Financial statements

Contents

Consolidated income statement

for the year ended 31 March

	Notes	2017 Result before goodwill impairment £m	2017 Goodwill impairment £m	2017 Result for the year £m	2016 Result before goodwill impairment £m	2016 Goodwill impairment £m	2016 Result for the year £m
Revenue	4	**919.3**	**-**	**919.3**	898.1	-	898.1
Staff costs	7	**(415.3)**	**-**	**(415.3)**	(439.1)	-	(439.1)
Services and materials		**(97.3)**	**-**	**(97.3)**	(87.6)	-	(87.6)
Repairs and maintenance		**(38.2)**	**-**	**(38.2)**	(42.3)	-	(42.3)
Depreciation, amortisation and impairment	6	**(149.3)**	**(11.0)**	**(160.3)**	(128.7)	(92.7)	(221.4)
Profit on disposal of non-current assets		**0.1**	**-**	**0.1**	7.1	-	7.1
Other operating charges		**(46.6)**	**-**	**(46.6)**	(49.5)	-	(49.5)
Other operating income		**4.2**	**-**	**4.2**	3.1	-	3.1
Deferred grants released	6	**0.7**	**-**	**0.7**	0.7	-	0.7
Net operating costs		**(741.7)**	**(11.0)**	**(752.7)**	(736.3)	(92.7)	(829.0)
Operating profit	6	**177.6**	**(11.0)**	**166.6**	161.8	(92.7)	69.1
Share of results of associates and joint ventures	32	**2.1**	**-**	**2.1**	1.5	-	1.5
Investment revenue	8	**1.9**	**-**	**1.9**	3.6	-	3.6
Fair value movement on derivative contract	9	**(17.6)**	**-**	**(17.6)**	2.6	-	2.6
Finance costs	10	**(27.5)**	**-**	**(27.5)**	(32.4)	-	(32.4)
Profit before tax		**136.5**	**(11.0)**	**125.5**	137.1	(92.7)	44.4
Tax	11	**(21.7)**	**-**	**(21.7)**	(16.8)	-	(16.8)
Profit for the year attributable to equity shareholders		**114.8**	**(11.0)**	**103.8**	120.3	(92.7)	27.6

Consolidated statement of comprehensive income

for the year ended 31 March

	Notes	2017 £m	2016 £m
Profit for the year after tax		**103.8**	27.6
Items that will not be reclassified subsequently to profit and loss:			
Actuarial (loss)/gain on defined benefit pension scheme	30	**(291.2)**	288.0
Deferred tax relating to items that will not be reclassified subsequently	23	**52.6**	(58.0)
Items that may be reclassified subsequently to profit and loss:			
Change in fair value of hedging derivatives	18	**6.3**	(2.3)
Transfer to income statement on cash flow hedges	4,6	**(3.0)**	7.4
Exchange differences arising on translation of foreign operations		**(0.4)**	(0.1)
Currency translation differences arising on consolidation of equity accounted foreign operations	32	**0.2**	0.2
Deferred tax relating to items that may be reclassified subsequently	23	**(0.6)**	(1.1)
Other comprehensive (loss)/income for the year, net of tax		**(236.1)**	234.1
Total comprehensive (loss)/income for the year attributable to equity shareholders		**(132.3)**	261.7

Consolidated balance sheet

at 31 March

	Notes	2017 £m	2016 £m
Assets			
Non-current assets			
Goodwill	13	**198.3**	209.3
Other intangible assets	14	**512.7**	439.5
Property, plant and equipment	15	**488.9**	555.0
Interests in associate and joint ventures	32	**5.4**	3.6
Loans to joint ventures	32	**14.9**	1.4
Trade and other receivables	16	**19.0**	24.0
Derivative financial instruments	18	**2.0**	0.2
		1,241.2	1,233.0
Current assets			
Loans to joint ventures	32	**-**	2.4
Trade and other receivables	16	**166.9**	235.6
Short term investments	19	**39.4**	28.9
Cash and cash equivalents	19	**254.2**	228.2
Derivative financial instruments	18	**2.3**	0.4
		462.8	495.5
Total assets		**1,704.0**	1,728.5
Current liabilities			
Trade and other payables	20	**(159.0)**	(171.0)
Current tax liabilities		**(6.7)**	(6.7)
Borrowings	17	**(46.6)**	(38.9)
Provisions	22	**(4.6)**	(8.7)
Derivative financial instruments	18	**(8.8)**	(7.8)
		(225.7)	(233.1)
Net current assets		**237.1**	262.4
Non-current liabilities			
Trade and other payables	20	**(132.6)**	(83.6)
Borrowings	17	**(379.7)**	(521.5)
Retirement benefit obligations	30	**(350.8)**	(77.4)
Deferred tax liability	23	**(19.6)**	(70.5)
Provisions	22	**(6.8)**	(7.5)
Derivative financial instruments	18	**(131.3)**	(121.1)
		(1,020.8)	(881.6)
Total liabilities		**(1,246.5)**	(1,114.7)
Net assets		**457.5**	613.8
Equity			
Called up share capital	24	**140.6**	140.6
Share premium account	25	**0.4**	0.4
AESOP reserve		**(0.3)**	(0.3)
Hedge reserve		**2.7**	-
Translation reserve		**(0.4)**	(0.2)
Other reserves		**(34.7)**	(34.7)
Retained earnings		**349.1**	507.9
Equity attributable to the shareholders		**457.4**	613.7
Non-controlling interest	26	**0.1**	0.1
Total equity		**457.5**	613.8

The financial statements (Company No. 04138218) were approved by the Board of directors and authorised for issue on 30 June 2017 and signed on its behalf by:

Paul Golby

Paul Golby
Chairman

Nigel Fotherby

Nigel Fotherby
Finance Director

Consolidated statement of changes in equity

for the year ended 31 March

	Equity attributable to equity holders of the group									
	Share capital £m	Share premium account £m	AESOP reserve £m	Hedge reserve £m	Translation reserve £m	Other reserves [1] £m	Retained earnings £m	Sub-total £m	Non-controlling interest £m	Total equity £m
At 1 April 2015	140.6	0.4	(0.3)	(4.0)	(0.3)	(34.7)	332.0	433.7	-	433.7
Profit for the year	-	-	-	-	-	-	27.6	27.6	-	27.6
Other comprehensive income for the year	-	-	-	4.0	0.1	-	230.0	234.1	-	234.1
Total comprehensive income for the year	**-**	**-**	**-**	**4.0**	**0.1**	**-**	**257.6**	**261.7**	**-**	**261.7**
Adjustments arising from non-controlling interest	-	-	-	-	-	-	-	-	0.1	0.1
Dividends paid	-	-	-	-	-	-	(81.7)	(81.7)	-	(81.7)
At 31 March 2016	**140.6**	**0.4**	**(0.3)**	**-**	**(0.2)**	**(34.7)**	**507.9**	**613.7**	**0.1**	**613.8**
At 1 April 2016	140.6	0.4	(0.3)	-	(0.2)	(34.7)	507.9	613.7	0.1	613.8
Profit for the year	-	-	-	-	-	-	103.8	103.8	-	103.8
Other comprehensive income/(loss) for the year	-	-	-	2.7	(0.2)	-	(238.6)	(236.1)	-	(236.1)
Total comprehensive income/(loss) for the year	**-**	**-**	**-**	**2.7**	**(0.2)**	**-**	**(134.8)**	**(132.3)**	**-**	**(132.3)**
Dividends paid	-	-	-	-	-	-	(24.0)	(24.0)	-	(24.0)
At 31 March 2017	**140.6**	**0.4**	**(0.3)**	**2.7**	**(0.4)**	**(34.7)**	**349.1**	**457.4**	**0.1**	**457.5**

1 Other reserves arose on the completion of the PPP transaction in July 2001.

Consolidated cash flow statement

for the year ended 31 March

	Notes	2017 £m	2016 £m
Net cash from operating activities	27	**387.7**	341.7
Cash flows from investing activities			
Interest received on short term investments		**1.2**	1.5
Purchase of property, plant and equipment and other intangible assets		**(149.1)**	(155.3)
Proceeds of disposal of property, plant and equipment		**0.1**	7.4
Changes in short term investments		**(10.5)**	0.8
Dividend received from associate		**0.2**	0.2
Loan to non-controlling interest		**-**	(0.1)
Loan to joint ventures		**(10.5)**	(3.3)
Net cash outflow from investing activities		**(168.6)**	(148.8)
Cash flows from financing activities			
Interest paid		**(31.1)**	(31.8)
Interest received on derivative financial instruments		**0.5**	0.6
Repayment of bond principal		**(39.2)**	(30.8)
Bank and other loans		**(95.4)**	(56.6)
Index linked swap repayments		**(3.8)**	-
Bank facility arrangement fees		**(0.4)**	(1.9)
Dividends paid		**(24.0)**	(81.7)
Proceeds on issue of shares to non-controlling interest		**-**	0.1
Net cash outflow from financing activities		**(193.4)**	(202.1)
Increase/(decrease) in cash and cash equivalents during the year		**25.7**	(9.2)
Cash and cash equivalents at 1 April		**228.2**	237.3
Exchange gains on cash and cash equivalents		**0.3**	0.1
Cash and cash equivalents at 31 March		**254.2**	228.2
Net debt (representing borrowings net of cash and short term investments)		**(132.7)**	(303.3)

Notes forming part of the consolidated accounts

1. General information

NATS Holdings Limited is a private limited company incorporated in England and Wales and domiciled in the United Kingdom and acting under the Companies Act 2006. The address of the registered office is on page 65. The nature of the group's operations and its principal activities are set out in the Report of the directors and in the Strategic report.

These financial statements are presented in pounds sterling because that is the currency of the primary economic environment in which the group operates.

2. Accounting policies

The following accounting policies have been applied consistently both in the current and prior years in dealing with items which are considered material in relation to the group's financial statements.

Basis of preparation and accounting

The financial statements have been prepared on the going concern basis. For further detail please refer to page 20. The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) and International Financial Reporting Interpretations Committee (IFRIC) interpretations as endorsed by the European Union (EU) and therefore the group financial statements comply with Article 4 of the EU IAS Regulation. The financial information has also been prepared in accordance with IFRSs.

In the current year, the group has applied a number of amendments to IFRSs issued by the International Accounting Standards Board (IASB) that are effective for accounting periods beginning on or after 1 January 2016.

IAS 1 (amendments): *Disclosure Initiative*

IAS 16 and IAS 38 (amendments): *Clarification of Acceptable Methods of Depreciation and Amortisation*

IAS 27 (amendments): *Equity Method in Separate Financial Statements*

IFRS 10, IFRS 12 and IAS 28 (amendments): *Applying the Consolidation Exemption*

The application of these amendments has not resulted in any material impact on the financial statements of the group.

