2,531
Proceeds from transfer of business	24	1,453	641
Other		99	9
Net cash used in (provided by) investing activities		(9,277)	6,107
Cash flows from financing activities:			
Proceeds from payments from non-controlling interests		70	−
Dividends paid to Hitachi High-Technologies Corporation stockholders	17	(5,503)	(6,874)
Dividends paid to non-controlling interests		−	(40)
Acquisition of common stock for treasury	16	(8)	(6)
Proceeds from sales of treasury stock	16	0	−
Other		(221)	(199)
Net cash used in financing activities		(5,662)	(7,120)
Effect of exchange rate changes on cash and cash equivalents		1,530	(2,095)
Net increase in cash and cash equivalents		21,018	15,433
Cash and cash equivalents at beginning of year	5	132,923	153,942
Cash and cash equivalents at end of year	5	153,942	169,375

Notes to the Consolidated Financial Statements

1. Reporting Entity

Hitachi High-Technologies Corporation (the Company) is a corporation domiciled in Japan, whose shares are publicly listed. The registered address of its Head Office is 24-14, Nishi-shimbashi 1-chome, Minato-ku, Tokyo. The Company's consolidated financial statements for the year ended March 31, 2016, comprise those of the Company and its subsidiaries (the Group) and its interests in associates. The Group's businesses center on electronics and its reportable segments consist of Electronic Device Systems, Fine Technology Systems, Science & Medical Systems, Industrial & IT Systems and Advanced Industrial Products.

2. Basis of Presentation

(1) Compliance with IFRS

As the Company meets the requirements of a "Specified Company applying Designated International Financial Reporting Standards" pursuant to Article 1-2 of the Ordinance on Terminology,
Forms and Preparation Methods of Consolidated Financial Statements, the consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by International Accounting Standards Board (IASB), as permitted by the provision of Article 93 of the Ordinance.

On June 24, 2016, Masahiro Miyazaki, Representative Executive Officer, President, and Chief Executive Officer, and Shunichi Uno, Chief Financial Officer, Senior Vice President, and Executive Officer approved these consolidated financial statements.

(2) Basis of Measurement

The Group's consolidated financial statements have been prepared on a historical cost basis, except for the financial instruments and the liabilities and assets associated with defined benefit plans stated in Note 3 *Summary of Significant Accounting Policies*.

(3) Presentation Currency

The consolidated financial statements are presented in Japanese yen as the Company's functional currency. The financial information in Japanese yen is rounded to the nearest million.

(4) Use of Estimates and Judgments

Management has made a number of judgments, estimates and assumptions relating to the application of accounting policies, reporting of revenues and expenses and assets and liabilities in the preparation of these IFRS-based consolidated financial statements. However, actual results could differ from those estimates.

Estimates and assumptions are continually evaluated. The effect of a revision in accounting estimates, is recognized in the reporting period in which the revision was made and in future periods.

The information regarding judgments used in applying accounting policies that could have a material effect on the Company's consolidated financial statements is included in the following notes:

- Note 3 (1) *Basis of Consolidation*
- Note 3 (5) *Financial Instruments* and Note 28 *Financial Instruments*
- Note 3 (16) *Revenue Recognition*

The information regarding uncertainties arising from assumptions and estimates that could result in material adjustments in the subsequent consolidated financial statements is included in the following notes:

- Note 3 (10) *Impairment of Non-financial Assets* and Note 21 *Impairment Losses*
- Note 3 (12) *Employee Benefits* and Note 15 *Retirement and Severance Benefits*
- Note 3 (13) *Provisions* and Note 14 *Provisions*
- Note 3 (14) *Contingencies* and Note 34 *Contingencies*
- Note 3 (17) *Income Taxes* and Note 12 *Deferred Taxes and Income Taxes*

3. Summary of Significant Accounting Policies

(1) Basis of Consolidation

(i) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group has control over an entity if it has a power to investee, it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The Group consolidates subsidiaries from the date on which it acquires control until the date on which it loses control.

Changes in ownership interests in subsidiaries without a loss of control are accounted for as equity transactions. Changes in ownership interests in subsidiaries with a loss of control are accounted for by derecognizing assets and liabilities, non-controlling interests, equity and accumulated other comprehensive income attributable to the subsidiaries.

Subsidiaries' financial statements are adjusted, if necessary, when their accounting policies differ from those of the Group. All intergroup balances, transactions, unrealized gains and losses are eliminated on consolidation.

Comprehensive income for subsidiaries is attributed to Hitachi High-Technologies Corporation stockholders' equity and non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Hitachi High-Technologies (Shanghai) Co., Ltd. and seven other subsidiaries have fiscal years ending on December 31. A provisional account closing of accounts for these subsidiaries is performed in accordance with annual settlement of accounts as of the Company's fiscal year end. The closing dates of other subsidiaries are same as that of the Company.

(ii) Associates

Associates are entities in which the Group holds 20% to 50% ownership or has the ability to exercise significant influence over their financial and operational policies for any reasons but does not have control or joint control over the investee. Investments in associates are accounted for under the equity method from the date on which the Group obtains significant influence through the date on which it loses such influence.

The financial statements of associates are adjusted, if necessary, when their accounting policies differ from those of the Group.

Giesecke & Devrient K.K. and one other associate have fiscal years ending on December 31. A provisional account closing of accounts for these associates is performed in accordance with annual settlement of accounts as of the Company's fiscal year end.

(2) Business Combinations

Business combinations are accounted for using the acquisition method. For each specific business combination, the Group chooses how to measure investments in which it has non-controlling interests at fair value or by the appropriate share of identifiable net assets of the acquiree. The related acquisition costs are recognized in the period in which they are incurred.

(3) Foreign Currency Translation

(i) Foreign Currency Transactions

Each Group company determines its own functional currency and measures its transactions in that functional currency.

Foreign currency transactions are converted into the functional currency using the exchange rate prevailing at the transaction date or a rate that approximates such a rate. Monetary assets and liabilities denominated in foreign currencies are converted into the functional currency using the exchange rate at the end of the fiscal year. Foreign exchange gains and losses resulting from the currency conversion and settlement are recognized in profit or loss, except where gains and losses on assets or liabilities are recognized in other comprehensive income, foreign exchange effects relating to such assets or liabilities are also recognized in other comprehensive income.

(ii) Foreign Operations

Assets and liabilities of foreign operations are translated into Japanese yen using the exchange rate at the end of the reporting period, while revenue and expense items are translated using the average exchange rates during the period as long as there are no dramatic fluctuations in foreign exchange rates during the period. Translation differences arising from translations of the financial statements of foreign entities are recognized as other comprehensive income. Upon the full disposal of foreign operations or a partial disposal resulting in a loss of significant influence, any related cumulative gain or loss relating to those foreign operations is recognized as profit or loss.

(4) Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, demand deposits, and short-term investments that are readily convertible to known amounts of cash and subject to insignificant risk of change in value and due within three months from the date of acquisition.

(5) Financial Instruments

The Group adopts IFRS 9 “Financial Instruments” (IFRS 9) (issued in November 2009, amended in October 2010).

(i) Non-Derivative Financial Assets

The Group recognizes financial assets measured at amortized cost on the date they arise and recognizes other financial assets at the transaction when the Group becomes a party to the arrangement.

The classification and measurement model of non-derivative financial assets is summarized as follows:

Financial Assets Measured at Amortized Cost

Financial assets are subsequently measured at amortized cost when they meet the following requirements:

• The financial asset is held under a business model the objective of which is to hold the asset to collect contractual cash flows.

• The contractual terms of the financial asset provide cash flows on specified dates that are solely payments of principal and interest on the principal amount outstanding.

Financial assets measured at amortized cost are initially measured at fair value, including direct transaction costs. The carrying amount of financial assets measured at amortized cost is subsequently measured using the effective interest method.

Impairment of Financial Assets Measured at Amortized Cost

Impairment is deemed to have occurred when there is objective evidence of impairment resulting from one or more event after initial recognition and when it is reasonably foreseeable that the future cash flows of the financial assets will be affected.

Objective evidence of impairment includes historical credit loss experience, existence of overdue payments, extended payment terms, negative evaluation by third party credit rating agencies, and deteriorated financial position and operating results, such as a capital deficit.

Impairment losses are estimated based on estimated future cash flows discounted by the initial effective interest rate or the estimated fair value using the observable market price.

In addition to the above impairment losses, the Group evaluates the potential risks of debtors or regions, etc., with regard to the relevant financial assets and recognizes impairment losses based on credit loss ratios calculated taking into consideration historical experience or other factors or estimates of collectible amounts.

Impairment losses directly or through bad debt provisions reduce the carrying amount of the assets, and the losses are recognized in profit or loss. Thereafter, for trade receivables and other receivables, debt provisions are directly written off from the carrying amount where the relevant financial assets are deemed uncollectible.

Financial Assets Measured at Fair Value through Profit or Loss (FVTPL Financial Assets)

Financial assets not classified as financial assets measured at amortized cost and not designated as FVTOCI financial assets are classified as FVTPL financial assets.

FVTPL financial assets are measured at fair value when initially recognized and incurred transaction expenses are recognized in profit or loss. After initial recognition, these assets are measured at fair value and the subsequent changes in fair value are recognized in profit or loss.

Financial Assets Measured at Fair Value through Other Comprehensive Income (FVTOCI Financial Assets)

For equity instruments that the Group holds to maintain close business relations with investees, the Group chooses for each financial asset whether or not it can be irrevocably designated as a FVTOCI financial asset upon initial recognition.

FVTOCI financial assets are initially recognized at fair value, including transaction expenses. After initial recognition, they are measured at fair value, and subsequent changes in fair value are recognized as OCI. Amounts recognized as OCI that are derecognized as financial assets are transferred to retained earnings. Dividends are recognized in profit or loss.

Derecognition of Financial Assets

The Group derecognizes financial assets when contractual rights to cash flows from the financial assets expire or when the contractual rights to receive cash flows from the financial assets are transferred and the risks and economic rewards of owning the financial assets are almost all transferred.

(ii) Non-Derivative Financial Liabilities

The Group classifies all non-derivative financial liabilities as financial liabilities measured at amortized cost and initially recognizes them on the date they arise.

Financial liabilities measured at amortized cost are initially recognized at fair value, less transaction costs. They are subsequently measured at amortized cost based on the effective interest method.

Financial liabilities are derecognized when contractual obligations are redeemed, discharged, canceled, or expired.

(iii) Derivatives and Hedge Accounting

The Group uses forward exchange contracts to hedge changes in cash flow relating to future foreign currency denominated transactions. These contracts are designated as cash flow hedges where satisfying hedge accounting requirements and are initially recognized at fair value. They are subsequently measured at fair value and portions for which hedging is deemed effective against subsequent changes are recognized as OCI.

The Group documents risk management policies, including derivative usage objectives and strategies. In addition, a formal assessment is made at the hedge's inception and subsequently on a periodic basis, as to whether the derivative used in hedging activities is highly effective in offsetting changes in fair value or cash flows of the hedged items.

Hedge accounting is discontinued if a hedge does not meet hedge accounting requirements or the hedging instruments have expired, been sold, or terminated or if the hedge designation has been canceled. If an expected transaction is no longer likely to occur, amounts recognized as OCI are promptly transferred to profit or loss.

(iv) Offsetting Financial Assets and Liabilities

Financial assets and liabilities are offset and reported as a net amount when the Group currently has a legally enforceable right to set off the recognized amounts and intends to settle on a net basis or to realize the asset and settle the liability simultaneously.

(6) Inventories

The cost of inventories includes all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.

Inventories are measured at the lower of cost or net realizable value. Cost is mainly determined by the moving average method for finished goods and raw materials and by the specific identification method for work in process. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to sell.

(7) Property, Plant and Equipment

The Group uses the cost model to measure property, plant and equipment. They are stated at cost, less accumulated depreciation and accumulated impairment losses.

Acquisition cost includes direct costs of acquisition, costs of dismantling, removing and restoration of the assets.