At the date of authorisation of these financial statements, the following Standards and Interpretations which have not been applied in these financial statements were in issue but not yet effective (and in some cases had not yet been adopted by the EU):

IFRS 9: *Financial Instruments*

IFRS 15: *Revenue from Contracts with Customers*

IFRS 16: *Leases*

IAS 7 (amendments): *Disclosure Initiative*

IAS 12 (amendments): *Recognition of Deferred Tax Assets for Unrealised Losses*

IFRIC 22: *Foreign Currency Transactions and Advance Consideration*

IFRS 9: *Financial Instruments* deals with classification, measurement and derecognition of financial assets and financial liabilities, hedge accounting and introduces a new expected loss impairment model. The standard is expected to have two main impacts on the group: the adoption of the expected loss impairment model in assessing the fair value of trade and contract receivables and loans to joint ventures; and the option to recognise the impact of changes in own credit risk in other comprehensive income rather than the income statement.

The group expects to recognise lifetime expected credit losses (i.e. losses arising from default over the life of a financial instrument) for its trade and contract receivables and loans to joint ventures. In general, the directors anticipate that the application of the expected credit loss model of IFRS 9 will result in earlier recognition of credit losses.

The group is also assessing whether the new standard will be implemented with a restatement of the previous period. If this is deemed impracticable at the date of initial application, an adjustment will be reflected in retained earnings.

The standard is effective for reporting periods beginning on or after 1 January 2018.

IFRS 15: *Revenue from Contracts with Customers* will replace IAS 18: *Revenue* and IAS 11: *Construction Contracts*, and provides enhanced detail on the principle of recognising revenue to reflect the transfer of goods and services to customers at a value which the group expects to be entitled to receive. The standard also updates revenue disclosure requirements.

The group's principal sources of revenue are Airspace, Airports, Defence, Other UK Business and International as described in note 5.

The group is undertaking a preliminary assessment of the impact of the standard by reviewing major contracts from each source of revenue. This assessment is subject to change. The principal impact identified from this assessment to date is the reclassification of airport ATC revenue. A number of airport ATC contracts require the group to rent the airport control tower buildings from the airport operator and to recover the property costs through the fee charged to the airport operator for ATC services. The fees for recovering property costs amount to c.£17m per annum and are recognised as revenue under IAS 18. Under IFRS 15, the provision of the air traffic control tower is not considered to be distinct from the provision of ATC services. Accordingly, the fee for recovering property costs would be reclassified from revenue and netted in operating costs against rental charges in the income statement, with no impact to the result.

The major part of the group's revenue is derived from service contracts which include performance obligations which are satisfied over time as customers simultaneously receive and consume the benefits provided by the group's performance as the group performs or which include enforceable rights to payment for performance completed to date. In addition, the transaction price for NERL's economically regulated services and certain airport ATC contracts include variable consideration for traffic volume risk sharing, inflation adjustments, service performance incentives and financing components. The group's preliminary assessment is that the nature, timing and amount of revenue for these service contracts is not materially different under IFRS 15.

Notes forming part of the consolidated accounts

The standard is effective for annual periods beginning on or after 1 January 2018. The directors do not intend to adopt the standard earlier and expect to use the full retrospective method upon adoption which requires the restatement of comparative financial information.

IFRS 16: *Leases* specifies how a company will recognise, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognise assets and liabilities for all leases unless the lease term is 12 months or less or the underlying asset has a low value.

As at 31 March 2017, the group has non-cancellable operating lease commitments of £94.5m as disclosed in note 28. A preliminary assessment indicates that these arrangements will meet the definition of a lease under IFRS 16, and hence the group will recognise an increase to total property, plant and equipment and a corresponding liability in respect of all these leases, unless they qualify for low value or short-term leases upon the application of IFRS 16.

The group's preliminary assessment is that property, plant and equipment is likely to increase by c.£100m, lease liabilities by c.£110m and accruals are likely to decrease by c.£10m (relating to the balance of rent free period incentives not recognised on transition) as at 31 March 2020.

Over the life of leased assets, there will be no profit impact from adopting IFRS 16 but profit will vary between financial years as interest charges on finance leases are higher at the beginning of the lease term and reduce as the lease principal is repaid. Profit before tax for the year ending 31 March 2020 is expected to be c.£1.5m lower following adoption of this standard.

The directors are still in the process of assessing the full impact of the application of IFRS 16 on the group's consolidated financial statements and as a result the above preliminary assessment is subject to change. The standard is effective for annual periods beginning on or after 1 January 2019, subject to EU endorsement. The directors do not intend to apply the standard earlier and have not yet assessed the transition accounting method to be used upon adoption.

The directors do not expect that the adoption of the other standards and interpretations listed above will have a material impact on the financial statements in future periods.

The financial information has been prepared on the historical cost basis. The principal accounting policies adopted are set out below.

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the company and entities controlled by the company (its subsidiaries). Control is achieved where the company has the power over the investee, exposure or rights to variable returns from involvement with the investee and the ability to use power over the investee to affect the amount of an investor's returns.

All intra-group transactions, balances, income and expenses are eliminated on consolidation.

Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable and represents amounts receivable for goods or services provided in the normal course of business, net of discounts, VAT and other sales related taxes. Revenue is recognised as follows:

> Income from the rendering of services is recognised when the outcome can be reliably estimated and then by reference to the stage of completion of the transaction at the balance sheet date and in accordance with NATS (En Route) plc's air traffic services licence (including volume risk sharing, service performance incentives, costs exempt from risk sharing and inflation adjustments) and airport contracts and other contracts. Amounts receivable (and payable) include revenue allowed under the charge control conditions of the air traffic services licence and EC Charging Regulations.

> Sales of goods are recognised when they are delivered and title has passed.

> Dividend income is recognised when the shareholder's rights to receive payment have been established.

> Interest income is recognised on a time-proportion basis using the effective interest method. This is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the group's Executive team, which is considered to be the chief operating decision maker. An operating segment represents a service line organised by customers who receive common products or services. Operating segment operating results are reviewed regularly by the Executive team to make decisions about resources to be allocated to the segment and to assess its performance, and for which discrete financial information is available.

Inter-segment transfers or transactions are entered into under the normal commercial terms and conditions that would also be available to unrelated third parties.

Segment performance is assessed by service line revenue and contribution, where contribution represents revenue less costs directly attributed to individual service lines. Segment results that are reported to the Executive team include items directly attributed to a segment as well as those that can be allocated on a reasonable basis. Costs that are not attributed to service lines include the cost of central support functions, depreciation and amortisation (net of Government grants), goodwill impairment, employee share scheme (costs)/credits, redundancy and relocation costs, above the line tax credits and any profit or loss on disposal of non-current assets.

Notes forming part of the consolidated accounts

Exceptional items and goodwill impairment charges

Exceptional items deemed as such by the directors by virtue of their nature or size, and goodwill impairment charges which may recur, are included under the statutory classification appropriate to their nature but are separately disclosed on the face of the income statement to assist in understanding the financial performance of the group.

Operating profit

Operating profit is stated after charging restructuring costs but before the group's share of results of joint ventures and associates, investment income, the fair value movement in the index-linked swap contract, finance costs and taxation.

Goodwill

Goodwill in relation to NATS (En Route) plc, being the excess of consideration over the values of the net assets acquired at the date of the Public Private Partnership (PPP), is recognised as an asset and reviewed for impairment at least annually. Any impairment is recognised immediately in the income statement and is not subsequently reversed. For the purpose of impairment testing NATS assesses the carrying value of goodwill against the recoverable amount of the cash generating unit to which goodwill has been allocated. Where the recoverable amount is less than the carrying value, the impairment loss is allocated to goodwill.

Recoverable amount is the higher of fair value less costs of disposal and value in use. Fair value less costs of disposal is assessed by reference to the Regulatory Asset Bases (RABs) of the economically regulated activities and costs of disposal. In assessing value in use, the estimated future cash flows (with a RAB terminal value, as a proxy for future cash flows) are discounted to their present value using the pre-tax nominal regulated rate of return. A premium is applied to the RAB (see note 3).

Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other items are classified as operating leases.

Assets held under finance leases are recognised as assets of the group at their fair value or, if lower, at the present value of the minimum lease payments, each determined at the inception of the lease. The corresponding liability to the lessor is included in the balance sheet as a finance lease obligation. Lease payments are apportioned between finance expenses and the reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognised immediately in profit or loss, unless they are directly attributable to qualifying assets in which case they are capitalised in accordance with the group's policy on borrowing costs (see below).

Rentals payable under operating leases are charged to income on a straight-line basis over the term of the relevant lease. Benefits received and receivable as an incentive to enter into an operating lease are also spread on a straight-line basis over the lease term.

Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and any provision for impairment in value. The cost of property, plant and equipment includes internal and contracted labour costs directly attributable to bringing the assets into working condition for their intended use. Depreciation is provided on a straight-line basis to write off the cost, less estimated residual value, of property, plant and equipment over their estimated useful lives as follows:

> Leasehold land: over the term of the lease
> Freehold buildings: 10-40 years
> Leasehold buildings: over the remaining life of the lease to a maximum of 20 years
> Air traffic control systems: 8-15 years
> Plant and other equipment: 3-15 years
> Furniture, fixtures and fittings: 10 years
> Vehicles: 5 years

Freehold land and assets in the course of construction and installation are not depreciated.

The gain or loss arising on the disposal or retirement of an asset is determined as the difference between the sale proceeds and the carrying amount of the asset and is recognised in income.

Borrowing costs

Following the amendments of IAS 23: *Borrowing Costs*, the costs of borrowings directly attributable to the acquisition, construction or production of a qualifying asset are capitalised as part of the cost of the asset (i.e. there is no longer a choice to expense such costs). Qualifying assets are those which take a substantial time to get ready for intended use. These do not include assets which are ready for use when acquired.

For NATS this assumes qualifying assets relate to any additions to new projects that began from 1 April 2009, included in assets under construction, and excludes acquisitions that are acquired in a state ready for use.

When funds are borrowed specifically for the purpose of acquiring or constructing a qualifying asset, the amount of borrowing costs eligible for capitalisation is the actual cost of borrowing incurred in the period. IAS 23 requires that where a qualifying asset is funded from a pool of general borrowings, the amount of borrowing costs eligible for capitalisation should be determined by applying an appropriate capitalisation rate (based on the weighted average of borrowing costs applicable to the general outstanding borrowings during the period) to the expenditure during the period, to determine the borrowing costs eligible for capitalisation.

Notes forming part of the consolidated accounts

For NATS, the percentage rate for interest capitalisation is calculated as a proportion of the interest costs to the average level of borrowings in the period that relate to qualifying capital expenditure. All qualifying capital expenditure is then inflated by this percentage which has the effect of capitalising related interest costs.

Government grants and other grants

Government grants relating to property, plant and equipment are treated as deferred income and released to the income statement by equal annual instalments over the expected useful economic lives of the related assets.

Grants of a revenue nature are credited to income in the period to which they relate (and are reported on the face of the income statement).

Funding received from the Innovation and Network Agency (INEA) for SESAR deployment projects is deferred on the balance sheet and reported as a liability falling due after more than one year (at 31 March 2017). Under EC rules, this funding represents a contribution towards future revenue allowances. For this reason, once the relevant assets are deployed, the relevant amounts of INEA funding will be recognised as revenue.

Investments in associates and joint ventures

An associate is an entity over which the group is in a position to exercise significant influence, but not control, through participation in the financial and operating policy decisions of the investee. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control over those policies.

The results, assets and liabilities of associates are incorporated in these financial statements using the equity method of accounting.

A joint venture is an arrangement in which two or more parties have joint control. The investors in the joint venture have rights to the net assets of the jointly controlled entity. The results of joint ventures are incorporated in these financial statements using the equity method of accounting.

Investments in associates and joint ventures are carried in the balance sheet at cost as adjusted by post-acquisition changes in the group's share of the net assets of the associate or joint venture, less any impairment in the value of individual investments.

Internally-generated intangible assets - research and development expenditure

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from the group's development activities is recognised only if all of the following conditions are met:

> the technical feasibility of completing the intangible asset so that it will be available for use or sale;

> the intention to complete the intangible asset and use or sell it;

> the ability to use or sell the intangible asset;

> how the intangible asset will generate probable future economic benefits;

> the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

> the ability to measure reliably the expenditure attributable to the intangible asset during its development.

Internally-generated intangible assets are amortised on a straight-line basis over their useful lives, typically over 3 to 12 years. Assets in the course of construction are not amortised until ready for use. Where no internally-generated intangible asset can be recognised, development expenditure is recognised as an expense in the period in which it is incurred.

Impairment of tangible and intangible assets excluding goodwill

At each balance sheet date, the group reviews the carrying amounts of its tangible and intangible assets, including those in the course of construction, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment (if any). Where the asset does not generate cash flows that are independent from other assets, the group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs of disposal and the value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using the pre-tax nominal regulated rate of return for NERL (with a RAB terminal value as a proxy for future cash flows) and for NATS Services the weighted average cost of capital.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised as an expense immediately.

Where an impairment loss on an intangible or tangible asset, excluding goodwill, subsequently reverses, the carrying amount of the asset (cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (cash-generating unit) in prior years. A reversal of an impairment loss is recognised in the income statement immediately.

Notes forming part of the consolidated accounts

Amounts recoverable on contracts

Where the outcome of a contract can be estimated reliably, revenue and costs are recognised by reference to the stage of completion of the contract activity at the balance sheet date. This is normally measured by the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs, except where this would not be representative of the stage of completion. Variations in contract work, claims and incentive payments are included to the extent that they have been, or are more likely than not to be, agreed with the customer.

Where the outcome of a contract cannot be estimated reliably, contract revenue is recognised to the extent of contract costs incurred that it is probable will be recoverable. Contract costs are recognised as expenses in the period in which they are incurred.

When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognised as an expense immediately.

Share-based payments

The group has applied the requirements of IFRS 2: *Share-Based Payments*.

In 2001, the company established an All-Employee Share Ownership Plan for the benefit of its employees to hold 5% of the share capital of NATS Holdings Limited. The Plan was initially established through the transfer of shares by the Crown Shareholder at the PPP to NATS Employee Sharetrust Limited (NESL) for £nil consideration. Following financial restructuring in March 2003, further shares were transferred to NESL by The Airline Group Limited (AG) for £nil consideration and NESL was gifted cash of £279,264 to acquire additional shares to maintain the Plan's interest at 5% of the share capital of NATS Holdings Limited. This amount is reflected in the AESOP reserve. The Plan is administered by NESL, a trustee company. The employee ordinary shares may only be owned by employee shareholders and can only be sold to the trust company.

Shares awarded by the Plan are treated as cash-settled liabilities. A liability is recognised for shares awarded over the period from award to when the employee becomes unconditionally entitled to the shares and are measured initially at their fair value. At each balance sheet date until the liability is settled, as well as at the date of settlement, the fair value of the liability is re-measured based on independent share valuations with any changes in fair value recognised in profit or loss for the year.

In respect of the award schemes, the group provides finance to the NESL to enable the trust company to meet its obligations to repurchase vested or eligible shares from employees.

The costs of running the employee share trust is charged to the income statement.

Taxation

The tax expense represents the sum of the tax currently payable and deferred tax.

Current tax is provided at amounts expected to be paid or recovered using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying values of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, and is accounted for using the balance sheet liability method. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the tax profit nor the accounting profit.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the balance sheet date. Deferred tax is charged or credited to the income statement, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also dealt with in equity.

The carrying amount of deferred tax assets is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current liabilities and when they relate to taxes levied by the same taxation authority and the group intends to settle its current tax assets and liabilities on a net basis.

Under the Finance (No.2) Act 2015 which was enacted on 18 November 2015, the corporation tax rate was reduced to 19% with effect from 1 April 2017. Under the Finance Act 2016, the corporation tax rate will be reduced to 17% with effect from 1 April 2020. The future main tax rate reductions are expected to have a similar impact on the group's financial statements as outlined above, subject to the impact of other developments in the group's tax position which may reduce the beneficial effect of this in the group's tax rate.

Notes forming part of the consolidated accounts

Foreign currency translation

The individual financial statements of each group company are presented in the currency of the primary economic environment in which it operates (its functional currency). For the purpose of the consolidated financial statements, the results and financial position of each group company are expressed in pounds sterling, which is the functional currency of the holding company, and the presentation currency for the consolidated financial statements. For the purpose of presenting consolidated financial statements, the assets and liabilities of the group's foreign operations are translated at exchange rates prevailing at the balance sheet date. Income and expense items are translated at the average rates for the period, unless exchange rates fluctuate significantly during the period, in which case the exchange rate at the date of transactions is used. Exchange differences arising, if any, are recognised in other comprehensive income and accumulated in equity in the Translation reserve (and attributed to non-controlling interests as appropriate).

In preparing the financial statements of the individual companies, transactions in currencies other than pounds sterling are recorded at the rates of exchange prevailing on the dates of the transactions. At each balance sheet date, monetary assets and liabilities that are denominated in foreign currencies are retranslated at the rates prevailing at the balance sheet date. Non-monetary assets and liabilities carried at fair value that are denominated in foreign currencies are translated at the rates prevailing at the date when the fair value was determined. Gains and losses arising on retranslation are included in the income statement for the period.

In order to hedge its exposure to certain foreign exchange risks, the group enters into forward contracts (see below for details of the group's accounting policies in respect of such derivative financial instruments).

Retirement benefit costs

The Civil Aviation Authority Pension Scheme is a funded defined benefit scheme. The assets of the scheme are held in a separate trustee administered fund. The cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each reporting period.

Remeasurement comprising actuarial gains and losses and return on scheme assets (excluding interest) are recognised immediately in the balance sheet with a charge or credit to the statement of comprehensive income in the period in which they occur. Remeasurement recorded in the statement of comprehensive income is not recycled.

Past service cost is recognised immediately to the extent that the benefits are already vested, and otherwise is amortised on a straight-line basis over the average period until the benefits become vested.

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. Defined benefit costs are split into three categories:

> current service cost, past service cost and gains and losses on curtailments and settlements;

> net interest expense or income; and

> remeasurement.

The retirement benefit obligation recognised in the balance sheet represents the deficit or surplus in the group's defined benefit scheme. Any surplus resulting from this calculation is limited to the present value of available refunds or reductions in future contributions to the scheme.

Since 2009, the group and Trustees have introduced a number of pension reforms, as explained in note 30. These include: closing the defined benefit scheme to new entrants with effect from 1 April 2009, and establishing a defined contribution scheme for new entrants from 1 April 2009, limiting the rate of increase in pensionable pay and changing the indexation reference rate for future service.

Contributions to the defined contribution pension scheme are expensed as incurred.

Provisions

Provisions are recognised when the group has a present obligation as a result of a past event, and it is probable that the group will be required to settle that obligation. Provisions are measured at the directors' best estimate of expenditure required to settle the obligation at the balance sheet date, and are discounted to present value where the effect is material.

Financial instruments

Financial assets and financial liabilities are recognised on the group's balance sheet when the group becomes a party to the contractual provisions of the instrument. Detailed disclosures are set out in notes 16 to 21.

Financial assets

Financial assets, other than hedging instruments, can be divided into the following categories:

> loans and receivables;

> financial assets at fair value through the profit and loss;

> available for sale financial assets; and

> held to maturity investments.

Notes forming part of the consolidated accounts

Financial assets are assigned to different categories on initial recognition. The classification depends upon the nature and purpose of the financial asset. A financial instrument's category is relevant to the way it is measured and whether the resulting income is recognised through the income statement or directly in equity. Subsequent to initial recognition financial assets are measured at either fair value or at amortised cost according to the category in which they are classified.

Investments are recognised and derecognised on a trade date where the purchase or sale of an investment is under a contract whose terms require delivery of the investment within the time frame established by the market concerned, and are initially measured at fair value plus transaction costs.

The group has financial assets in the categories of other loans and receivables and financial assets at fair value through the profit and loss. The group does not have financial assets in other categories.

Loans and receivables

Trade receivables and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as loans and receivables. Receivables are measured at amortised cost using the effective interest method, less any impairment.

Impairment of financial assets

Financial assets are rigorously assessed for indicators of impairment at half year and year end.

Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after initial recognition of the financial asset, the estimated future cash flows of the investment have been impacted.

Impairment losses on trade receivables are recognised using allowance accounts. When a trade receivable is considered irrecoverable, it is written off against the allowance account, any subsequent recoveries are credited to the allowance account. Changes in the allowance account are recognised in the income statement.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits and other highly liquid investments (with a maturity of 3 months or less) that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value.

Financial liabilities

Financial liabilities are classified according to the substance of the contractual arrangements entered into. Financial liabilities are either financial liabilities at 'fair value through the profit and loss' or 'other financial liabilities'.

Fair value through the profit and loss

Financial liabilities at fair value through the profit and loss are measured initially at fair value and subsequently stated at fair value, with any resultant gain or loss recognised in the income statement. The net gain or loss recognised in the income statement incorporates any interest paid on the financial liability.