Except for land and other assets that are not depreciated, property, plant and equipment are depreciated using the straight-line method over the following estimated useful lives for major classes of assets:

• Buildings and structures	2 to 60 years
• Machinery, equipment and vehicles	2 to 17 years
• Tools, furniture and fixtures	2 to 20 years

Estimated useful lives and the method of depreciation are reviewed at the fiscal year end. Changes in estimated useful lives or depreciation method are accounted for on a prospective basis as a change in accounting estimate.

(8) Intangible Assets

(i) Goodwill

Goodwill is stated at cost less any accumulated impairment losses, and is not amortized.

(ii) Intangible Assets

The Group applies the cost model to intangible assets and states such assets at cost less accumulated amortization and impairment losses.

Intangible assets acquired separately are measured at cost at initial recognition, and the costs of intangible assets acquired through business combinations are recognized at fair value at the acquisition date.

Intangible assets with finite useful lives are amortized generally using the straight-line method, while intangible assets with indefinite useful lives are not amortized. The estimated useful lives for major classes of assets are as follows:

• Software	2 to 5 years
• Other	5 to 20 years

Estimated useful lives and the method of amortization are reviewed at the fiscal year end. Changes in estimated useful lives or amortization method are accounted for on a prospective basis as a change in accounting estimate.

(9) Leases

(i) Lease Transactions

Whether an arrangement is or contains a lease is determined based on the nature of the arrangement. Leased assets are recognized when fulfillment of the contract is dependent on the use of certain assets or asset groups, with the arrangements providing rights to use the relevant assets.

(ii) Finance Leases

<u>As Lessee</u>

Leases for which all of the risks and economic rewards of ownership are transferred to the Group are classified as finance leases.

Lease assets and liabilities are initially recognized as the lower of the fair value or the present value of the minimum lease payments. After initial recognition, accounting is based on the accounting policies applied to the relevant assets and liabilities.

<u>As Lessor</u>

Leases for which all of the risks and economic value accompanying the asset ownership are transferred to the lessee are classified as finance leases.

Lease receivables are recognized at amounts equivalent to the net investments in the leased assets and included in trade receivables in the consolidated statements of financial position.

(iii) Operating Lease Transactions

Leases other than finance leases are classified as operating leases.

Operating lease payments are recognized in profit or loss on a straight-line basis throughout the lease terms.

(10) Impairment of Non-financial Assets

For each non-financial asset, the Group assesses whether there are any indications that assets may be impaired and tests for impairment when events or circumstances indicate such impairment. For goodwill and intangible assets with indefinite useful lives, the Group annually estimates recoverable amounts and tests for impairment regardless of whether or not there are indications of impairment.

The Group uses the higher of the fair value less costs of disposal or value in use as the recoverable amount of an asset or a cash generating unit. In estimating the value in use, estimated future cash flows are discounted to the present value, using pre-tax discount rates that reflect the time value of money and the inherent risks of the relevant assets and cash generating units. If the carrying amount of an asset or a cash generating unit exceeds the recoverable amount, the impairment loss of the asset is recognized in profit or loss.

For an asset other than goodwill, the recoverable amount is subsequently estimated when there is a significant change in facts and circumstances and there is an indication that an impairment loss previously recognized may no longer exist or has decreased. If the estimated recoverable amount exceeds the carrying amount, the impairment loss recognized previously is reversed to the extent of the carrying amount that would have been recorded, net of depreciation or amortization, if impairment had not been recognized previously.

(11) Assets Held for Sale

An asset or disposal group for which the value is expected to be recovered through a sale rather than through continuing use is classified as an asset or disposal group held for sale when the asset or disposal group could be sold immediately as is or it is highly probable that the asset or disposal group will soon be sold.

Assets held for sale are measured at the lower of the carrying amount or the fair value less costs to sell. There is no depreciation or amortization of assets after classification.

(12) Employee Benefits

(i) Retirement and Severance Benefits

Defined Benefit Plans

The Company and certain subsidiaries maintain defined benefit plans and / or severance lump-sum payment plans to provide retirement and severance benefits to employees.

For each plan, the Group uses the projected unit credit method to calculate the present value of defined benefit obligations and related retirement benefit costs. For a discount rate, a discount period is determined based on the period until the expected date of benefit payment in each fiscal year and the discount rate is determined by reference to market yields for the period corresponding to the discount period at the end of the fiscal year on high-quality corporate bonds.

Liabilities or assets for defined benefit plans are calculated by the present value of the defined benefit obligation, deducting the fair value of any plan assets.

Remeasurements of defined benefit plan liabilities or assets are recognized as other comprehensive income in the period in which incurred but are not subsequently transferred to profit or loss. Past service costs are recognized as profit or loss in the period when incurred.

Defined Contribution Plans

The Company and certain subsidiaries maintain defined contribution plans.

Under a defined contribution plan, the employer contributes certain amounts to another independent entity, and there is no legal or constructive obligation to pay more than the contributions.

Contributions to defined contribution plans are recognized in profit or loss during the periods in which employees provided the relevant service.

(ii) Short-Term Employee Benefits

Short-term employee benefits are recognized in profit or loss during the periods in which employees provided the relevant service.

When there is a legal and constructive obligation to pay bonuses and paid leave, and where it is possible to make reliable estimates, the payments based on such plans are recognized as estimated obligations.

(13) Provisions

The Company recognizes provisions when it has a present obligation (legal or constructive) as a result of past events, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and the amount of the obligation can be reliably estimated.

When the time to settle an obligation is expected to be long, and thus the time value of money is material, the amount of a provision is measured at the present value of the amount of expenditures expected to be required to settle the obligation. The present value is calculated by using pre-tax discount rates that reflect the time value of money and the inherent risks of the relevant obligations.

See Note 14 *Provisions* for a discussion about the nature of the provisions and the amounts recognized by the Group.

(14) Contingencies

(i) Contingent Liabilities

The Group discloses contingent liabilities in Note 34 *Contingencies* if it has possible obligations at the fiscal year end, whose existence cannot be confirmed at that date, or if obligations do not meet the recognition criteria for provisions described above in Note 3(13) *Provisions*, excluding those where the possibility of an outflow of resources embodying economic benefits is remote.

The Group has concluded financial guarantee agreements that require it to make repayments to compensate for a loss incurred if a specified debtor defaults on a payment on the due date based on the terms of a debt instrument.

(ii) Contingent Assets

The Group discloses contingent assets in Note 34 *Contingencies* if an inflow of resources embodying economic benefits is probable, but not virtually certain at the fiscal year end.

(15) Capital

(i) Common Stock and Capital Surplus

The issue prices of equity instruments that the Company issues are recorded in common stock and capital surplus. The direct issuance costs are deducted from capital surplus.

(ii) Treasury Stock

Acquired treasury stock is recognized at cost and deducted from equity, while the difference between the carrying value of treasury stock and its value at the time of sale is recognized in capital surplus.

(16) Revenue Recognition

Revenue is measured at the fair value of consideration received or receivable by the Group, less discounts, rebates or consumption or other taxes. If there is more than one identifiable component in a single transaction, the components of the transaction are split and the revenue recognized for each component. If the economic reality of multiple transactions cannot be presented without being seen as integral, the revenue of multiple transactions is recognized integrally. The Group's revenue recognition criteria and presentation policies are as follows:

(i) Revenue Recognition Standards

<u>Sale of Goods</u>

Revenue from the sale of goods is recognized when the significant risks and rewards of ownership of the goods have been transferred to the customer, the Group has neither continuing involvement nor effective control over the goods sold, the costs incurred in respect of the transaction and the amount of revenue can be measured reliably, and it is probable that the economic benefits associated with the transaction will flow to the Group. Specifically, revenue is recognized at such times as when goods are transferred to a customer, the date of shipment, or the date of acceptance by the customer.

<u>Rendering of Services</u>

Revenue from repairs and support services associated with the sale of products is recognized when services are provided. Revenue from maintenance or other fixed price service contracts is recognized evenly over the contractual period.

<u>Construction Contracts</u>

If the progress of construction can be reliably estimated, revenue is recognized using the percentage of completion method. Revenue under this method is calculated by the latest estimate of the total selling price multiplied by the ratio of the cost incurred to date to the estimated total cost of construction. Any anticipated losses on fixed-price contracts are expensed in profit or loss when such losses are estimated.

If it is impossible to reliably estimate the outcome of a construction contract, revenue is recognized using the cost recovery method. Revenue under the cost recovery method is recognized only to the extent that there is a high probability of cost recovery, and costs are recognized in the period in which they are incurred.

(ii) Revenue Presentation Policy

If the Group is a party to a transaction, all of the revenue received from the customer is presented. If the Group participates in a transaction as an agent for a third party, the commission paid by the customer, excluding the payment collected for the third party, is presented as revenue.

The determination of whether the Group is a party or agent depends on such factors as whether or not it has the primary responsibility for supplying the products and services and executing the order, whether it incurs inventory risks before or after the customer places an order, during shipment, or upon returns, or whether the Group has the right to directly or indirectly set prices.

(17) Income Taxes

Income taxes comprise current and deferred taxes that are recognized in profit or loss, except for taxes recognized in equity or directly in OCI and taxes related to business combinations.

Current income taxes are measured as amounts expected to be paid to or refunded from the taxation authorities. For the calculation of taxes, the Group uses the tax rates and tax laws that have been enacted or substantively enacted by the end of the fiscal year.

Deferred income taxes are calculated based on the temporary differences between the tax basis for assets and liabilities and the carrying amount at the fiscal year end. Deferred tax assets are recognized for deductible temporary differences, carryforward of unused tax credits and unused tax losses to the extent that it is probable that future taxable profit will be available against which they can be utilized. Deferred tax liabilities are recognized for taxable temporary differences.

The deferred tax assets or liabilities are not recognized for the following temporary differences:

- The initial recognition of goodwill
- The initial recognition of assets or liabilities in transactions that are not business combinations and at the time of transaction, affect neither accounting profit nor taxable profit or tax loss
- Taxable temporary differences arising from investments in subsidiaries and associates to the extent that the timing of the reversal of the temporary difference is controlled and that it is probable that the temporary difference will not reverse in the foreseeable future.
- Deductible temporary differences arising from investments in subsidiaries and associates to the extent that it is probable that the temporary difference will not reverse in the foreseeable future and that it is not probable that future taxable profits will be available against which they can be utilized

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the fiscal year when those temporary differences are reversed, based on tax rates that have been enacted or substantively enacted by the end of the fiscal year.

Deferred tax assets and deferred tax liabilities are offset if there is a legally enforceable right to offset deferred tax assets and liabilities with current tax assets and liabilities, and where the same taxation authority imposes the same income tax on the same taxable entity or even on a different taxable entity, where these taxable entities intend to settle current tax assets and liabilities on a net basis or plan to realize these tax assets and liabilities simultaneously.

(18) Consumption Tax

Consumption tax collected and remitted to the taxation authorities is excluded from revenues, cost of sales and expenses.

(19) Earnings per Share

Basic earnings per share are calculated by dividing net income attributable to Hitachi High-Technologies Corporation stockholders by the weighted average number of ordinary shares outstanding during the period, excluding treasury stock.

Basic and diluted earnings per share are the same, as there are no shares with dilutive potential.

(20) New Accounting Standards not yet Adopted by the Group

The following table lists the principal new accounting standards and interpretations issued or amended prior to the approval date of the consolidated financial statements that have not been yet adopted as of the reporting date (March 31, 2016).

The Group is currently evaluating the potential impact of adopting these standards and amendments on the Group, and is unable to estimate the impact at this time.

IFRSs	Title	Mandatory effective date (Fiscal year beginning on or after)	To be adopted by the Group	Description of new standards and amendments
IFRS 9	Financial Instruments	January 1, 2018	To be determined	Amendments for hedge accounting (amended in November 2013) Amendments for the classification and measurement of financial instruments, and adoption of expected credit loss impairment model for financial assets (amended in July 2014)
IFRS 15	Revenue from Contracts with Customers	January 1, 2018	To be determined	Revised accounting standard for revenue recognition and disclosure
IFRS 16	Leases	January1, 2019	To be determined	Changes in definitions and accounting treatment of leases

4. Segment Information

(1) Overview of Reportable Segments

The Group's reportable segments are components for which separate financial information is available and which the Management Committee evaluates regularly in deciding how to allocate resources and in assessing performance.