Other financial liabilities: including bank, other borrowings, loan notes and debt securities

Interest-bearing bank loans, other borrowings, loan notes and debt securities are recorded at the proceeds received, net of direct issue costs. Finance charges, including premia payable on settlement or redemption and direct issue costs, are accounted for on an accruals basis in the income statement using the effective interest method and are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

Effective interest method

The effective interest method is a method of calculating amortised cost of a financial asset or financial liability and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts the estimated future cash receipts over the expected life of the financial asset.

Equity

Equity instruments are also classified according to the substance of the contractual arrangements entered into. An equity instrument is any contract that evidences a residual interest in the assets of the group after deducting all of its liabilities. Equity instruments issued by the group are recorded at the proceeds received, net of direct issue costs.

Reserves

The consolidated statement of changes in equity includes the following reserves not otherwise explained in this note:

> Other reserves, which arose on the completion of the PPP transaction in July 2001; and
> Non-controlling interest, which represents the share of equity attributable to the minority investor in NATS Services LLC.

Notes forming part of the consolidated accounts

Derivative financial instruments and hedging activities

The group's activities expose it primarily to the financial risks of changes in interest rates, inflation and foreign currency exchange rates. The group uses interest rate and index-linked swap contracts and forward foreign exchange contracts to hedge these exposures. These are disclosed in notes 18 and 19 to the accounts.

Under IFRS derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

The use of financial derivatives is governed by the group's policies approved by the Board of directors, which provides written principles on the use of financial derivatives. The group documents at the inception of the transaction the relationship between hedging instruments and the hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. The group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Changes in the fair value of derivative financial instruments that are designated and effective as hedges of future cash flows are recognised directly in equity (in the Hedge reserve) and the ineffective portion is recognised immediately in the income statement.

If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gains or losses that were recognised directly in equity are reclassified into the income statement in the same period or periods during which the asset acquired or liability assumed affects profit or loss. For hedges that do not result in the recognition of an asset or a liability, amounts deferred in equity are recycled to the income statement in the same period in which the hedged item affects the income statement.

Changes in the fair value of derivative financial instruments that do not qualify for hedge accounting are recognised in the income statement as they arise.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated, or exercised, or no longer qualifies for hedge accounting. At that time, any cumulative gain or loss on the hedging instrument recognised in equity is retained in equity until the forecast transaction occurs. If a hedging transaction is no longer expected to occur, the net cumulative gain or loss recognised in equity is transferred to net income or expense for the period.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of host contracts and the host contracts are not carried at fair value with unrealised gains or losses reported in the income statement.

Notes forming part of the consolidated accounts

3. Critical judgements and key sources of estimation uncertainty

Impairment of goodwill, intangible and tangible assets

In carrying out impairment reviews of goodwill, intangible and tangible assets (including assets in the course of construction), a number of significant assumptions have to be made when preparing cash flow projections and assessing fair values less costs of disposal. These include air traffic growth, future cash flows, the value of the regulated asset bases, market premia for regulated businesses, NERL's licence period and the outcome of the regulatory price control determinations. The market premium was assessed at the balance sheet date to be 5-6% (2016: 5-6%). If the actual outcome should differ or changes in expectations arise, impairment charges may be required which would materially impact on operating results. Refer to notes 13, 14 and 15.

Retirement benefits

The group accounts for its defined benefit pension scheme such that the net pension scheme position is reported on the balance sheet with actuarial gains and losses being recognised directly in equity through the statement of comprehensive income.

A number of key assumptions have been made in calculating the fair value of the group's defined benefit pension scheme which affect the balance sheet position and the group's reserves and income statement. Refer to note 30 of the notes to the consolidated accounts for a summary of the main assumptions and sensitivities. Actual outcomes may differ materially from the assumptions used and may result in volatility in the net pension scheme position.

Recoverability of revenue allowances

The economic regulatory price controls for UK en route services established annual revenue allowances that are recovered through a price based on the economic regulator's forecasts of traffic volumes and inflation made at the start of the price control period. Where traffic volumes or inflation differ from the regulator's forecasts, revenue actually recovered may be higher or lower than the revenue allowance. Where this is the case, the EC Charging Regulation requires an adjustment to be made to the price two years later to reflect any over or under-recovery. At the balance sheet date there were £3.5m of net payable allowances relating to previous regulatory reference periods (2016: £63.2m of recoverable allowances) and £47.4m of payable allowances relating to the current regulatory reference period (2016: £14.3m of net payable allowances). The legal right to recover or the obligation to rebate the revenue adjustments discussed above is provided by the EC Charging Regulation and NERL's air traffic services licence.

Capital investment programme

The group is undertaking a significant capital investment programme to upgrade existing air traffic control infrastructure. This programme requires the group to enter into substantial contracts for the development of infrastructure assets and information systems. Whilst covered by contractual arrangements, it is in the nature of such complex projects that, from time-to-time, variations to the original specifications may necessitate the renegotiation of original contract scope or price and affect amounts reported in these accounts.

Notes forming part of the consolidated accounts

4. Revenue

An analysis of the group's revenue is provided as follows:

	2017 £m	2016 £m
Airspace	**707.6**	689.6
Airports	**155.8**	167.9
Defence	**36.0**	20.3
Other UK Business	**10.3**	12.3
International	**9.6**	8.0
	919.3	898.1
Other operating income	**4.2**	3.1
Investment revenue (see note 8)	**1.9**	3.6
	925.4	904.8

All revenue is derived from continuing operations. Note 5 summarises the source of revenue by operating segment. Other revenue is described on the face of the income statement and is included in note 8.

A portion of the group's revenue from the provision of services denominated in foreign currencies is cash flow hedged. Included in revenue is the recycling of the effective amount of foreign currency derivatives that are used to hedge foreign currency revenue. The amount included in revenue is a £3.5m gain (2016: £7.4m loss).

5. Operating segments

The group's Executive team is considered to be the chief operating decision maker as defined by IFRS 8. The segmental analysis is based on the information that the Executive team uses internally for the purposes of evaluating the performance of operating segments and determining resource allocation between segments. The business is organised into service lines, aligned with our customers: Airspace, Airports, Defence, Other UK Business and International, and the products and services provided to each.

The performance of operating segments is assessed based on service line revenue and contribution. Service line contribution represents the revenue and costs which are directly attributed to a service line. Costs which are not directly attributed to a service line include: costs managed outside of service lines, depreciation and amortisation (net of Government grants), goodwill impairment, profit/(loss) on disposal of non-current assets, employee share scheme (costs)/credits, redundancy and relocation costs and above the line tax credits. A reconciliation of service line contribution to operating profit is set out below.

Notes forming part of the consolidated accounts

5. Operating segments (continued)

Principal activities

The following table describes the activities of each operating segment:

Airspace - This includes all of the group's economically regulated activities and encompasses services to en route, oceanic and terminal customers provided from our Prestwick and Swanwick centres, together with all the supporting communications, navigation and surveillance infrastructure and facilities. Airspace includes air traffic services for helicopters operating in the North Sea, approach services for London airports, infrastructure services to the Ministry of Defence for their en route operations and European projects in conjunction with other air traffic organisations.

Airports -The provision of air traffic control, engineering support and airport optimisation services to UK airport customers.

Defence - The provision of air traffic control, engineering support and other services to the UK MOD and to our joint venture for the UK MOD's Marshall contract.

Other UK Business - Other services provided to UK customers including: consultancy, offering airspace development, capacity improvement and training; and information, providing data to enable future efficiency and flight optimisation.

International - The provision of air traffic control and related services (including consultancy, engineering, training and information services) to overseas customers.

A change to the service line management reporting structure was introduced from 1 April 2016. The effect of this is to change the reporting of operating segments based on the principal products and services provided by the group to one based on key customers. As a result the prior period comparatives for the year ended 31 March 2016 have been presented on a consistent basis.

Revenue

Service line revenue includes intra-group revenue. This is eliminated in deriving the group's third party revenue below:

	2017			2016		
	Revenue £m	**Intra-group revenue £m**	**External revenue £m**	Revenue £m	Intra-group revenue £m	External revenue £m
Airspace	**733.5**	**(25.9)**	**707.6**	715.1	(25.5)	689.6
Airports	**167.9**	**(12.1)**	**155.8**	180.2	(12.3)	167.9
Defence	**36.4**	**(0.4)**	**36.0**	20.6	(0.3)	20.3
Other UK Business	**14.8**	**(4.5)**	**10.3**	18.8	(6.5)	12.3
International	**9.6**	**-**	**9.6**	8.0	-	8.0
	962.2	**(42.9)**	**919.3**	942.7	(44.6)	898.1

Notes forming part of the consolidated accounts

5. Operating segments (continued)

Operating profit

Service line contribution represents the revenue and costs which are directly attributed to a service line.

A reconciliation of service line contribution to operating profit is provided below:

	2017 £m	2016 £m
Airspace	**359.0**	323.1
Airports	**32.0**	39.7
Defence	**5.9**	2.7
Other UK Business	**3.7**	2.7
International	**(0.2)**	(1.5)
Service line contribution	**400.4**	366.7
Costs not directly attributed to service lines:		
Depreciation and amortisation (net of deferred grants released)	**(148.6)**	(128.0)
Impairment of goodwill	**(11.0)**	(92.7)
Profit on disposal of non-current assets	**0.1**	7.1
Employee share scheme credit	**0.6**	0.3
Redundancy and relocation costs	**(1.8)**	(6.5)
Other costs not directly attributed to service lines	**(72.6)**	(78.1)
R&D expenditure above the line tax credits	**1.6**	1.8
Less: share of results of associates and joint ventures	**(2.1)**	(1.5)
Operating profit	**166.6**	69.1

The performances of Airspace, International and Defence include the group share of the results of European Satellite Services Provider SAS (ESSP SAS), FerroNATS Air Traffic Services SA and Aquila Air Traffic Management Services Limited respectively (see note 32). Other costs not directly attributed to service lines include corporate costs providing central support functions.

Notes forming part of the consolidated accounts

5. Operating segments (continued)

Non-current assets additions

The group reports additions to non-current assets by the service lines above, a table of the capital expenditure by service line is shown below:

	2017 £m	2016 £m
Airspace	**151.4**	141.1
Airports	**4.0**	1.2
Defence	**0.1**	0.3
Other UK Business	**0.9**	5.0
International	**-**	-
	156.4	147.6

Geographical segments

The following table provides an analysis of the group's revenue by geographical area based on the geographical location of its customers, and non-current assets (excluding financial assets) by geographical location:

	Revenue		**Non-current assets**	
	2017 £m	2016 £m	**2017 £m**	2016 £m
United Kingdom	**487.8**	484.0	**1,202.7**	1,205.0
Other European countries	**133.7**	126.7	**5.0**	4.0
Republic of Ireland	**88.3**	80.5	**-**	-
United States of America	**82.9**	87.0	**-**	-
Countries in Asia	**52.0**	49.6	**0.1**	0.1
Germany	**48.2**	45.8	**-**	-
Other North American countries	**20.4**	18.6	**0.7**	0.8
Countries in Africa	**3.6**	3.4	**-**	-
Countries in Oceania	**1.4**	1.4	**-**	-
Countries in South America	**1.0**	1.1	**-**	-
	919.3	898.1	**1,208.5**	1,209.9

Revenue is attributed to countries on the basis of the customer's country of domicile. Individual countries have not been shown where revenue from these countries of domicile are less than 5% of total revenue.