The Group maintains business divisions at the head office in accordance with the nature of its products and services. Each business division formulates comprehensive internal and external strategies and operates worldwide.

Accordingly, the Group comprises product and service specific segments based on business divisions. Its five business segments are Electronic Device Systems, Fine Technology Systems, Science & Medical Systems, Industrial & IT Systems and Advanced Industrial Products.

The main products and services of each segment are as follows:

Electronic Device Systems

Manufacture, sales, installation and maintenance services of semiconductor–related manufacturing equipment such as etching systems, CD-Measurement SEMs, and inspection systems.

Fine Technology Systems

Manufacture, sales, installation and maintenance services of railway inspection equipment, HD manufacturing equipment, factory automation equipment, and FPD manufacturing equipment.

Science & Medical Systems

Manufacture, sales, installation and maintenance services of various analytical instruments including spectrophotometers, chromatographs, fluorescent X-ray analysis and thermal analysis systems, and electron microscopes, biotechnology products and clinical analyzers.

Industrial & IT Systems

Sales of automated assembly systems for LIBs and other products, HDDs, power generation and transformation facilities, design and development solutions, videoconferencing systems, and telecommunications equipment. Manufacture, sales, installation and maintenance services of instruments and control systems, and related systems

Advanced Industrial Products

Sales of automated assembly systems in steel products, and non-ferrous metal products, components for circuits, plastics, cell materials and components, automotive components, silicon wafers, optical telecommunications device materials and components, optical storage device materials and components, electronic components such as semiconductors, and oil products.

(2) Reportable Segment Information

The accounting methods applied to the business segments reported are generally the same as those described in Note 3 *Summary of Significant Accounting Policies*. Intersegment transactions are generally based on prevailing market prices. Segment income is measured by earnings before interest and taxes (EBIT).

Corporate property, plant and equipment and intangible assets cannot be allocated to particular reportable segments and are not included in the assets of those segments. The related depreciation and amortization are included in segment income because they constitute part of the corporate expenses allocated to each reportable segment.

Information relating to reportable segments from the Group's continuing operations is as follows:

Year ended March 31, 2015

Millions of yen

	Reportable segments						Others (Note 1)	Adjustment	Consolidated
	Electronic Device Systems	Fine Technology Systems	Science & Medical Systems	Industrial & IT Systems	Advanced Industrial Products	Total			
Revenues									
External customers	105,633	10,998	163,279	81,565	255,943	617,419	618	1,595	619,632
Intersegment revenues	259	355	985	3,304	2,167	7,070	933	(8,003)	−
Total	105,893	11,354	164,264	84,869	258,110	624,489	1,551	(6,408)	619,632
Segment income (loss)									
EBIT	17,362	678	26,090	163	2,209	46,501	(2,395)	673	44,778
Interest income (Note 2)	−	−	267	−	−	267	−	184	450
Interest charges (Note 2)	(237)	(29)	−	(125)	(263)	(654)	(7)	622	(39)
Income before income taxes	17,124	649	26,357	37	1,946	46,113	(2,403)	1,479	45,189
Other income and expenses									
Depreciation and amortization (Note 3)	(4,432)	(301)	(4,146)	(1,170)	(459)	(10,508)	(66)	−	(10,574)
Impairment losses (Note 4)	(111)	−	(277)	(164)	−	(553)	(124)	−	(677)
Share of profits of investments accounted for using the equity method (Note 5)	−	−	−	(39)	85	46	−	(34)	12
Segment assets	74,939	8,374	87,217	37,008	97,207	304,744	756	231,204	536,705
Other assets									
Investments accounted for using the equity method (Note 6)	−	−	−	98	98	196	−	118	314
Capital expenditures (Note 4)	6,383	138	3,760	1,242	1,289	12,812	(110)	709	13,410
Segment liabilities	31,357	2,094	26,854	25,590	68,613	154,508	171	80,330	235,009

Notes

1. Others represent businesses segments not included in the reportable segments, and they include indirect-support businesses.
2. Interest income and charges incurred at each business segment are interests of intracompany loans payable. These interest income and charges are offset, and the net amount represented as either interest income or charges in accordance with the net amount since it is recognized on a net basis for internal management purposes. The adjustments for interest income and interest charges are mainly for the head office, which are not attributable to any business segments, and reversal of interests on intracompany loans payable.
3. For the Electronic Device Systems segment, depreciation and amortization include amounts for discontinued operations.
4. Impairment losses and capital expenditure in Adjustments are corporate amounts not attributable to any business segments.
5. For management purposes, share of profits of investments accounted for using the equity method is equivalent to the income before income taxes of equity method associates, and the difference between these amounts and the amounts shown on the consolidated financial statements is included in Adjustment.
6. For management purposes, investments accounted for using the equity method in each business segment are initial investments in equity method associates, and the difference between these amounts and the amounts shown on the consolidated financial statements is included in Adjustment.

Year ended March 31, 2016

Millions of yen

	Reportable segments						Others (Note 1)	Adjustment	Consolidated
	Electronic Device Systems	Fine Technology Systems	Science & Medical Systems	Industrial & IT Systems	Advanced Industrial Products	Total			
Revenues									
External customers	102,424	14,498	176,356	80,686	254,228	628,192	1,113	(321)	628,984
Intersegment revenues	287	571	640	2,794	2,594	6,886	914	(7,799)	－
Total	102,711	15,069	176,997	83,480	256,822	635,078	2,027	(8,121)	628,984
Segment income (loss)									
EBIT	15,307	492	26,571	638	3,457	46,465	(1,525)	3,270	48,209
Interest income (Note 2)	－	－	293	－	－	293	－	116	409
Interest charges (Note 2)	(287)	(37)	－	(99)	(335)	(757)	(6)	711	(52)
Income before income taxes	15,020	455	26,864	539	3,122	46,000	(1,531)	4,097	48,566
Other income and expenses									
Depreciation and amortization	(4,297)	(289)	(4,314)	(907)	(631)	(10,437)	(90)	－	(10,527)
Impairment losses (Note 3)	－	(142)	(1,540)	(90)	－	(1,773)	(102)	(15)	(1,889)
Share of profits of investments accounted for using the equity method (Note 4)	－	－	－	(15)	101	87	－	(35)	51
Segment assets	71,702	8,095	83,992	37,627	96,904	298,319	333	232,380	531,032
Other assets									
Investments accounted for using the equity method (Note 5)	－	－	－	98	98	196	－	127	323
Capital expenditures (Note 3)	3,537	86	3,975	1,186	1,108	9,892	30	1,315	11,237
Segment liabilities	24,387	2,303	29,081	21,673	60,491	137,935	139	71,905	209,979

Notes

1. Others represent businesses segments not included in the reportable segments, and they include indirect-support businesses.
2. Interest income and charges incurred at each business segment are interests of intracompany loans payable. These interest income and charges are offset, and the net amount represented as either interest income or charges in accordance with the net amount since it is recognized on a net basis for internal management purposes. The adjustments for interest income and interest charges are mainly for the head office, which are not attributable to any business segments, and reversal of interests on intracompany loans payable.
3. Impairment losses and capital expenditure in Adjustments are corporate amounts not attributable to any business segments.
4. For management purposes, share of profits of investments accounted for using the equity method is equivalent to the income before income taxes of equity method associates, and the difference between these amounts and the amounts shown on the consolidated financial statements is included in Adjustment.
5. For management purposes, investments accounted for using the equity method in each business segment are initial investments in equity method associates, and the difference between these amounts and the amounts shown on the consolidated financial statements is included in Adjustment.

(3) Information about Differences between Totals of Reporting Segments and Consolidated Financial Statements and Main Details of Differences (Matters Relating to Adjustments)

Millions of yen

Revenues	For the year ended March 31, 2015	For the year ended March 31, 2016
Reportable segment total	624,489	635,078
Others (other business segment)	1,551	2,027
Intersegment transaction elimination	(8,003)	(7,799)
Other adjustments (see Note)	1,595	(321)
Consolidated financial statements	619,632	628,984

Note: Other adjustments are management accounting adjustments.

Millions of yen

Segment income (EBIT)	For the year ended March 31, 2015	For the year ended March 31, 2016
Reportable segment total	46,501	46,465
Others (other business segment)	(2,395)	(1,525)
Intersegment transaction elimination	(3)	26
Other adjustments (see Note)	675	3,244
Consolidated financial statements	44,778	48,209

Note: Other adjustments are mainly corporate profit or loss not attributable to any business segments.

Millions of yen

Assets	As of March 31, 2015	As of March 31, 2016
Reportable segment total	304,744	298,319
Others (other business segment)	756	333
Intersegment transaction elimination	(290)	(880)
Other adjustments (see Note)	231,495	233,260
Consolidated financial statements	536,705	531,032

Note: Other adjustments are mainly corporate assets not attributable to any business segments.

Millions of yen

Liabilities	As of March 31, 2015	As of March 31, 2016
Reportable segment total	154,508	137,935
Others (other business segment)	171	139
Intersegment transaction elimination	(227)	(842)
Other adjustments (see Note)	80,557	72,747
Consolidated financial statements	235,009	209,979

Note: Other adjustments are mainly corporate liabilities that do not belong to any business segments.

(4) Product and Services Information

This is as disclosed in Note 4 (2) *Reportable Segment Information* and is not presented here.

(5) Geographical Information

(i) External Revenues

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Japan	260,965	255,743
North America	64,394	59,205
Europe	96,830	88,342
Asia	191,591	218,863
(China)	76,544	88,228
Others	5,853	6,831
Total	619,632	628,984

Note: Revenue information is based on customer location and classified by country or region.

(ii) Non-Current Assets

Non-current asset information is not presented as such assets are mostly located in Japan.

(6) Information about Major Customers

For the year ended March 31, 2015, two customer groups accounted for more than 10% of the Group’s net sales, with sales for all segments to those customers amounting to ¥184,164 million. For the year ended March 31, 2016, two customer groups accounted for more than 10% of the Group's net sales, with sales for all segments to those customers amounting to ¥184,653 million.

5. Cash and Cash Equivalents

Cash and cash equivalents are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Bank deposits with cash and deposits with maturities of less than three months	24,536	23,843
Deposits with maturities of less than three months	129,406	145,531
Cash and cash equivalents	153,942	169,375

6. Trade Receivables

The components of trade receivables are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Accounts receivable	124,943	121,827
Notes receivable	11,706	12,554
Finance lease receivables	787	1,380
Less: Provision for doubtful receivables	(347)	(213)
Total	137,089	135,549
Current assets	136,586	134,583
Non-current assets	503	966

Credit risk management and the fair value of trade receivables are stated in Note 28 *Financial Instruments*.

7. Inventories

The components of inventories are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Merchandise and finished goods	49,906	47,278
Work in progress	36,533	41,639
Raw materials	4,270	4,388
Total	90,709	93,306

Inventories (from continuing operations) included in the cost of sales and recognized as an expense totaled ¥481,516million and ¥486,683million in the years ended March 31, 2015 and 2016, respectively.

The write-downs of inventories (from continuing operations) recognized as an expense are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Inventory write-downs	2,155	1,310

8. Assets Held-for-Sale

The components of assets held-for-sale is as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Assets held-for-sale		
Software	—	321
Tools, furniture and fixtures	—	62
Investment property	269	—
Total	269	383

As the Group decided, to divest corporate idle assets not belonging to any of its business segments, such idle assets were classified as assets held-for-sale as of March 31, 2015.

As the Group has not completed the sale and one year has passed since the Group decided to divest, ¥269 million of such assets held-for-sale, which were not included in any of its business segments, were reclassified as Other non-current assets as of March 31, 2016.

As the Group decided to divest ¥318 million of software and other assets belonging to Industrial & IT systems segment, such assets were classified as assets held-for-sale as of March 31, 2016.

9. Property, Plant and Equipment

Changes in acquisition cost, accumulated depreciation, accumulated impairment losses and carrying amount of property, plant and equipment are as follows:

(1) Acquisition cost

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2014	60,922	43,630	33,003	20,702	1,319	159,577
Acquisitions	189	540	496	–	9,704	10,930
Sales or disposals	(1,470)	(5,044)	(2,903)	(1)	(2)	(9,420)
Transfers from construction in progress	2,836	3,998	2,592	–	(9,427)	–
Decrease due to business transfer	(593)	(333)	(108)	(664)	(9)	(1,707)
Currency translation effect	447	977	231	(18)	20	1,657
Other	(2,820)	(2,217)	(123)	(1,351)	(27)	(6,538)
As of March 31, 2015	59,511	41,552	33,189	18,667	1,579	154,498
Acquisitions	243	661	580	–	7,496	8,980
Sales or disposals	(595)	(2,037)	(1,872)	(1)	(3)	(4,507)
Transfers from construction in progress	1,655	2,416	2,565	–	(6,636)	–
Currency translation effect	(381)	(577)	(222)	(4)	(11)	(1,195)
Other	(5)	(35)	(266)	–	(769)	(1,075)
As of March 31, 2016	60,428	41,982	33,974	18,663	1,656	156,702

(2) Accumulated depreciation and accumulated impairment losses

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures	Land	Construction in progress	Total
As of April 1, 2014	28,264	32,347	25,219	–	–	85,830
Sales or disposals	(1,392)	(4,879)	(2,818)	–	–	(9,089)
Depreciation	2,287	3,203	2,431	–	–	7,920
Impairment losses	311	186	117	226	–	840
Decrease due to business transfer	(293)	(251)	(71)	–	–	(616)
Currency translation effect	79	405	154	–	–	638
Other	(1,429)	(860)	(176)	(226)	–	(2,692)
As of March 31, 2015	27,828	30,150	24,855	–	–	82,833
Sales or disposals	(504)	(1,784)	(1,821)	–	–	(4,109)
Depreciation	2,168	3,238	2,551	–	–	7,958
Impairment losses	16	19	69	–	–	104
Currency translation effect	(121)	(309)	(175)	–	–	(605)
Other	(2)	(105)	(125)	–	–	(232)
As of March 31, 2016	29,385	31,210	25,354	–	–	85,950

(3) Carrying amount

Millions of yen

	Buildings and structures	Machinery and equipment	Tools, furniture and fixtures	Land	Construction in progress	Total
As of March 31, 2015	31,683	11,402	8,334	18,667	1,579	71,665
As of March 31, 2016	31,043	10,771	8,620	18,663	1,656	70,752

There are no ownership restrictions on property, plant and equipment.

Amounts for property, plant and equipment under construction are presented in construction in progress.

Details on impairment losses are stated in Note 21 *Impairment Losses*.

Impairment losses on discontinued operations are included in other income and expenses of Note 24 *Discontinued Operations*.

Commitments relating to acquisitions of property, plant and equipment are presented in Note 33 *Commitments*.

Depreciation is recognized in cost of sales and in selling, general and administrative expenses.

The carrying amounts of lease assets included in property, plant and equipment are as follows:

Millions of yen

	Buildings and structures	Machinery and vehicles	Tools, furniture and fixtures
As of March 31, 2015	1	―	178
As of March 31, 2016	―	267	150

10. Intangible Assets

Changes in acquisition cost, accumulated amortization, accumulated impairment losses and carrying amount of intangible assets are as follows:

(1) Acquisition cost

Millions of yen

	Goodwill	Software	Other	Total
As of April 1, 2014	4,744	20,296	6,675	31,714
Purchases	―	1,648	158	1,807
Internal development	―	1,233	―	1,233
Sales or disposals	―	(881)	(20)	(901)
Decrease due to business transfer	(458)	(92)	(147)	(697)
Currency translation effect	―	15	111	126
Other	―	357	2	359
As of March 31, 2015	4,286	22,576	6,780	33,641
Purchases	―	1,018	16	1,034
Internal development	―	1,065	―	1,065
Sales or disposals	(60)	(1,693)	(51)	(1,804)
Currency translation effect	―	(39)	(49)	(88)
Other	―	(744)	(14)	(758)
As of March 31, 2016	4,226	22,183	6,682	33,091

(2) Accumulated amortization and accumulated impairment losses

Millions of yen

	Goodwill	Software	Other	Total
As of April 1, 2014	―	14,733	3,426	18,159
Sales or disposals	―	(828)	(12)	(840)
Amortization	―	2,263	391	2,653
Impairment losses	―	70	11	81
Decrease due to business transfer	―	(80)	(5)	(85)
Currency translation effect	―	7	67	73
Other	―	347	(20)	328
As of March 31, 2015	―	16,511	3,858	20,369
Sales or disposals	―	(1,389)	(4)	(1,393)
Amortization	―	2,131	372	2,503
Impairment losses	1,540	154	90	1,785
Currency translation effect	―	(28)	(33)	(62)
Other	―	(427)	(14)	(441)
As of March 31, 2016	1,540	16,952	4,269	22,761

(3) Carrying amount

Millions of yen

	Goodwill	Software	Other	Total
As of March 31, 2015	4,286	6,064	2,921	13,271
As of March 31, 2016	2,686	5,231	2,413	10,330

There are no ownership restrictions on intangible assets.

Details on impairment losses are stated in Note 21 *Impairment Losses*.

Impairment losses on discontinued operations are included in other income and expenses of Note 24 *Discontinued Operations*.

Amortization is recognized in the cost of sales and in selling, general and administrative expenses.

There are no significant intangible assets whose useful lives cannot be estimated.

The carrying amounts of internally generated intangible assets as of March 31, 2015 and 2016 were ¥2,226 million and ¥1,808 million, respectively, and recognized in the software account.

(4) Significant Intangible Assets

Significant intangible assets resulted from the acquisition of SII NanoTechnology Inc. (now named as Hitachi High-Tech Science Corporation).

The carrying amounts of goodwill as of March 31, 2015 and 2016 were ¥4,286 million and ¥2,686 million, respectively.

The intangible assets related to such factors as technologies and customers identified through the business combination, and the carrying amounts as of March 31, 2015 and 2016 were ¥2,456 million and ¥2,121 million, respectively.

Intangible assets are amortized using the straight-line method, and the remaining useful life is mainly six years.

(5) Tests for Impairment of Cash Generating Units including Goodwill

All significant goodwill in the Group is allocated to the Analytical Systems business of the Science & Medical Systems segment. The carrying amount as of March 31, 2015 and 2016 were ¥4,286 million and ¥2,686 million, respectively.

Every year or when there are indications of impairment, the Company conducts the following impairment tests of cash generating units to which goodwill is allocated.

The recoverable amount for the analysis business, a cash generating unit, is calculated by the value in use, with the estimated future cash flows discounted to the present value, based on a three-year business plan that was prepared by reflecting past experiences and external information approved by management. Management assumes a future cash flow growth rate of zero beyond the three year business plan. The discount rate before taxes is based on the weighted average cost of capital of other companies in the same industry, and this rate as of March 31, 2015 and 2016 was 6.0%.

If there is a reasonable change in major assumptions for tests for impairment, such as the decrease of future cash flows or the hike of discount rate, it is likely that additional impairment losses will be recognized.

For the year ended March 31, 2016, the Company recognized ¥1,540 million as impairment loss, which is described in Note 21 *Impairment Losses.*

11. Investments Accounted for Using the Equity Method

The Group uses the equity method to account for its investments in the following associates.

Company name	Principal business	Segment	Ownership percentage (%)	
			As of March 31, 2015	As of March 31, 2016
Giesecke & Devrient K.K.	Selling and developing IC cards and other Giesecke & Devrient products in the Japanese market	Advanced Industrial Products	49.0	49.0
Chorus Call Asia Corporation	Providing video and audio conferencing services	Industrial & IT Systems	49.0	49.0

Note: Summary financial information is not presented because it is insignificant.

12. Deferred Taxes and Income Taxes

(1) Details of the main components and changes in deferred tax assets and deferred tax liabilities are as follows:

Millions of yen

	As of April 1, 2014	Recognized in profit or loss	Recognized in other comprehensive income	Change in scope of consolidation (see Note)	As of March 31, 2015
Deferred tax assets					
Inventories	3,071	691	−	(58)	3,704
Depreciation and amortization	1,244	719	−	(9)	1,954
Impairment losses	−	910	−	−	910
Accrued expenses	4,429	507	−	45	4,981
Retirement and severance benefits	16,889	(98)	(682)	(902)	15,206
Carryforward of unused tax losses	59	(41)	−	6	24
Other	4,071	(1,638)	104	517	3,055
Total deferred tax assets	29,762	1,050	(578)	(401)	29,835
Deferred tax liabilities					
Deferred profit on sale of properties	(819)	95	−	−	(724)
FVTOCI financial assets	(3,191)	−	(254)	37	(3,408)
Other	(1,313)	(17)	−	(53)	(1,383)
Total deferred tax liabilities	(5,323)	78	(254)	(16)	(5,515)

Note: Changes in foreign currency translation differences and discontinued operations are included in the change in the scope of consolidation.

Millions of yen

	As of March 31, 2015	Recognized in profit or loss	Recognized in other comprehensive income	Change in scope of consolidation (see Note 1)	As of March 31, 2016
Deferred tax assets					
Inventories	3,704	(458)	−	(37)	3,209
Depreciation and amortization	1,954	78	−	21	2,053
Impairment losses	910	(910)	−	−	−
Accrued expenses	4,981	(440)	−	(20)	4,521
Retirement and severance benefits (see Note 2)	15,206	(2,667)	2,474	(436)	14,577
Carryforward of unused tax losses	24	(15)	−	(2)	8
Other	3,055	(378)	(528)	(95)	2,054
Total deferred tax assets	29,835	(4,789)	1,946	(569)	26,421
Deferred tax liabilities					
Deferred profit on sale of properties	(724)	138	−	−	(586)
FVTOCI financial assets	(3,408)	−	588	16	(2,805)
Other	(1,383)	27	−	(1)	(1,357)
Total deferred tax liabilities	(5,515)	165	588	15	(4,747)

Notes: 1. Changes in foreign currency translation differences are included in the change in the scope of consolidation.
2. In the transition to defined contribution pension plans, the asset to be transitioned is recognized in retirement and severance benefits.

In recognizing deferred tax assets, the Group considers whether it can use all or part of future deductible temporary differences or carryforward unused tax losses with respect to future taxable income. In evaluating the recoverability of deferred tax assets, the Group considers the planned reversal of deferred tax liabilities, expected future taxable income, and tax planning. For recognized deferred tax assets, the Group has determined that there is a high probability of materializing tax benefits based on historical taxable income levels and on future taxable income projections for the period in which it can recognize deferred tax assets. However, they would similarly be a decrease in deferred tax assets that the Group considers recognizable if future projected taxable income declines during the period in which deductions are possible.

Deferred tax assets and deferred tax liabilities in the consolidated statements of financial position are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Deferred tax assets	24,454	21,761
Deferred tax liabilities	(135)	(87)

(2) Future Deductible Temporary Differences and Carryforward of Unused Tax Losses for Unrecognized Deferred Tax Assets

Future deductible temporary differences and carryforward of unused tax losses for unrecognized deferred tax assets are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Future deductible temporary differences	9,022	9,831
Carryforward of unused tax losses	15,327	4,885
Total	24,348	14,716

The carryforward of unused tax losses for unrecognized deferred tax assets will expire as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
First year	—	—
Second year	—	—
Third year	1,934	—
Fourth year	3,056	—
Fifth and subsequent years	10,337	4,885
Total	15,327	4,885

(3) Temporary Differences Relating to Investments in Subsidiaries for Unrecognized Deferred Tax Liabilities

On March 31, 2015 and 2016, future taxable temporary differences relating to investments in subsidiaries with unrecognized deferred tax liabilities totaled ¥36,052 million and ¥37,469 million, respectively. Deferred tax liabilities are unrecognized because the Group can control the timing of temporary difference reversals and because there is a high possibility that temporary differences will not be eliminated in the foreseeable future.