Notes forming part of the consolidated accounts

6. Operating profit for the year

Operating profit for the year has been arrived at after charging/(crediting):

	2017 £m	2016 £m
CAA regulatory charges in respect of NERL's air traffic services licence	**4.9**	5.4
CAA regulatory charges for safety regulation at airports	**2.7**	3.1
Impairment of goodwill	**11.0**	92.7
Depreciation of property, plant and equipment	**103.6**	94.8
Impairment of property, plant and equipment	**0.5**	0.4
Amortisation of intangible assets	**45.2**	33.2
Impairment of intangible assets	**-**	0.3
Deferred grants released	**(0.7)**	(0.7)
Redundancy costs	**2.4**	1.6
Staff relocation costs (net of credits for revisions to estimates) following site closure	**(0.6)**	4.9
Research and development costs	**7.0**	12.1
R&D expenditure above the line tax credits	**(1.6)**	(1.8)
Auditor's remuneration for audit services (see below)	**0.1**	0.1

The analysis of auditor's remuneration is as follows:

	2017 £m	2016 £m
Fees payable to the company's auditor for the audit of the company's annual accounts	**0.1**	0.1
Fees payable to the company's auditor and their associates for other services to the group		
- The audit of the company's subsidiaries	**-**	-
Total audit fees	**0.1**	0.1

Total non-audit fees of £73,133 (2016: £82,058) include tax services of £8,867 (2016: £74,947) and other services of £64,266 (2016: £7,111).

Total fees payable to the company's auditor for the audit of the subsidiary accounts was £23,800 (2016: £23,800).

A portion of the company's costs are denominated in foreign currencies and are cash flow hedged. Included in operating profit is the recycling of the effective amount of foreign currency derivatives that are used to hedge foreign currency costs. The amount included in operating profit is £0.5m (2016: £nil).

Government grants relating to the purchase of property, plant and equipment and Ministry of Defence contributions received prior to 1 April 2001 are treated as deferred income which is credited to the income statement by equal annual instalments over the expected useful lives of the related assets.

Research and development costs represent internal labour costs incurred in support of research and development activities.

Notes forming part of the consolidated accounts

7. Staff costs

a. Staff costs

Salaries and staff costs, including directors' remuneration, were as follows:

	2017 £m	2016 £m
Wages and salaries	**310.6**	309.4
Social security costs	**38.1**	34.0
Pension costs (note 7b)	**108.5**	141.4
	457.2	484.8
Less: amounts capitalised	**(41.9)**	(45.7)
	415.3	439.1

Wages and salaries include redundancy costs of £2.0m (2016: £0.8m), share-based payment credits or charges, other allowances and holiday pay. Pension costs include £0.4m (2016: £0.8m) for redundancy related augmentation payments which staff elected to receive in lieu of severance payments.

b. Pension costs

	2017 £m	2016 £m
Defined benefit pension scheme costs (note 30)	**98.0**	132.7
Defined contribution pension scheme costs	**10.5**	8.7
	108.5	141.4

The company operates a salary sacrifice arrangement for staff pension contributions. Wages and salaries and pension costs reflect this arrangement.

c. Staff numbers

The monthly average number of employees (including executive directors) was:

	2017 No.	2016 No.
Air traffic controllers	**1,670**	1,656
Air traffic service assistants	**647**	668
Engineers	**931**	937
Others	**968**	935
	4,216	4,196

Notes forming part of the consolidated accounts

8. Investment revenue

	2017 £m	2016 £m
Interest on bank deposits	**1.0**	1.5
Other loans and receivables	**0.9**	2.1
	1.9	3.6

Interest on bank deposits has been earned on financial assets, including cash and cash equivalents and short term investments.

Other loans and receivables includes the effect of unwinding the discount on amounts receivable after more than one year and interest accrued on the loan to our joint venture, Aquila.

9. Fair value movement on derivative contract

	2017 £m	2016 £m
(Charge)/credit arising from change in the fair value of derivatives not qualifying for hedge accounting (before credit value adjustment)	**(17.6)**	3.8
Credit value adjustment on derivatives not qualifying for hedge accounting	**-**	(1.2)
	(17.6)	2.6

10. Finance costs

	2017 £m	2016 £m
Interest on bank overdrafts, loans and hedging instruments	**0.1**	1.1
Bond and related costs including financing expenses	**25.7**	28.2
Other finance costs	**1.7**	3.1
	27.5	32.4

Other finance costs includes the effect of unwinding the discount on amounts payable after more than one year.

Notes forming part of the consolidated accounts

11. Tax

	2017 £m	2016 £m
Corporation tax		
Current tax	**25.1**	25.5
Adjustments in respect of prior year	**(4.5)**	(1.5)
Foreign taxation	**-**	0.6
	20.6	24.6
Deferred tax (see note 23)		
Origination and reversal of temporary timing differences	**0.9**	(1.2)
Adjustments in respect of prior year	**4.9**	1.0
Effects of tax rate change on opening balance	**(4.7)**	(7.6)
	1.1	(7.8)
	21.7	16.8

Corporation tax is calculated at 20% (2016: 20%) of the estimated assessable profit for the year.

The charge for the year can be reconciled to the profit per the income statement as follows:

	2017 £m		2016 £m	
Profit on ordinary activities before tax	**125.5**		44.4	
Tax on profit on ordinary activities at standard rate in the UK of 20% (2016: 20%)	**25.1**	**20.0%**	8.9	20.0%
Tax effect of change in corporation tax from 20% to 17% (2016: 20% to 18%)	**(4.7)**	**(3.7%)**	(7.6)	(17.1%)
Patent box	**(1.4)**	**(1.1%)**	(1.2)	(2.7%)
Employee share scheme award of partnership and matching shares	**(0.4)**	**(0.3%)**	-	-
Profit on disposal of non-current assets	**-**	**-**	(1.4)	(3.2%)
Goodwill impairment	**2.2**	**1.7%**	18.5	41.7%
Tax effect of prior year adjustments: current tax	**(4.5)**	**(3.6%)**	(1.5)	(3.4%)
Tax effect of prior year adjustments: deferred tax	**4.9**	**3.9%**	1.0	2.3%
Joint ventures and associates	**(0.4)**	**(0.3%)**	(0.3)	(0.7%)
Unrecognised deferred tax assets on overseas subsidiaries	**-**	**-**	0.4	0.9%
R&D expenditure increased deductions	**1.1**	**0.9%**	-	-
Other permanent differences	**(0.2)**	**(0.2%)**	-	-
Tax charge for year at an effective tax rate of 17.3% (2016: 37.8%)	**21.7**	**17.3%**	16.8	37.8%
Deferred tax (credit)/charge taken directly to equity (see note 23)	**(52.0)**		59.1	

Notes forming part of the consolidated accounts

12. Dividends

Amounts recognised as dividends to equity shareholders in the year:

	2017 £m	2016 £m
First interim dividend of 16.78 pence per share (2016: 38.03 pence per share)	**24.0**	54.4
Second interim dividend of nil pence per share (2016: 19.08 pence per share)	**-**	27.3
	24.0	81.7

In May 2017, the Board approved and the company paid an interim dividend for the year ending 31 March 2018 of 19.92 pence per share, totalling £28.5m.

13. Goodwill

	£m
Cost	
At 31 March 2017 and 31 March 2016	**351.0**
Accumulated impairment losses	
At 1 April 2015	49.0
Impairment provision recognised in income statement	92.7
At 31 March 2016	**141.7**
Impairment provision recognised in income statement	11.0
At 31 March 2017	**152.7**
Carrying amount	
At 31 March 2017	**198.3**
At 31 March 2016	**209.3**
At 1 April 2015	**302.0**

The group tests goodwill annually for impairment, or more frequently if there are indications that goodwill might be impaired.

The recoverable amount of goodwill is determined by reference to the higher of its fair value less costs of disposal and value in use. Fair value less costs of disposal is determined by reference to the value of the regulatory asset bases of UK Air Traffic Services and North Atlantic Air Traffic Services, representing the relevant cash generating units, including opportunities for out-performance of regulatory settlements and market premia for economically regulated businesses (assumed at 5%-6%, 2016: 5%-6%) and estimated costs of disposal. The key assumptions for value in use calculations are the discount rate, future cash flows to the end of Reference Period 2 (31 December 2019) for both cash generating units as assumed in the group's business plans, and a terminal value at that date, reflecting the projected regulatory asset bases and a market premium, which is assessed annually. The group's business plans reflect the outcome of the RP2 price control review and include forecasts of traffic volumes, inflation and pension costs reflecting the current economic environment. The discount rate is a pre-tax nominal rate of 9.10% (2016: 9.08%) for cash flows arising in Reference Period 2. The value of the regulatory asset bases at the balance sheet date were £1,037.8m (2016: £1,127.4m). Goodwill is allocated to the Airspace service line. The impairment charge arose in the year following a reduction in value in use. Further details are provided in the Strategic Report. See also note 3.

Notes forming part of the consolidated accounts

14. Other intangible assets

	Operational software £m	Non-operational software £m	Airspace and resectorisation £m	Assets in course of construction £m	Total £m
Cost					
At 1 April 2015	199.3	73.2	26.2	253.1	551.8
Additions internally generated	0.4	0.5	-	29.5	30.4
Additions externally acquired	7.8	1.8	2.8	46.7	59.1
Other transfers during the year	14.6	2.2	17.3	(33.4)	0.7
At 31 March 2016	**222.1**	**77.7**	**46.3**	**295.9**	**642.0**
Additions internally generated	6.0	0.1	-	10.7	16.8
Additions externally acquired	5.1	5.5	-	90.4	101.0
Other transfers during the year	217.8	3.7	0.6	(225.2)	(3.1)
At 31 March 2017	**451.0**	**87.0**	**46.9**	**171.8**	**756.7**
Accumulated amortisation and impairment					
At 1 April 2015	93.3	43.1	15.7	16.9	169.0
Charge for the year	21.0	9.9	2.3	-	33.2
Impairment provision recognised in income statement	-	-	-	0.3	0.3
Transfer of impairment provision	-	-	1.2	(1.2)	-
At 31 March 2016	**114.3**	**53.0**	**19.2**	**16.0**	**202.5**
Charge for the year	31.3	9.7	4.2	-	45.2
Transfer of impairment provision	11.9	-	-	(15.6)	(3.7)
At 31 March 2017	**157.5**	**62.7**	**23.4**	**0.4**	**244.0**
Carrying amount					
At 31 March 2017	**293.5**	**24.3**	**23.5**	**171.4**	**512.7**
At 31 March 2016	**107.8**	**24.7**	**27.1**	**279.9**	**439.5**
At 1 April 2015	**106.0**	**30.1**	**10.5**	**236.2**	**382.8**

An annual review is performed to assess the carrying value of other intangible assets, including assets in the course of construction. The accumulated amortisation of assets in the course of construction represents impairment provisions.