(4) Income Taxes

Details of income taxes are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Current tax expense	14,182	7,951
Deferred tax expense		
Temporary differences and eliminations	(1,241)	3,043
Recoverability of deferred tax assets	(1,492)	741
Change in tax rates	1,605	840
Total deferred tax expenses	(1,128)	4,624
Income taxes	13,053	12,575

(5) Reconciliation of Effective Statutory Tax Rate

The reconciliation of the effective statutory tax rate with the actual tax rate in continuing operations is as follows:

	For the year ended March 31, 2015	For the year ended March 31, 2016
Effective statutory tax rate	35.6 %	33.1 %
Non-deductible costs	1.2 %	0.7 %
Tax credit	(7.2) %	(4.6) %
Different tax rates applied to foreign subsidiaries	(1.4) %	(1.1) %
Downward revision in deferred tax assets due to tax rate change	3.6 %	1.7 %
Change in recoverable deferred tax assets	(3.3) %	1.5 %
Acquisition of subsidiary	-	(6.1) %
Other	0.4 %	0.6 %
Actual tax rate	28.9 %	25.9 %

The Company is subject mainly to corporate, inhabitant, and enterprise taxes. The effective statutory tax rates calculated based on these taxes were 35.6% and 33.1% for the years ended March 31, 2015 and 2016, respectively. Foreign subsidiaries are subject to income taxes at their locations, while the Company and domestic subsidiaries have adopted the consolidated taxation system.

The "Act for Partial Amendment of the Income Tax Act, etc."(Act No.9 of 2015) and the "Act for Partial Amendment of the Local Tax Act, etc."(Act No.2 of 2015) were promulgated on March 31, 2015. In line with this change, the effective statutory tax rate used to calculate deferred tax assets and deferred tax liabilities decreased from 35.6% to 33.1% for the temporary differences expected to be realized or settled, in the fiscal year starting on April 1, 2015 with the effective statutory tax rate changing to 32.3%, for the temporary differences expected to be realized or settled from the fiscal year starting on April 1, 2016.

The Act for Partial Amendment of the Income Tax Act, etc. (Act No.15 of 2016) and the Act for Partial Amendment of the Local Tax Act, etc. (Act No.13 of 2016) were enacted on March 29, 2016. In line with this change, the effective statutory tax rate used to calculate deferred tax assets and deferred tax liabilities decreased from 32.3% to 30.9% for the temporary differences expected to be realized or settled, in the fiscal year starting on April 1, 2016 and the fiscal year starting on April 1, 2017 with the effective statutory tax rate changing to 30.6%, for the temporary differences expected to be realized or settled from the fiscal year starting on April 1, 2018.

13. Trade Payables

Details of trade payables are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Accounts payable	121,416	109,432
Notes payable	222	543
Total	121,637	109,975

Liquidity risk management and the fair value of trade payables are stated in Note 28 *Financial Instruments*.

14. Provisions

Changes in the balance and components of provisions are as follows:

Millions of yen

	Asset retirement obligations	Product warranty provisions	Total
As of March 31, 2015	734	3,147	3,881
Additions	10	1,931	1,940
Provisions used	(3)	(2,272)	(2,275)
Provisions reversed	―	(131)	(131)
Interest cost for discount	17	―	17
Currency translation effects	(9)	(144)	(153)
As of March 31, 2016	748	2,531	3,279
Current liabilities	28	1,784	1,812
Non-current liabilities	721	747	1,467

(i) Asset Retirement Obligations

To settle the obligation of restoring and removing hazardous substances from plant facilities and premises that the Group uses, the Group recognizes the estimated amount based on the estimated future expenditures calculated based on estimates from third parties. These expenses are expected to be paid after one year or more, however, they may be affected by future business plans.

(ii) Product Warranty Provisions

To provide for the costs of after-sales service for the Group's products, the Group recognizes estimated service costs within the warranty period based on historical experience. These expenses are used over the warranty period (principally within three years).

15. Retirement and Severance Benefits

The Company and certain domestic subsidiaries have maintained defined benefit pension plans and severance lump-sum payment plans as defined benefit corporate pension plans and transitioned in part to a defined contribution pension plan on October 1, 2015. Some foreign subsidiaries have defined benefit pension plans, while some have defined contribution plans. Certain defined benefit corporate pension plans adopt cash-balance plans.

In the transition to defined contribution pension plans, the Company recognized gain from the transition to defined contribution pension plans during the year ended March 31, 2016.

The asset is scheduled to be transitioned for four years and the asset to be transitioned is recognized in other current liabilities and in other non-current liabilities in the consolidated statements of financial position.

In the consolidated statement of cash flows, the net amount of the decrease in retirement benefit and the increase in other financial liabilities related to the asset to be transitioned is recognized in decrease in retirement and severance benefits.

The benefits of defined benefit plans are predetermined based on conditions, such as points employees have gained in compensation for each year of service, the payment rate in retirement, years of service and average salaries in their final years of service before retirement. Some employees receive additional severance payments at the time of retirement.

Funded defined benefit plans are administrated by the fund that is a separate legal entity from the Company under the law. The pension fund board and trustee of the plan are required by law to act in the best interests of the plan participants, and are responsible for managing plan assets in accordance with the designated investment strategy.

Pursuant to the Japanese Defined Benefit Corporate Pension Plan Act, the Company endeavors to maintain the pension financing balance for future benefits by regularly reviewing the financial condition of the pension plan and recalculating contributions.

The Company has future obligations to make contributions as defined by the fund. The contribution amount is periodically reviewed to the extent legally allowed.

Severance lump-sum payment plans provide a lump-sum payment at the time of retirement, and the Company has an obligation to pay benefits directly to beneficiaries.

These defined benefit plans expose the Group to actuarial risks.

The Group plans to allocate ¥2,402 million in contributions for the fiscal year ending March 31, 2017.

Defined contribution plans require a fixed amount of contribution over a participation period and plan participants themselves are responsible for the management of plan assets. Benefits are paid by the trustees, and the Company's responsibility is limited to making contributions.

(1) Defined Benefit Plans

(i) Net Liabilities (Assets) of Defined Benefit Plans

Amounts recognized in the consolidated statements of financial position are as follows and the amounts recognized as defined benefit pension plans are presented in other non-current liabilities in the consolidated statements of financial position:

Millions of yen

	Present value of defined benefit plan obligations	Fair value of plan assets	Net defined benefit plan obligations (assets)
As of March 31, 2014	127,082	(77,545)	49,537
Amounts recognized in profit or loss			
Continuing operations			
Service cost	4,788	－	4,788
Interest cost (income)	1,629	(1,083)	546
Discontinued operations			
Service cost	187	－	187
Interest cost (income)	76	(52)	24
Total	6,680	(1,135)	5,545
Amounts recognized in OCI			
Remeasurement			
Actuarial gains and losses arising from changes in demographic assumptions	201	－	201
Actuarial gains and losses arising from changes in financial assumptions	4,693	－	4,693
Actuarial gains and losses arising from actual adjustments	1,284	－	1,284
Return on plan assets (excluding interest income)	－	(6,776)	(6,776)
Total	6,177	(6,776)	(599)
Other			
Contributions by the employer	－	(8,824)	(8,824)
Benefits paid	(5,791)	4,338	(1,453)
Reduction from transfer of business	(1,779)	1,274	(505)
Currency translation effects	1,181	(910)	271
Total	(6,388)	(4,122)	(10,510)
As of March 31, 2015	133,550	(89,578)	43,972
Amounts recognized in profit or loss			
Continuing operations			
Service cost	4,499	－	4,499
Interest cost (income)	1,326	(983)	343
Gain on transition to defined contribution pension plans	(3,799)	－	(3,799)
Total	2,026	(983)	1,043
Amounts recognized in OCI			
Remeasurement			
Actuarial gains and losses arising from changes in demographic assumptions	528	－	528
Actuarial gains and losses arising from changes in financial assumptions	6,106	－	6,106
Actuarial gains and losses arising from actual adjustments	1,274	－	1,274
Return on plan assets (excluding interest income)	－	1,517	1,517
Total	7,909	1,517	9,425
Other			
Contributions by the employer	－	(3,293)	(3,293)
Benefits paid	(5,876)	3,590	(2,286)
Reduction due to transition to defined contribution pension plans	(15,608)	－	(15,608)
Currency translation effects	(719)	448	(271)
Total	(22,203)	746	(21,457)
As of March 31, 2016	121,282	(88,299)	32,983

The Company's funding takes into account such factors as limits on tax deductions, the fund status of plan assets, and actuarial assumptions. Contributions to plan assets are intended to cover future benefits as well as those for service that has already been provided. In addition, the Company may contribute cash to a retirement allowance trust as a reserve for shortfalls in funding for benefit obligations at the end of the fiscal year.

Management of the Company's plan assets aims to secure the payment of benefits to beneficiaries (including future pension beneficiaries) and optimize the value of plan assets within acceptable range of risks. The Company's management of plan assets factors in risks and returns for investment assets and includes formulating a policy asset mix that is optimal for the future, selecting trustees, and monitoring asset allocation.

The Company periodically reviews the policy asset mix to accommodate changes in the market environment from initial assumptions and changes in the funded status.

The Company targets an asset allocation mix of 19% for equities, 38% for bonds, and 43% for other instruments.

(ii) Main Plan Asset Components

Details of the major components of plan assets are as follows:

Millions of yen

	As of March 31, 2015		
	With quoted market price in an active market	With no quoted market price in an active market	Total
Cash and cash equivalents	849	—	849
Equities	3,547	—	3,547
Bonds	150	3,092	3,242
Hedge funds	—	23,684	23,684
Securitization products	—	1,907	1,907
Life insurance general accounts	—	1,531	1,531
Comingled funds (see Note)	—	48,549	48,549
Other	3,835	2,434	6,268
Total	8,381	81,197	89,578

Note: Commingled funds comprised 40% in listed equities, 21% in national government bonds, 25% in other bonds, and 14% in other assets.

Millions of yen

	As of March 31, 2016		
	With quoted market price in an active market	With no quoted market price in an active market	Total
Cash and cash equivalents	709	—	709
Equities	3,005	—	3,005
Bonds	1,100	1,729	2,829
Hedge funds	—	25,746	25,746
Securitization products	—	1,696	1,696
Life insurance general accounts	—	1,594	1,594
Comingled funds (see Note)	—	46,834	46,834
Other	116	5,771	5,887
Total	4,930	83,369	88,299

Note: Commingled funds comprised 35% in listed equities, 25% in national government bonds, 22% in other bonds, and 18% in other assets.

(iii) Actuarial Assumptions

The major actuarial assumptions at the end of reporting periods are as follows:

	For the year ended March 31, 2015	For the year ended March 31, 2016
Discount rates	1.1%	0.6%

The weighted average duration of defined benefit plan obligations for the years ended March 31, 2015 and 2016 were 14.3 years and 14.0 years, respectively.

(iv) Sensitivity Analysis for Defined Benefit Plan Obligations

Based on the assumption that all other variables were held constant, the impacts on defined benefit plan obligations of a 0.5 percentage point increase or decrease in the discount rate as March 31, 2015 and 2016 are as follows. In reality, changes in other assumptions may affect the outcome of the analysis.

Millions of yen

	For the year ended March 31, 2015		For the year ended March 31, 2016	
	0.5 percentage point increase	0.5 percentage point decrease	0.5 percentage point increase	0.5 percentage point decrease
Effects of changes in discount rate	(9,119)	10,061	(7,903)	7,382

(2) Defined Contribution Plans

The Company has recognized expenses (continuing operations) on defined contribution plans of ¥502 million and ¥892 million for the years ended March 31, 2015 and 2016, respectively.

16. Equity and Other Capital Items

(a) Changes in Total Number of Authorized Shares, Shares Issued, and Treasury Stock

Number of shares

	For the year ended March 31, 2015	For the year ended March 31, 2016
Number of authorized shares		
Balance at beginning of year	350,000,000	350,000,000
Changes	—	—
Balance at end of year	350,000,000	350,000,000
Total number of issued shares		
Balance at beginning of year	137,738,730	137,738,730
Changes	—	—
Balance at end of year	137,738,730	137,738,730
Number of treasury stock		
Balance at beginning of year	203,551	206,223
Changes (Note 3)	2,672	1,989
Balance at end of year	206,223	208,212

Notes:

1. The shares that the Company issues are ordinary shares with non-par value.
2. Issued shares are fully paid.
3. For the year ended March 31, 2015, the number of shares increased by 2,672, which consisted of purchase of 2,712 shares and the sale of 40 shares. For the year ended March 31, 2016, the number of shares increases by 1,989, which consists of purchase of 1,989 shares.

(2) Capital Surplus

The main component of capital surplus is legal reserve.

Legal Reserve

The Japanese Company Law (JCL) requires that at least half of paid-in capital be appropriated as common stock and the rest be appropriated as a legal reserve within capital surplus. Under the JCL, The legal reserve can be incorporated in common stock by resolution at a shareholders' meeting.

(3) Retained Earnings

Retained earnings comprise the following categories:

(i) Earned Reserves

The JCL requires that 10% of the retained earnings appropriated for dividends be retained until the total amount of earned reserves included in legal reserve and earned reserves reaches a quarter of the nominal value of common stock. The accumulated earned reserves can be appropriated for deficit disposition. In addition, earned reserves may be available for dividends by resolution at the shareholders' meeting.

(ii) Other Retained Earnings

Other retained earnings are earned and undistributed by the Group.

(4) Accumulated Other Comprehensive Income

(i) Net Changes in Financial Assets Measured at Fair Value through OCI

These are the differences between the acquisition cost and fair value of FVTOCI financial assets.

(ii) Remeasurement of Defined Benefit Plans

Actuarial gains and losses are the effects of differences between actuarial assumptions at the beginning of the year and what has actually occurred, and the effects of changes in actuarial assumptions.

(iii) Foreign Currency Translation Adjustments

These adjustments result from converting the financial statements of foreign operations into the Group's presentation currency.

(iv) Net Changes in Cash Flow Hedges

These are the portions deemed effective of net changes in the fair value of derivative financial instruments designated as cash flow hedges.

17. Dividend

(1) Dividend Payments

Decision	Share class	Appropriation from	Cash dividends (Millions of yen)	Cash dividends per share (Yen)	Record date	Effective date
The Board of Directors on May 23, 2014	Common stock	Retained earnings	2,751	20.00	March 31, 2014	June 2, 2014
The Board of Directors on October 23, 2014	Common stock	Retained earnings	2,751	20.00	September 30, 2014	November 28, 2014
The Board of Directors on May 25, 2015	Common stock	Retained earnings	3,438	25.00	March 31, 2015	June 3, 2015
The Board of Directors on October 26, 2015	Common stock	Retained earnings	3,438	25.00	September 30, 2015	November 30, 2015

(2) Dividends on common stock for which the record date falls in the fiscal year ended March 31, 2016, and the effective date falls in the following fiscal year are as follows:

Decision	Share class	Appropriation from	Cash dividends (Millions of yen)	Cash dividends per share (Yen)	Record date	Effective date
The Board of Directors on May 25, 2016	Common stock	Retained earnings	5,501	40.00	March 31, 2016	June 3, 2016

18. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses (continuing operations) are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Personnel expenses	(41,208)	(42,211)
Research and development expenses	(15,500)	(16,097)
Depreciation and amortization	(3,677)	(4,511)
Other	(27,871)	(31,126)
Total	(88,257)	(93,945)

19. Personnel Expenses

Details of personnel expenses (continuing operations) are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Salaries	(60,258)	(61,149)
Employees' bonuses	(20,002)	(20,810)
Retirement benefit expenses	(5,836)	(5,734)
Legal and employee benefits expense	(11,293)	(12,078)
Extra retirement payments	(437)	(978)
Total	(97,825)	(100,750)

Note: Personnel expenses are included in cost of sales, selling, general and administrative expenses, and other expenses.

20. Research and Development Expenses

Research and development expenses (continuing operations) are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Research and development expenses	(19,556)	(20,163)

Note: Research and development expenses are included in cost of sales and in selling, general and administrative expenses.

21. Impairment Losses

The components of impairment losses (continuing operations) by asset category are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Property, plant and equipment	(237)	(104)
Intangible assets	(30)	(1,785)
Investment property	(354)	—
Other	(55)	—
Total	(677)	(1,889)

Impairment losses are included in other expenses.

The component of impairment losses by reportable segment is described in Note 4 *Segment Information*.

Information on main impairment losses recognized for the fiscal years ended March 31, 2015 and 2016 is as follows:

For the year ended March 31, 2015, the Company closed a demo center in the Electronic Device Systems and Science & Medical Systems segments. The Company therefore reduced the carrying amount of investment property of the demo center, recognizing ¥354 million as impairment losses. The recoverable amount of these assets is measured at fair value less the costs of disposal.

For the year ended March 31, 2016, the Company does not conclude that the profit as projected for the goodwill allocated to the Analytical Systems business in the Science & Medical Systems segments is expected. The Company therefore recognized ¥1,540 million in impairment loss. The recoverable amount of this asset is measured at value in use. The value in use is estimated by future cash flows discounted by 6.0%.

22. Other Income and Expenses

The components of other income (continuing operations) are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Gain on transition to defined contribution pension plans (Note 1)	—	3,799
Reversal of allowance for doubtful receivables	165	132
Gain on sale of property, plant and equipment, intangible assets (Note 2)	82	412
Other	335	627
Total	582	4,969

Notes:

1. Details of gain on transition to defined contribution pension plans are described in Note 15 *Retirement and Severance Benefits.*
2. Gain on sale of assets held-for-sale is included.

The components of other expenses (continuing operations) are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Impairment losses (Note 1)	(677)	(1,889)
Loss on sale and disposal of property, plant and equipment, and intangible assets	(617)	(324)
Other	(65)	(447)
Total	(1,358)	(2,660)

Note: Details of impairment losses are described in Note 21 *Impairment Losses.*

23. Financial Income and Expenses

Interest income and interst charges (continuing operations) are related to financial assets and liabilities measured at amortized cost. The components of financial income (continuing operations), except interest income, are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Dividend income		
FVTOCI financial assets	209	288
Gain on sale of financial instruments		
FVTPL financial assets	10	24
Total	219	312

The components of financial expenses (continuing operations), except interest charges, are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Loss on valuation of financial instruments		
FVTPL financial assets	(8)	(32)
Foreign exchange losses	(2,276)	(1,278)
Other	(98)	(201)
Total	(2,382)	(1,510)

24. Discontinued Operations

The Group decided, based on a resolution at a meeting of the Board of Directors on September 5, 2014, to withdraw from the chip mounter business. At a meeting on December 22, 2014, the Board of Directors resolved to transfer the die bonders business to TY Holdings Co., Ltd.

These operations have therefore been included in the Electronic Device Systems reportable segment and the Mounting Systems segment that included the above two lines of businesses was classified as a discontinued operation for the year ended March 31, 2015.

The above business withdrawals and transfers were executed and completed by the end of March 31, 2015.

(i) Discontinued Operations Profit and Loss Analysis

The discontinued operations profit and loss analysis is as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Revenues	18,714	—
Cost of sales	(14,313)	—
Gross profit	4,401	—
Selling, general and administrative expenses	(3,948)	—
Other income and expenses (Note 1)	(1,855)	—
Operating loss	(1,402)	—
Financial income and charges	0	—
EBIT	(1,402)	—
Interest income and interest expense	(0)	—
Loss from discontinued operations, before income taxes	(1,402)	—
Income taxes	397	—
Loss from discontinued operations	(1,005)	—

Note: Other income and expenses included the following for the year ended March 31, 2015:

i) Property, plant and equipment impairment losses stemming from resolution to withdraw from chip mounting business (603) (Millions of yen)

Intangible assets impairment losses stemming from resolution to withdraw from chip mounting business (51) (Millions of yen)

Total (653) (Millions of yen)

ii) Loss on transfer of die bonders business to TY Holdings Co., Ltd. (53) (Millions of yen)

(ii) Cash Flow Analysis of Discontinued Operations

Cash flow analysis of discontinued operations is as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Cash flows from operating activities	943	—
Cash flows from investing activities (Notes 1 and 2)	1,240	—
Cash flows from financing activities	—	—
Total	2,182	—

Notes:

1. For the year ended March 31, 2015, cash flows from investing activities included ¥1,453 million in proceeds from transfer of business to TY Holdings Co., Ltd.
2. The assets and liabilities disposed of in the above business transfer are as follows:

Current assets	2,287	(Millions of yen)
Non-current assets	1,725	(Millions of yen)
Total assets	4,012	(Millions of yen)
Current liabilities	2,022	(Millions of yen)
Non-current liabilities	507	(Millions of yen)
Total liabilities	2,529	(Millions of yen)

25. Earnings per Share

Basic earnings (loss) per share attributable to Hitachi High-Technologies Corporation stockholders is calculated based on the following information:

	For the year ended March 31, 2015	For the year ended March 31, 2016
Net income (loss) attributable to Hitachi High-Technologies Corporation stockholders (millions of yen)		
Continuing operations	32,098	35,989
Discontinued operations	(1,005)	—
Total	31,093	35,989
Basic weighted average number of ordinary shares	137,533,902	137,531,377
Basic earnings (loss) per share attributable to Hitachi High-Technologies Corporation stockholders (yen)		
Continuing operations	233.38	261.68
Discontinued operations	(7.30)	—
Total	226.08	261.68

Note: Basic and diluted earnings (loss) per share attributable to Hitachi High-Technologies Corporation stockholders are the same, as there were no dilutive potential ordinary shares.

26. Other Comprehensive Income

Amounts arising, reclassification adjustment, and tax effect for each component of OCI for the years ended March 31, 2015 and 2016 are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Items not to be reclassified into net income		
Net changes in financial assets measured at FVTOCI		
Amounts arising	1,699	(1,340)
Before tax effect adjustment	1,699	(1,340)
Tax effect	(254)	588
Net changes in financial assets measured at FVTOCI	1,445	(752)
Remeasurements of defined benefit plans		
Amounts arising	599	(9,425)
Before tax effect adjustment	599	(9,425)
Tax effect	(682)	2,474
Remeasurements of defined benefit plans	(82)	(6,951)
Total items not to be reclassified into net income	1,363	(7,704)
Items that can be reclassified into net income		
Foreign currency translation adjustments		
Amounts arising	4,050	(3,157)
Net changes in cash flow hedges		
Amounts arising	(3,071)	137
Reclassification adjustment	2,698	1,523
Before tax effect adjustment	(372)	1,660
Tax effect	104	(528)
Net changes in cash flow hedges	(268)	1,132
Total items that can be reclassified into net income	3,781	(2,025)
OCI	5,144	(9,729)

27. Non-Cash Transactions

Details of significant non-cash transactions are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Property, plant and equipment acquired under finance leases	51	56

28. Financial Instruments

(1) Financial Risk Management Policy

The Group is exposed to financial risks (credit, liquidity, and market risks) in the course of business, and manages risks based on a specific policy to avoid or reduce such risks.

The Group uses derivative transactions to avoid the risk of cash flow fluctuations resulting from fluctuations in foreign exchange markets, and does not transact derivatives for speculative purposes.

(2) Credit Risk

The Group is exposed to customer credit risk for trade receivables acquired in the course of business. Investments in debt securities held for managing cash surplus and equity securities held for strategic purposes are exposed to credit risk of the issuers. Forward exchange contracts that the Group enters into to hedge against foreign-exchange market fluctuation risks are exposed to credit risk of the counterparty financial institutions.

In accordance with our business criteria, the Company decides whether or not to engage in transactions and determines credit limits and terms and conditions. The Company also undertakes conservation measures that include acquiring collateral. After receivables are recognized, operating and administrative divisions share information on the status of transactions in managing payments by due dates. The Company conducts periodic credit checks and reviews whether or not to continue transactions or assesses whether credit limits and terms and conditions are adequate. In principle, the Company limits investments of cash surpluses to bonds with issuer credit ratings of at least investment grade and to deposits with financial institutions. In principle, forward exchange contracts are entered into only with internationally recognized financial institutions with at least an A rating. The Company prevents a significant concentration of credit risk by engaging in transactions with multiple financial institutions. The Company periodically confirms its reasons for holding equities and other instruments held for policy purposes and evaluates issuers and their financial positions.

Except for guaranty obligations, the Group's maximum exposure to credit risk if collateral held and other credit enhancements are not included is equal to the financial assets' carrying amount after impairment in the consolidated statements of financial position. The maximum exposure to the credit risk from guaranty obligations is the guaranteed debt described in Note 34 *Contingencies*.