Notes forming part of the consolidated accounts

15. Property, plant and equipment

	Freehold land and buildings £m	Improvements to leasehold land and buildings £m	Air traffic control systems, plant and equipment £m	Vehicles, furniture and fittings £m	Assets in course of construction and installation £m	Total £m
Cost						
At 1 April 2015	241.7	52.8	1,279.0	19.9	79.6	1,673.0
Additions during the year	1.3	0.4	29.7	2.3	24.4	58.1
Disposals during the year	-	(7.4)	(5.8)	-	-	(13.2)
Other transfers during the year	0.6	0.2	49.7	2.2	(53.4)	(0.7)
At 31 March 2016	**243.6**	**46.0**	**1,352.6**	**24.4**	**50.6**	**1,717.2**
Additions during the year	0.8	0.1	13.0	0.3	24.4	38.6
Disposals during the year	-	-	(1.0)	(0.1)	-	(1.1)
Other transfers during the year	1.1	-	28.6	0.1	(26.7)	3.1
At 31 March 2017	**245.5**	**46.1**	**1,393.2**	**24.7**	**48.3**	**1,757.8**
Accumulated depreciation and impairment						
At 1 April 2015	113.8	39.8	909.8	14.3	0.8	1,078.5
Provided during the year	8.0	1.8	83.0	2.0	-	94.8
Impairment provision recognised in income statement	-	-	-	-	0.4	0.4
Transfer of impairment provision	-	-	0.1	-	(0.1)	-
Disposals during the year	-	(5.7)	(5.7)	(0.1)	-	(11.5)
At 31 March 2016	**121.8**	**35.9**	**987.2**	**16.2**	**1.1**	**1,162.2**
Provided during the year	7.6	1.4	93.0	1.6	-	103.6
Impairment provision recognised in income statement	-	-	-	-	0.5	0.5
Transfer of impairment provision	-	-	4.6	-	(0.9)	3.7
Disposals during the year	-	-	(1.0)	(0.1)	-	(1.1)
At 31 March 2017	**129.4**	**37.3**	**1,083.8**	**17.7**	**0.7**	**1,268.9**
Carrying amount						
At 31 March 2017	**116.1**	**8.8**	**309.4**	**7.0**	**47.6**	**488.9**
At 31 March 2016	**121.8**	**10.1**	**365.4**	**8.2**	**49.5**	**555.0**
At 1 April 2015	**127.9**	**13.0**	**369.2**	**5.6**	**78.8**	**594.5**

Notes forming part of the consolidated accounts

15. Property, plant and equipment (continued)

The group conducts annual reviews of the carrying values of its property, plant, equipment and intangible assets. During the year, impairment charges of £0.5m (2016: £0.7m) were made in respect of operational assets and assets in the course of construction reflecting a reassessment of certain projects and assets, and the likelihood of benefits being realised in full.

During the year the group capitalised £1.1m (2016: £1.1m) of general borrowing costs at a capitalisation rate of 1.9% (2016: 2.2%), in accordance with IAS 23: *Borrowing Costs*, relating to both property, plant and equipment and other intangible assets.

During the prior year, the group entered into a finance lease for certain network related assets. The fair value of the assets held under finance lease are £1.8m (2016: £2.0m) and are included within the cost for air traffic control systems, plant and equipment above.

16. Financial and other assets

The group had balances in respect of financial and other assets as follows:

	2017 £m	2016 £m
Trade and other receivables		
Non-current		
Other debtors	**0.3**	0.4
Prepayments	**3.2**	2.5
Accrued income	**15.5**	21.1
	19.0	24.0
Current		
Receivable from customers gross	**75.2**	80.7
Allowance for doubtful debts	**(4.4)**	(4.6)
	70.8	76.1
Amounts recoverable under contracts	**0.8**	0.6
Other debtors	**3.4**	10.9
Prepayments	**16.0**	15.9
Accrued income	**75.9**	132.1
	166.9	235.6

The average credit period taken on sales of services is 30 days (2016: 30 days). Interest is charged by Eurocontrol to UK en route customers at 9.88% (2016: 10.30%) on balances outstanding after more than 30 days. All other balances are non-interest bearing. An allowance has been made for estimated irrecoverable amounts from sales to customers of £4.4m (2016: £4.6m). Full provision is made for receivables from UK en route customers that are overdue as, based on past experience, this is an indicator of impairment. Debts that are neither impaired nor overdue are assessed for credit quality and reviewed periodically. Receivables in respect of other customers are provided for where there is an identified loss event, such as administration, receivership or liquidation or where there is evidence of a reduction in the recoverability of the cash flows.

Accrued income which is non-current represents regulatory revenue adjustments for the previous control period, which will be repaid after 31 March 2018. Accrued income which is current includes unbilled revenue for services provided in March 2017. Prior year accrued income included unbilled revenue for services provided in March 2016 and regulatory adjustments for calendar year 2014 which were recovered by 31 March 2017.

Notes forming part of the consolidated accounts

16. Financial and other assets (continued)

	2017 £m	2016 £m
Ageing of past due but not impaired trade receivables		
31-90 days	**0.2**	0.2
91-365 days	**-**	0.1
> 365 days	**0.1**	0.2
	0.3	0.5

	2017 £m	2016 £m
Movement in the allowance for doubtful debts		
Balance at the beginning of the year	**4.6**	4.4
Increase in allowance recognised in the income statement	**0.1**	0.7
Foreign exchange movement in the year	**0.3**	0.3
Amounts recovered during the year	**0.1**	-
Amounts written off as irrecoverable	**(0.7)**	(0.8)
Balance at the end of the year	**4.4**	4.6

In determining the recoverability of a trade receivable the group considers any change in credit quality of the trade receivable from the date credit was initially granted up to the reporting date. The directors believe that there is no further credit provision required in excess of the allowance for doubtful debts.

Included in the allowance for doubtful debts are individually impaired trade receivables with a balance of £2.4m (2016: £2.8m) which are in administration, receivership or liquidation. The impairment recognised represents the carrying amount of these trade receivables. The group does not hold any collateral over these balances.

	2017 £m	2016 £m
Ageing of impaired receivables		
31-90 days	**0.4**	0.3
91-365 days	**0.7**	1.0
> 365 days	**3.3**	3.3
	4.4	4.6

The directors consider that the carrying amount of trade and other receivables approximates to their fair value.

Notes forming part of the consolidated accounts

16. Financial and other assets (continued)

Cash and cash equivalents

Cash and cash equivalents comprise cash held by the group and short term bank deposits with an original maturity of three months or less. The directors consider that the carrying amount of these assets approximates to their fair value.

Overall, the maximum credit risk for the items discussed above and loans to joint ventures , excluding prepayments, would be £475.2m (2016: £502.1m).

17. Borrowings

	2017 £m	2016 £m
Secured loans at amortised cost		
£600m 5.25% Guaranteed Secured Amortising Bond due 2026	**428.4**	467.4
Bank loans (variable rate revolving term loan and revolving credit facility expiring 2021)	**-**	95.0
	428.4	562.4
Unsecured loans at amortised cost		
Bank overdraft	**-**	0.4
Obligations under finance leases (see note 21)	**1.8**	2.0
Gross borrowings	**430.2**	564.8
Unamortised bond issue costs	**(2.2)**	(2.7)
Unamortised bank facility arrangement fees	**(1.7)**	(1.7)
	426.3	560.4
Amounts due for settlement within 12 months	**46.6**	38.9
Amounts due for settlement after 12 months	**379.7**	521.5

The £600m 5.25% Guaranteed Secured Amortising Bond is secured by way of a debenture by which NERL grants its lenders a first legal mortgage over certain properties in England and Wales, a first fixed charge over all other real estate, plant and equipment and a floating charge over all other assets. Any drawings made by NERL under its £400.0m committed bank facilities are similarly secured. Total assets of NERL as at 31 March 2017 were £1,472.3m (2016: £1,510.6m), including goodwill of £198.3m (2016: £209.3m). Further security provisions are also provided by NATS Holdings Limited and by NATS Limited.

The average effective interest rate on the bank loans in the year was 1.1% (2016: 1.4%) and was determined based on LIBOR rates plus a margin and utilisation fee.

Costs associated with the issue of the £600m bond are being amortised over the life of the bond. Costs incurred to refinance bank facilities are being amortised over the facility term. Costs not fully amortised at the date of subsequent refinancing are written off.

Notes forming part of the consolidated accounts

17. Borrowings (continued)

	2017 £m	2016 £m
Undrawn committed facilities		
Undrawn committed facilities expire as follows:		
Expiring in more than two years	**400.0**	305.0

At 31 March 2017, NERL had no outstanding drawings against its committed bank facilities. These facilities expire in July 2021, after NERL opted to extend the bank facility in May 2016 from July 2020 to July 2021.

NATS Services has an uncommitted overdraft facility of £1.0m that was undrawn as at 31 March 2017 and 31 March 2016 and is not included in the table above.

Notes forming part of the consolidated accounts

18. Derivative financial instruments

	2017 £m	2016 £m
Fair value of derivative financial instruments		
Non-current assets		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	**2.0**	0.2
Current assets		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	**2.3**	0.4
Current liabilities		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	**(0.9)**	(4.1)
Derivative financial instruments classified as held for trading		
Index-linked swap	**(7.9)**	(3.7)
	(8.8)	(7.8)
Non-current liabilities		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	**(0.6)**	-
Derivative financial instruments classified as held for trading		
Index-linked swap	**(130.7)**	(121.1)
	(131.3)	(121.1)

Further details on derivative financial instruments are provided in note 19. The index-linked swap is classified under international accounting standards as held for trading as it does not qualify for hedge accounting.

The index-linked swap was taken out in August 2003 to hedge against the risk of low inflation and previously qualified as a hedge under UK generally accepted accounting principles prior to the group's adoption of international accounting standards.

Notes forming part of the consolidated accounts

19. Financial instruments

Capital risk management

The group manages its capital to ensure that entities in the group are able to continue as going concerns, to ensure that NERL is able to meet its obligations under the air traffic services licence, for NATS Services to meet obligations to its customers, and to fund returns to shareholders.

The capital structure of the group consists of debt as disclosed in note 17, cash and cash equivalents and short term investments, as shown in this note, and equity attributable to shareholders as disclosed in the consolidated statement of changes in equity.

External capital requirements

NERL's air traffic services licence requires the company to use reasonable endeavours to maintain an investment grade issuer credit rating (BBB-/Baa3 or better). Separately, it is the objective of the group to target a credit profile for NERL that exceeds BBB-/Baa3.

As at 31 March 2017, NERL had a corporate rating of A+ from Standard & Poor's (2016: AA-) and A2 from Moody's (2016: A2).

Gearing ratio

The group does not seek to maintain a target gearing level at group level but rather sets a gearing target for NERL, the economically regulated subsidiary, based on a ratio of net debt to its regulatory asset base (RAB). In addition, the CAA has set NERL a gearing target of 60% and a cap of 65% of net debt to RAB with a requirement for NERL to remedy the position if this cap is exceeded. NERL's gearing ratio at 31 March 2017 was 35.9% (2016: 49.1%).

Significant accounting policies

Details of the significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial asset, financial liability and equity instrument are disclosed in note 2 to the financial statements.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Categories of financial instrument

The carrying values of financial instruments by category at 31 March were as follows:

	2017 £m	2016 £m
Financial assets		
Loans and receivables, excluding prepayments	**181.6**	245.0
Cash and cash equivalents and short term investments	**293.6**	257.1
Derivative financial instruments in designated hedge accounting relationships	**4.3**	0.6
	479.5	502.7
Financial liabilities		
Derivative financial instruments in designated hedge accounting relationships	**(1.5)**	(4.1)
Derivative financial instruments classified as held for trading	**(138.6)**	(124.8)
Other financial liabilities at amortised cost	**(628.3)**	(747.3)
	(768.4)	(876.2)

Loans and receivables, excluding prepayments includes balances relating to loans to the joint ventures of £14.9m (2016: £3.8m).

Other financial liabilities at amortised cost includes balances for trade and other payables (excluding deferred income of £93.5m (2016: £72.1m)) and including tax and social security, the bond, bank borrowings (excluding unamortised bond issue costs and bank facility arrangement fees) and finance lease obligations.

The index-linked swap is categorised as held for trading. During the year, £3.8m (2016: £nil) was repaid as semi-annual amortisation payments commence from 2017. The charge arising from the change in fair value of £17.6m has been recorded in the income statement in the year (2016: £2.6m credit).

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Financial risk management objectives

The group's Treasury function is mandated by the Board to manage financial risks that arise in relation to underlying business needs. The function provides services to the business, co-ordinates access to financial markets and monitors and manages financial risks relating to the operations of the group. The function has clear policies and operating parameters. The Treasury Committee provides oversight and meets three times a year to approve strategy and to monitor compliance with Board policy. The Treasury function does not operate as a profit centre and the undertaking of speculative transactions is not permitted. The principal financial risks arising from the group's activities include market risk (including currency risk, interest rate risk and inflation risk), credit risk and liquidity risk. The principal financial risk in these entities is credit risk. Specific policies on interest rate and liquidity risk management apply principally to NERL.

Market risk

The group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates, interest rates and inflation rates. These risks are explained below. The group enters into a variety of derivative financial instruments to manage its exposure to these risks, including:

- forward foreign exchange contracts to hedge the exchange risk arising on services provided to UK en route customers that are billed in euro, and purchases from foreign suppliers settled in foreign currencies;
- interest rate swaps to mitigate the risk of rising interest rates; and
- an index-linked swap to mitigate the risk of low inflation.

Foreign currency risk management

The group's principal exposure to foreign currency transaction risk is in relation to UK en route services revenue, accounting for 65% of the group's turnover (2016: 64%). Charges for this service are set in sterling, but are billed and collected in euro by applying a conversion rate determined monthly by Eurocontrol, who administer the UK en route revenue collection. The conversion factor used is the average of the daily closing rates for the month prior to the billing period. To mitigate the risk that exchange rates move between the date of billing and the date on which the funds are remitted to NERL, forward foreign currency contracts are entered into. NERL seeks to hedge 95% of the UK en route income that is forecast to arise by entering into forward foreign exchange contracts on a monthly basis.

The group's international activities account for 1.0% of external revenue (2016: 0.8%). The group trades with and provides finance to its overseas joint ventures and subsidiaries. Where appropriate the transactions are conducted in sterling.

The group also enters into contracts for the purchase and sale of goods and services with overseas suppliers and customers who operate in foreign currencies. To mitigate currency risk the contract value is hedged when a firm commitment arises, either through the use of forward foreign currency contracts or by purchasing foreign currency at spot rates on the date the commitment arises or by setting aside already available foreign currency.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

The carrying amount of the group's foreign currency denominated monetary assets and monetary liabilities at 31 March was as follows:

	Assets		Liabilities	
	2017 £m	2016 £m	**2017 £m**	2016 £m
Euro	**107.8**	98.7	**(14.5)**	(29.8)
Singapore dollar	**2.1**	0.6	**(0.2)**	-
US dollar	**1.6**	2.0	**(3.9)**	(4.0)
Thai baht	**1.6**	-	**(0.2)**	-
UAE dirham	**1.5**	1.0	**(0.1)**	(0.3)
Omani rial	**0.4**	0.4	**-**	-
Qatari riyal	**0.4**	0.2	**-**	-
Philippine peso	**0.4**	0.2	**-**	-
Swedish krona	**0.4**	-	**(0.6)**	-
Hong Kong dollar	**0.3**	0.1	**-**	(0.2)
Canadian dollar	**0.3**	0.4	**(1.8)**	(0.2)
Kuwaiti dinar	**0.1**	0.6	**-**	-
Norwegian krone	**0.1**	0.1	**(0.2)**	(0.2)
Danish krone	**-**	0.1	**-**	-
	117.0	104.4	**(21.5)**	(34.7)

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Foreign currency sensitivity analysis

The group has assets and liabilities denominated in foreign currencies including cash balances of £12.9m at 31 March 2017 (2016: £5.6m) in euro, US dollars, UAE dirham, Swedish krona, Canadian dollars, Omani rial, Qatari riyal, Singapore dollars, Hong Kong dollars, Norwegian krone and Kuwaiti dinar. Furthermore, the group has entered into forward foreign currency contracts to hedge exchange risk relating to customer receipts and supplier costs which will arise in future periods. These contracts are not reflected on the balance sheet but are reported in the table below.

The following table details the group's sensitivity to a 10% increase or decrease in the value of sterling against relevant foreign currencies. 10% is the sensitivity rate that represents the reasonably possible change in foreign currency exchange rates in a financial year. The sensitivity analysis includes foreign currency cash balances, trade receivables, trade payables and forward foreign exchange contracts and adjusts their translation at the period end for a 10% change in foreign currency rates.

The table below shows the effect of a 10% strengthening of sterling against the relevant currency (to the nearest £0.1m). A positive number below indicates an increase in profit and equity and a negative number a reduction in profit and equity. There would be an equal and opposite impact on profit and equity if sterling devalues by 10% against the relevant currency.

Currency	**2017 Impact £m**	2016 Impact £m
Euro	**(2.2)**	7.7
Singapore dollar	**(0.2)**	-
US dollar	**(2.6)**	(3.2)
Thai baht	**0.4**	-
UAE dirham	**(0.2)**	(0.1)
Canadian dollar	**(0.2)**	(0.1)
Kuwaiti dinar	**-**	(0.1)
Norwegian krone	**-**	(0.2)
	(5.0)	4.0

The group's sensitivity to the euro decreased during the year reflecting a net increase in euro denominated monetary assets and a net decrease in euro denominated forward contracts taken out to hedge future receipts. The group's sensitivity to the US dollar has decreased during the year, reflecting a net decrease in US dollar denominated forward contracts taken out to hedge future payments to a US supplier relating to the group's capital investment programme, partly offset by a net increase in US dollar denominated monetary assets. Exposure to other currencies has remained fairly constant. NATS believes that this sensitivity analysis accurately reflects its inherent foreign exchange risk.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Forward foreign exchange contracts

The group entered into forward foreign exchange contracts to sell euro forecast to be received from Eurocontrol in respect of UK en route revenues and to sell other currencies it will receive on its overseas contracts. In addition, the group entered into other forward foreign exchange contracts to fund purchases of equipment. The group has designated these forward contracts as cash flow hedges. The following contracts were outstanding at year end:

	2017			2016		
			Average exchange rate			Average exchange rate
Euro sold	**£m**	**€m**		£m	€m	
0-90 days	**149.8**	**174.1**	**0.8602**	165.1	214.3	0.7704
91-365 days	**0.5**	**0.6**	**0.8200**	0.1	0.2	0.7417
> 365 days	**0.2**	**0.2**	**0.7586**	0.5	0.6	0.7524
	150.5	**174.9**	**0.8600**	165.7	215.1	0.7703
Euro bought	**€m**	**£m**		€m	£m	
0-90 days	**5.8**	**5.0**	**0.8552**	2.1	1.6	0.7630
91-365 days	**21.0**	**18.3**	**0.8704**	19.1	15.4	0.8075
> 365 days	**63.5**	**56.0**	**0.8828**	3.5	2.9	0.8197
	90.3	**79.3**	**0.8782**	24.7	19.9	0.8056
US dollar sold	**£m**	**US$m**		£m	US$m	
0-90 days	**3.8**	**4.7**	**1.2443**	-	-	n/a
US dollar bought	**US$m**	**£m**		US$m	£m	
0-90 days	**11.3**	**9.0**	**1.2511**	3.3	2.3	1.4558
91-365 days	**13.5**	**9.6**	**1.4150**	16.1	11.0	1.4596
> 365 days	**19.8**	**13.4**	**1.4765**	30.4	20.6	1.4726
	44.6	**32.0**	**1.3950**	49.8	33.9	1.4677
Canadian dollar bought	**C$m**	**£m**		C$m	£m	
0-90 days	**3.2**	**1.9**	**1.6882**	-	-	n/a
91-365 days	**0.4**	**0.2**	**1.9936**	-	-	n/a
> 365 days	**2.2**	**1.2**	**1.8004**	1.6	0.8	1.9915
	5.8	**3.3**	**1.7474**	1.6	0.8	1.9915
Norwegian krone sold	**£m**	**NOKm**		£m	NOKm	
0-90 days	**0.1**	**1.3**	**11.1126**	-	-	n/a
91-365 days	**0.1**	**1.3**	**11.1105**	-	-	n/a
	0.2	**2.6**	**11.1115**	-	-	n/a

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

	2017			2016		
			Average exchange rate			Average exchange rate
Norwegian krone bought	**NOKm**	**£m**		NOKm	£m	
0-90 days	**1.4**	**0.1**	**11.7480**	0.1	0.8	12.3776
91-365 days	**-**	**-**	**n/a**	0.1	0.8	12.3760
> 365 days	**1.5**	**0.1**	**11.7395**	-	-	n/a
	2.9	**0.2**	**11.7437**	0.2	1.6	12.3768
Swedish krona bought	**SEKm**	**£m**		SEKm	£m	
0-90 days	**2.1**	**0.2**	**11.1031**	-	-	n/a
91-365 days	**4.2**	**0.4**	**11.0746**	-	-	n/a
	6.3	**0.6**	**11.0841**	-	-	n/a
Philippine peso sold	**£m**	**PHPm**		£m	PHPm	
0-90 days	**0.3**	**21.3**	**63.4464**	-	-	n/a
Thai baht sold	**£m**	**THBm**		£m	THBm	
0-90 days	**1.7**	**73.9**	**44.5600**	-	-	n/a
91-365 days	**2.7**	**123.1**	**45.1515**	-	-	n/a
> 365 days	**1.4**	**62.2**	**45.9100**	-	-	n/a
	5.8	**259.2**	**45.1205**	-	-	n/a

At 31 March 2017, the aggregate amount of the unrealised gain under forward foreign exchange contracts deferred in the hedge reserve relating to the exposure on these future transactions was £3.3m (2016: £nil). The majority of these contracts will mature within the next financial year at which stage the amount deferred in equity will be realised in the income statement.