At March 31, 2015 and 2016, the Group considers that unimpaired financial assets were all collectible.

The analyses of the aging of trade receivables that are past due but not impaired as of March 31, 2015 and 2016 are as follows. The financial assets include amounts considered recoverable through credit insurance and collateral.

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Past due within 30 days	4,453	2,344
Past due between 31 and 90 days	559	573
Past due between 91 days and 1 year	319	143
Past due over 1 year	—	—
Total	5,331	3,060

Security deposits accepted as credit enhancements for trade receivables amounted to ¥2,593 million and ¥2,572 million as of March 31, 2015 and 2016, respectively.

The Group reviews the collectibility of trade receivables according to the credit positions of customers and recognizes an allowance for doubtful receivables. Changes in the allowance for the years ended March 31, 2015 and 2016 are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Balance at beginning of year	616	347
Addition	72	66
Provisions used	(105)	(0)
Provisions reversed	(237)	(198)
Currency translation effects	1	(2)
Other	—	—
Balance at end of year	347	213

Trade receivables individually impaired after taking into account of customer financial positions, payment delays, and other factors amounted to ¥394 million and ¥356 million as of March 31, 2015 and 2016, respectively. The allowance for doubtful receivables was ¥317 million and ¥203 million as of March 31, 2015 and 2016, respectively.

Transfers of Financial Assets

The Group endorses or discounts some notes receivable before their due dates. If notes are dishonored after such endorsement or discounting, customers for which the Group provided endorsements or banks and other entities that discounted the notes would demand repurchases of the notes.

The Group accordingly continues to recognize endorsed or discounted notes as notes receivable until their due dates and presents them as part of trade receivables. The Group presents amounts deposited from endorsements or discounts as other financial liabilities (debt).

As of March 31, 2015 and 2016, other financial liabilities (debt) with respect to the endorsed and discounted notes were as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Endorsed and discounted notes	29	—
Other financial liabilities (debt)	29	—

(3) Liquidity Risk Management

Maintaining appropriate liquidity levels and efficiently and flexibly securing adequate funds for current and future business operations are important financial objectives for the Group's management. By efficiently managing working capital, the Group endeavors to optimize the effective use of capital in operations while improving Group cash management by centralizing such management within the Company.

(i) Non-Derivative Financial Liabilities

Details of the maturities of non-derivative financial liabilities are as follows:

As of March 31, 2015

Millions of yen

	Carrying amount	Contractual rights to cash flows	Due within 1 year	Due after 1 year and not later than 5 years	Due after 5 years
Trade payables	121,637	121,637	121,557	80	—
Other financial liabilities	12,792	12,792	12,596	195	1
Total	134,429	134,429	134,153	275	1

As of March 31, 2016

Millions of yen

	Carrying amount	Contractual rights to cash flows	Due within 1 year	Due after 1 year and not later than 5 years	Due after 5 years
Trade payables	109,975	109,975	109,921	54	—
Other financial liabilities	23,473	23,473	16,435	7,038	0
Total	133,448	133,448	126,355	7,092	0

Guarantee obligations not included in the above tables were ¥193 million and ¥133 million as of March 31, 2015 and 2016, respectively.

(ii) Derivatives

Details of the maturities derivatives are as follows:

As of March 31, 2015

Millions of yen

		Due within 1 year	Due after 1 year and not later than 5 years	Due after 5 years	Total
Forward exchange contracts	In	208	―	―	208
	Out	1,698	―	―	1,698

As of March 31, 2016

Millions of yen

		Due within 1 year	Due after 1 year and not later than 5 years	Due after 5 years	Total
Forward exchange contracts	In	1,000	―	―	1,000
	Out	59	―	―	59

(4) Market Risk Management

(i) Foreign Currency Fluctuation Risk

The Group holds assets and liabilities denominated in foreign currencies, and it is exposed to foreign currency fluctuation risk. The Group addresses this risk by appropriately measuring the net future cash flows per currency and entering into forward exchange contracts within that scope to fix future cash flows arising from assets, liabilities, commitments, and forecasted transactions denominated in foreign currencies. The terms of forward exchange contracts are largely within one year.

The Company enters into forward exchange contracts based on its risk management policy and other internal management rules. The chief financial officer receives periodic reports on forward exchange contract transactions, foreign currency denominated assets and liabilities, and commitment and forecasted transaction positions.

The Company's subsidiaries similarly enter into forward exchange contracts based on the risk management policy and other internal management rules. The Company's finance department receives periodic reports on the positions of these transactions, and checks that they are undertaken in keeping with internal management rules.

Foreign Exchange Sensitivity Analysis

The sensitivity analysis for currency exchange rates indicates the impact on income from continuing operations, before income taxes, and on other comprehensive income (before tax effect adjustment) of the Japanese yen appreciating 1% against other currencies as of March 31, 2015 and 2016, while all other variables are held constant, as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Income from continuing operations, before income taxes		
US dollar	(7)	1
Euro	0	(4)
RMB	(20)	(23)
Other	1	5
Other comprehensive income		
US dollar	104	136
Euro	8	12
RMB	0	(3)
Other	5	14

(ii) Share Price Fluctuation Risk

The Group holds equity instruments (including shares and investment) to develop its business, and is exposed to share price fluctuation risks. Management periodically confirms the market values of these equity instruments and the financial positions of their issuers.

Share Price Sensitivity Analysis

The sensitivity analysis for the Group's holdings of marketable equity instruments indicates the impact on other comprehensive income (before tax effect adjustment) of share prices rising 10%, while all other variables are held constant, as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Other comprehensive income	1,150	1,067

(5) Fair Value

(i) Carrying Amounts and Fair Value of Financial Assets and Financial Liabilities

The carrying amounts and fair values of financial assets and financial liabilities are as follows:

Millions of yen

	As of March 31, 2015		As of March 31, 2016	
	Carrying amount	Fair value	Carrying amount	Fair value
Assets measured at amortized cost				
Current assets				
Cash and cash equivalents	153,942	153,942	169,375	169,375
Trade receivables	136,586	136,586	134,583	134,583
Investments in securities and other financial assets	21,421	21,421	5,366	5,366
Securities	2,001	2,001	–	–
Bank deposits with maturities exceeding three months	12,500	12,500	–	–
Other receivables	6,874	6,874	5,305	5,305
Loans	47	47	61	61
Non-current assets				
Trade receivables	503	503	966	966
Investments in securities and other financial assets	2,311	2,311	2,234	2,234
Investments in securities and other investments	1,904	1,904	1,867	1,867
Loans	407	407	367	367
Assets measured at fair value				
FVTPL Financial assets				
Current assets				
Investments in securities and other financial assets	208	208	1,000	1,000
Other financial assets (derivatives)	208	208	1,000	1,000
Non-current assets				
Investments in securities and other financial assets	995	995	914	914
Other investments	995	995	914	914
FVTOCI financial assets				
Non-current assets				
Investments in securities and other financial assets	11,705	11,705	10,829	10,829
Securities	11,705	11,705	10,829	10,829
Liabilities measures at amortized cost				
Current liabilities				
Trade payables	121,637	121,637	109,975	109,975
Other financial liabilities	12,596	12,596	16,435	16,435
Debt	29	29	–	–
Lease payables	126	126	181	181
Deposits	3,466	3,466	3,332	3,332
Other payables	8,975	8,975	12,922	12,922
Non-current liabilities				
Other financial liabilities	196	196	7,038	7,038
Lease payables	196	196	248	248
Other payables	–	–	6,790	6,790
Liabilities measured at fair value				
FVTPL financial liabilities				
Current liabilities				
Other financial liabilities (derivatives)	1,698	1,698	59	59

(ii) Fair Value Measurements

The following methods and assumptions are used to measure the fair value of financial assets and liabilities. In measuring the fair value of financial instruments, quoted market prices are used if available. If these prices are unavailable, management uses the discounted future cash flow method or other appropriate evaluation methods.

a) Cash and Cash Equivalents

The carrying amount approximates the fair value because of the short maturities of these instruments.

b) Trade Receivables and Payables

The carrying amount approximates the fair value because of the short settlement periods of these instruments.

c) Investments in Securities and Other Financial Assets and Other Financial Liabilities Measured at Amortized Cost

The carrying amounts of bank deposits with maturities exceeding three months, other receivables, deposits, other payables, and short-term loans and debt approximate the fair value because of the short maturities of these instruments.

For securities, long-term loans, lease payables, long-term other payables, and other investments, the Company measures future cash flow at a discounted rate on the assumption that the contracts are newly executed.

d) Investments in Securities and Other Financial Assets Measured at Fair Value

These are described in (iii) Fair Value Hierarchy below.

(iii) Fair Value Hierarchy

Financial instruments are classified into the following fair value hierarchy:

Level 1: Quoted prices (unadjusted) for identical assets or liabilities in active markets
Level 2: Valuations measured by direct or indirect observable inputs other than Level 1
Level 3: Valuations measured by significant unobservable inputs

When several inputs are used for a fair value measurement, the level is determined based on the input with the lowest level in the fair value measurement as a whole. Transfers between fair value hierarchy levels are deemed arising at the beginning of each quarter.

Equity Securities

Equity securities are classified as Level 1 financial instruments, as they can be measured at fair market value. Equity securities classified as Level 1 are listed shares. If the significant indicators for measuring the fair value of unlisted shares and other similar financial instruments are unobservable, they are classified as Level 3 investments. The Group measures fair value by using price information supplied by financial institutions and other parties, similar company comparisons, the discounted cash flow method, the valuation models based on net assets, and other methods.

Derivatives

FVTPL financial assets and liabilities are measured based on forward exchange rates at the end of the fiscal year.
The Group classifies these instruments as Level 2, as it only enters into foreign exchange contracts.

Financial Assets and Liabilities Measured at Amortized Cost

The financial assets and liabilities measured at amortized cost are mainly classified as Level 2.

The financial assets and liabilities measured at fair value and classified by level are as follows:

As of March 31, 2015

Millions of yen

	Level 1	Level 2	Level 3	Total
FVTPL financial assets				
Investments in securities and other financial assets				
Other investments	−	−	995	995
Other financial assets (derivatives)	−	208	−	208
FVTOCI financial assets				
Investments in securities and other financial assets				
Securities	11,500	−	205	11,705
Total assets	11,500	208	1,200	12,908
FVTPL financial liabilities				
Other financial liabilities (derivatives)	−	1,698	−	1,698
Total liabilities	−	1,698	−	1,698

As of March 31, 2016

Millions of yen

	Level 1	Level 2	Level 3	Total
FVTPL financial assets				
Investments in securities and other financial assets				
Other investments	−	−	914	914
Other financial assets (derivatives)	−	1,000	−	1,000
FVTOCI financial assets				
Investments in securities and other financial assets				
Securities	10,672	−	157	10,829
Total assets	10,672	1,000	1,071	12,743
FVTPL financial liabilities				
Other financial liabilities (derivatives)	−	59	−	59
Total liabilities	−	59	−	59

Changes in Level 3 financial assets are as follows:

Millions of yen

	For the year ended March 31, 2015			For the year ended March 31, 2016		
	Investments in securities and other financial assets			Investments in securities and other financial assets		
	FVTPL financial assets	FVTOCI financial assets	Total	FVTPL financial assets	FVTOCI financial assets	Total
Balance at beginning of year	939	116	1,055	995	205	1,200
Total gain (loss) in profit or loss	(8)	14	6	(32)	(75)	(107)
Net profit or loss	(8)	−	(8)	(32)	−	(32)
OCI	−	14	14	−	(75)	(75)
Acquisitions	230	81	311	150	45	196
Sales or disposals	(241)	(11)	(253)	(181)	(9)	(190)
Currency translation effects	75	3	79	(19)	(8)	(27)
Other	−	2	2	(0)	−	(0)
Balance at end of year	995	205	1,200	914	157	1,071

The gain or loss recognized in net profit or loss is included in financial income or financial expenses in the consolidated statements of profit or loss. For the total gain (loss) in net profit or loss, losses of financial assets held at year-end were ¥7 million and ¥32 million in the years ended March 31, 2015 and 2016, respectively

The gain or loss recognized in other comprehensive income is included in net changes from financial assets measured at fair value through other comprehensive income in the consolidated statements of comprehensive income.

(6) FVTOCI Financial Assets

The Group classifies equity instruments held to maintain and strengthen business relations FVTOCI financial assets, in view of the holding purpose.

(i) Fair Values of Principal Equity Instruments

The fair values of principal FVTOCI financial assets are as follows:

As of March 31, 2015

Millions of yen

Principal FVTOCI financial assets	Fair value
Hitachi Capital Corporation	5,905
Horiba, Ltd.	2,369
Shin-Etsu Chemical Co., Ltd.	1,092
Komatsu Ltd.	950
Aica Kogyo Co., Ltd.	518
Screen Holdings Co., Ltd.	183
Enplas Corporation	159
Sanyo Special Steel Co., Ltd.	107

As of March 31, 2016

Millions of yen

Principal FVTOCI financial assets	Fair value
Hitachi Capital Corporation	5,698
Horiba, Ltd.	2,165
Shin-Etsu Chemical Co., Ltd.	810
Komatsu Ltd.	770
Dexerials Corporation	487
Aica Kogyo Co., Ltd.	437
Enplas Corporation	137
Sanyo Special Steel Co., Ltd.	109

(ii) Derecognition of FVTOCI Financial Assets

The Group sold some FVTOCI financial assets following reviews of business relationships or for other reasons. The FVTOCI financial assets that were derecognized for the years ended March 31, 2015 and 2016 are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Fair value at time of sale	11	263
Accumulated gains at time of the recognition	4	3

Accordingly, the accumulated gains transferred from accumulated other comprehensive income to retained earnings were ¥2 million and ¥5 million in the years ended March 31, 2015 and 2016, respectively.

(iii) Dividend Income

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Investments derecognized during year	－	5
Investments held at year-end	209	283
Total	209	288

(7) Derivatives and Hedge Accounting

(i) Cash Flow Hedges

The Group uses forward exchange contracts to hedge cash flow fluctuations for forward exchange commitments and forecasted transactions, designating derivatives that satisfy hedge accounting requirements as cash flow hedges. Effective portions of fair value fluctuations of forward exchange contracts designated as cash flow hedges are recognized as OCI, while ineffective portions are recognized in profit or loss.

No amounts were recognized in profit or loss in the years ended March 31, 2015 and 2016, as the effects of hedges were either not effective or were excluded from the assessment of hedge effectiveness.

(ii) Derivatives Not Designated as Hedges

The Group uses forward exchange contracts to hedge against currency exchange risks associated with foreign currency denominated assets and liabilities. Hedge accounting is not adopted for these contracts, and all fair value changes are recognized in profit and loss.

(iii) Fair Value of Derivatives Designated as Hedging Instruments

The fair values of derivatives designated as hedging instruments as of March 31, 2015 and 2016 are as follows:

Millions of yen

	As of March 31, 2015			As of March 31, 2016		
	Contract amount	Over 1 year	Fair value	Contract amount	Over 1 year	Fair value
Forward exchange contracts						
Selling						
US dollar	13,021	－	(992)	14,524	－	644
Euro	1,366	－	71	1,379	－	22
Other	1,010	－	(35)	2,053	－	59
Buying						
US dollar	3,579	－	33	365	－	(11)
Euro	488	－	(22)	138	－	5
Other	492	－	2	937	－	(3)
Total	19,957	－	(943)	19,396	－	717

(8) Capital Management

The Group manages its capital under the policy of maintaining appropriate levels of assets, liabilities and equity for current and future business operations, as well as optimizing the capital in its operations.

The Company uses the total Hitachi High-Technologies stockholders’ equity ratio as an important indicator in capital management, sets targets in its medium-term management plan, and regularly monitors them. The total Hitachi High-Technologies stockholders’ equity ratios at March 31, 2015 and 2016 were 56.2% and 60.4%, respectively.

The Group is not subject to any capital requirements except for general rules, such as JCL.

29. Leases

(1) Lessee

The Company and certain subsidiaries use leased tools, furniture and fixtures under finance leases.

The following table shows the undiscounted amounts and present value of minimum lease payments under finance leases as of March 31, 2015 and 2016.

Millions of yen

	Future minimum lease payments		Present value of future minimum lease payments	
	As of March 31, 2015	As of March 31, 2016	As of March 31, 2015	As of March 31, 2016
Within 1 year	135	191	126	181
After 1 year and not later than 5 years	204	258	195	248
More than 5 years	1	0	1	0
Total	339	449	321	429
Finance charges	(18)	(21)	—	—
Present value of future minimum lease payments	321	429	321	429

The Company and certain subsidiaries use leased buildings and structures, machinery and vehicles under operating leases.

The following table shows the future minimum lease payments for non-cancelable operating leases as of March 31, 2015 and 2016.

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Within 1 year	874	1,002
After 1 year and not later than 5 years	1,881	1,901
More than 5 years	768	442
Total	3,522	3,345

Minimum lease payments (continuing operations) for operating leases recognized as expenses in the years ended March 31, 2015 and 2016 are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Minimum lease payments	4,913	5,245

Minimum lease payments are posted in cost of sales and selling, general and administrative expenses.

(2) Lessor

The Company and certain subsidiaries lease tools, furniture, and equipment under finance lease contracts.

The following table shows the future minimum lease payments receivable for finance leases as of March 31, 2015 and 2016.

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Within 1 year	284	414
After 1 year and not later than 5 years	464	870
More than 5 years	39	96
Total	787	1,380

30. Major Subsidiaries

The Group's consolidated financial statements include the financial statements of the following principal subsidiaries.

Company name	Location	Principal businesses	Ownership (%)	
			As of March 31, 2015	As of March 31, 2016
Hitachi High-Tech Solutions Corporation	Chuo-ku, Tokyo	Industrial & IT Systems	100.0	100.0
Hitachi High-Tech Materials Corporation	Minato-ku, Tokyo	Advanced Industrial Products	100.0	100.0
Hitachi High-Tech Fielding Corporation	Shinjuku-ku, Tokyo	Electronic Device Systems, Science & Medical Systems, and Industrial & IT Systems	100.0	100.0
Hitachi High-Tech Fine Systems Corporation	Kamisato, Kodama-gun, Saitama Prefecture	Fine Technology Systems	100.0	100.0
Hitachi High-Tech Manufacturing & Service Corp.	Hitachinaka City, Ibaraki Prefecture	Electronic Device Systems and Science & Medical Systems	100.0	100.0
Hitachi High-Tech Science Corporation	Minato-ku, Tokyo	Science & Medical Systems	100.0	100.0
Hitachi High Technologies America, Inc.	U.S.A.	Electronic Device Systems, Science & Medical Systems, Industrial & IT Systems, and Advanced Industrial Products	100.0	100.0
Hitachi High-Technologies Europe GmbH	Germany	Electronic Device Systems, Science & Medical Systems, Industrial & IT Systems, and Advanced Industrial Products	100.0	100.0
Hitachi High-Technologies (Singapore) Pte. Ltd.	Singapore	Electronic Device Systems, Fine Technology Systems, Science & Medical Systems, Industrial & IT Systems, and Advanced Industrial Products	100.0	100.0
Hitachi High-Technologies (Thailand) Ltd. (Note 2)	Thailand	Industrial & IT Systems and Advanced Industrial Products	100.0	100.0
Hitachi High-Technologies (Shanghai) Co., Ltd.	China	Electronic Device Systems, Fine Technology Systems, Science & Medical Systems, Industrial & IT Systems, and Advanced Industrial Products	100.0	100.0
Hitachi High-Technologies Hong Kong Limited	China	Industrial & IT Systems and Advanced Industrial Products	100.0	100.0

Note: Hitachi High-Technologies (Thailand) Ltd. is a wholly owned subsidiary of Hitachi High-Technologies (Singapore) Pte. Ltd.

31. Related Party

(1) Parent Company

Company name	Principal business	Location	Ownership (%)	
			As of March 31, 2015	As of March 31, 2016
Hitachi, Ltd.	Manufacturing and sales of electrical machinery and equipment	Chiyoda-ku, Tokyo	51.8	51.8

(2) Related Party Transactions

The Group's significant transactions (excluding those eliminated from the consolidated financial statements) with related parties are as follows:

(i) For the year ended March 31, 2015

Millions of yen

Category	Company name	Details of related party transactions	Transaction amount	Outstanding balances	
Parent company	Hitachi, Ltd.	Sales of information equipment and power-related parts, etc.	19,955	Trade receivables	11,416
				Advances received	112
		Deposits of funds	16,914	Deposits (including for more than three months)	129,053
Entities with same parent company	Hitachi Capital Corporation	Factoring transactions	36,152	Trade payables	15,793
	Hitachi Europe Ltd.	Deposits of funds	619	Deposits	7,649

Notes:

1. Transaction amounts that exclude those for factoring transactions do not include consumption taxes. Factoring transaction amounts and outstanding balances include consumption taxes.
2. Deposits of funds and refunds are conducted daily. Transaction amounts represent amounts subtracted from the end of the previous fiscal year.

(ii) For the year ended March 31, 2016

Millions of yen

Category	Company name	Details of related party transactions	Transaction amount	Outstanding balances	
Parent company	Hitachi, Ltd.	Sales of information equipment and power-related parts, etc.	13,796	Trade receivables	9,446
				Advances received	2,087
		Deposits of funds	7,398	Deposits (including for more than three months)	136,451
Entities with same parent company	Hitachi Capital Corporation	Factoring transactions	36,737	Trade payables	6,290
	Hitachi Europe Ltd.	Deposits of funds	43	Deposits	7,691

Notes:

1. Transaction amounts that exclude those for factoring transactions do not include consumption taxes. Factoring transaction amounts and outstanding balances include consumption taxes.
2. Deposits of funds and refunds are conducted daily. Transaction amounts represent amounts subtracted from the end of the previous fiscal year.

(3) Compensation for Directors and Executive Officers

The compensation for directors and executive officers for the years ended March 31, 2015 and 2016 are as follows:

Millions of yen

	For the year ended March 31, 2015	For the year ended March 31, 2016
Short-term employee benefits	640	595

32. Collateral

Assets pledged as collateral and the secured liabilities are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Assets pledged as collateral		
Investments in securities and other financial assets	363	311
Secured liabilities		
Trade payables	21	56

Notes:

1. Assets pledged as collateral do not give assignees the right to sell or repledge the collateral.
2. Under assets pledged as collateral as of March 31, 2015, ¥334 million of investments in securities and other financial assets is the maximum guaranteed amount.
   Under assets pledged as collateral as at March 31, 2016, ¥288 million of investments in securities and other financial assets is measured at fair value and ¥353 million is the maximum guaranteed amount.

33. Commitments

Commitments related to the acquisition of assets subsequent to March 31, 2015 and 2016 are as follows:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Purchase of property, plant and equipment	794	1,037

34. Contingencies

(1) Contingent Liabilities

The Group provides the following guarantees to financial institutions with respect to the home loans of Group employees and the operationally contracted guarantees for the office lease of a subsidiary:

Millions of yen

	As of March 31, 2015	As of March 31, 2016
Employee guarantees	193	133
Total	193	133

(2) Contingent Assets

None

(3) Litigation

Although the Group is subject to litigation in the natural course of business and claims that do not lead to litigation, none of these matters materially affect the operations of the Group.

35. Subsequent Events

None

Building a better working world

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Independent Auditor's Report

The Board of Directors
Hitachi High-Technologies Corporation

We have audited the accompanying consolidated financial statements of Hitachi High-Technologies Corporation and its consolidated subsidiaries, which comprise the consolidated statements of financial position as at March 31, 2016, and the consolidated statements of profit or loss, comprehensive income, changes in equity, and cash flows for the year then ended and notes to the consolidated financial statements.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Hitachi High-Technologies Corporation and its consolidated subsidiaries as at March 31, 2016, and their consolidated financial performance and cash flows for the year then ended in conformity with International Financial Reporting Standards.

Ernst & Young ShinNihon LLC

June 24, 2016
Tokyo, Japan