In addition to the above, NERL has entered into average rate forward agreements with a fixing date after 31 March 2017 to sell euro anticipated to be received in July 2017 in respect of UK en route revenues. The value of these cash flows is £60.0m. These contracts are also designated as cash flow hedges. They are not included in the table above.

Interest rate risk management

The group is exposed to interest rate risk to the extent that it holds borrowings at fixed, floating and index-linked interest rates. Its interest rate risk management policies, which are kept under continuous review, are specific to NERL. Except for NERL, no other entity within the NATS group had borrowings at 31 March 2017 (2016: NATS Limited £0.4m).

The group seeks to minimise NERL's exposure to movements in interest rates by ensuring NERL holds an appropriate balance of fixed, floating and index-linked debt as a percentage of its net debt by the use of interest rate swap contracts and index-linked swap contracts.

The group's exposure to interest rates on financial assets and financial liabilities is detailed in the liquidity risk management section of this note. The group held no interest rate swaps at 31 March 2017 (2016: none).

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Economic interest rate exposure

The group's cash and short term deposits were as follows:

2017	Cash			Short term deposits			
Currency	**Amount £m**	**Economic interest rate %**	**Average maturity days**	**Amount £m**	**Economic interest rate %**	**Average maturity days**	**Total £m**
Sterling	241.3	0.3	10	39.4	0.4	182.0	280.7
Euro	8.7	(0.4)	3	-	-	-	8.7
US dollar	1.4	-	3	-	-	-	1.4
UAE dirham	1.0	-	3	-	-	-	1.0
Swedish krona	0.4	-	3	-	-	-	0.4
Canadian dollar	0.3	-	3	-	-	-	0.3
Omani rial	0.3	-	3	-	-	-	0.3
Qatari riyal	0.2	-	3	-	-	-	0.2
Singapore dollar	0.2	-	3	-	-	-	0.2
Hong Kong dollar	0.2	-	3	-	-	-	0.2
Norwegian krone	0.1	-	3	-	-	-	0.1
Kuwaiti dinar	0.1	-	-	-	-	-	0.1
	254.2			**39.4**			**293.6**

2016	Cash			Short term deposits			
Currency	**Amount £m**	**Economic interest rate %**	**Average maturity days**	**Amount £m**	**Economic interest rate %**	**Average maturity days**	**Total £m**
Sterling	222.6	0.5	14	28.9	0.6	183.0	251.5
Euro	2.5	-	1	-	-	-	2.5
US dollar	1.6	-	1	-	-	-	1.6
Kuwaiti dinar	0.5	-	1	-	-	-	0.5
Canadian dollar	0.4	-	1	-	-	-	0.4
Omani rial	0.3	-	1	-	-	-	0.3
Norwegian krone	0.1	-	1	-	-	-	0.1
Qatari riyal	0.1	-	1	-	-	-	0.1
Danish krone	0.1	-	1	-	-	-	0.1
	228.2			**28.9**			**257.1**

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

The economic interest rate reflects the true underlying cash rate that the group was paying on its borrowing or receiving on its deposits at 31 March. The economic interest rate explosure of the group's loans is presented below with and without the effect of derivatives, as follows:

	Total £m	Variable rate £m	Inflation rate £m	Fixed rate £m	Economic interest rate %	Weighted average time rate is fixed years
Excluding derivatives						
At 31 March 2017						
Sterling:						
5.25% guaranteed secured bonds	428.4	-	-	428.4	5.26%	5.1
Obligations under finance leases	1.8	-	-	1.8	3.10%	4.4
Total	**430.2**	**-**	**-**	**430.2**		
At 31 March 2016						
Sterling:						
5.25% guaranteed secured bonds	467.4	-	-	467.4	5.26%	5.7
Bank loans	95.0	95.0	-	-	1.11%	0.5
Obligations under finance leases	2.0	-	-	2.0	3.10%	4.9
Bank overdraft	0.4	0.4	-	-	1.50%	-
Total	**564.8**	**95.4**	**-**	**469.4**		

	Total £m	Variable rate £m	Inflation rate £m	Fixed rate £m	Economic interest rate %	Weighted average time rate is fixed years
Including derivatives						
At 31 March 2017						
Sterling:						
5.25% guaranteed secured bonds	236.4	-	-	236.4	5.27%	5.1
5.25% guaranteed secured bonds	192.0	-	192.0	-	5.10%	0.5
Obligations under finance leases	1.8	-	-	1.8	3.10%	4.4
Total	**430.2**	**-**	**192.0**	**238.2**		
At 31 March 2016						
Sterling:						
5.25% guaranteed secured bonds	267.4	-	-	267.4	5.27%	5.7
5.25% guaranteed secured bonds	200.0	-	200.0	-	4.97%	0.5
Bank loans	95.0	95.0	-	-	1.11%	0.5
Obligations under finance leases	2.0	-	-	2.0	3.10%	4.9
Bank overdraft	0.4	0.4	-	-	1.50%	-
Total	**564.8**	**95.4**	**200.0**	**269.4**		

The interest rate payable under the index-linked swap is adjusted semi-annually in line with the movement in RPI.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

The following table shows the percentage of fixed, index-linked and floating rate debt as a percentage of group net debt. Net debt is defined for this purpose as borrowings net of cash and short term investments, as distinct from the definition used for financial covenants purposes.

	2017		2016	
	£m		£m	
Net debt	**132.7**		303.3	
	£m	**%**	£m	%
Fixed (net of bond discount and issue costs)	**236.0**	**177.8**	266.7	87.9
Index-linked	**192.0**	**144.7**	200.0	65.9
Floating (net of cash, short term investments and facility costs)	**(295.3)**	**(222.5)**	(163.4)	(53.8)
	132.7	**100.0**	303.3	100.0

At 31 March 2017, NERL had net debt, including an intercompany loan of £22.5m, of £301.0m (2016: net debt £481.1m), NATS Limited held net cash of £4.8m (2016: £5.4m), NATS Services had cash of £136.9m (2016: £147.7m), NATSNav had cash of £0.3m (2016: £0.8m), NATS (USA) Inc had cash of £0.6m (2016: £0.5m), NATS Services DMCC had cash of £1.1m (2016: £nil), NATS Services (Asia Pacific) had cash of £1.8m (2016: £0.6m) and NATS Services LLC had cash of £0.3m (2016: £0.3m).

The following table shows the percentage of fixed, index-linked and floating rate debt as a percentage of NERL net debt, reflecting the application of the interest rate risk management policies that are specific to NERL.

	2017		2016	
	£m		£m	
Net debt	**301.0**		481.1	
	£m	**%**	£m	%
Fixed (net of bond discount and issue costs)	**236.0**	**78.4**	266.7	55.4
Index-linked	**192.0**	**63.8**	200.0	41.6
Floating (net of cash, short term investments and facility costs)	**(127.0)**	**(42.2)**	14.4	3.0
	301.0	**100.0**	481.1	100.0

In order to reduce its exposure to interest rate risk on its cash balances, NERL adopts a strategy of hedging net debt rather than gross debt. This is an economic hedge whereby exposure to floating rate debt is offset by interest on cash balances.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Interest rate sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to interest rates on floating rate assets and liabilities. The analysis is prepared assuming the amount of assets or liabilities at the balance sheet date were in place for the whole year. A 1% increase or decrease is considered to represent a reasonably possible change in interest rates.

The following table shows the effect of a 1% increase in interest rates on the group's cash and floating rate bank loans on profit for the year and on equity. A positive number represents an increase in profit and equity and a negative number a decrease in profit and equity.

	2017 Impact £m	2016 Impact £m
Cash at bank and short term deposits (2017: £293.6m, 2016: £257.1m)	**2.9**	2.6
Borrowings (2017: £nil, 2016: £95.4m)	**-**	(1.0)
	2.9	1.6

Overall the group's sensitivity to interest rates is slightly higher than prior year, reflecting net changes in cash and borrowing levels.

Inflation rate risk

The regulatory charge control conditions that apply to NERL's UK en route and North Atlantic services determines a revenue allowance for financing charges that is linked to inflation (now CPI but previously RPI). To achieve an economic hedge of part of this income, in August 2003 coincident with the issue of its £600.0m 5.25% fixed rate bond, NERL entered into an amortising index-linked swap with a notional principal of £200.0m for the period up to March 2017 reducing semi-annually thereafter and expiring in March 2026. As at 31 March 2017 the notional principal had reduced to £192.0m. Under the terms of this swap, NERL receives fixed interest at 5.25% and pays interest at a rate of 3.43% adjusted for the movement in RPI. The index-linked swap cannot be designated as a cash flow hedge under IFRS, although it provides an economic hedge of certain of NERL's inflation-linked revenues.

The value of the notional principal of the index-linked swap is also linked to movements in RPI.

Inflation rate sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to breakeven inflation arising from the index-linked swap. The difference between fixed rate and index-linked gilts reflects the market's expectations of future RPI and is a proxy for the breakeven inflation rate. The analysis is prepared assuming that the index-linked swap at the balance sheet date was in place for the whole year. A 1% increase or decrease in breakeven inflation is considered to represent a reasonably possible change in inflation. An increase in the rate of RPI will increase the future index-linked payments that NERL is required to make under the swap contract and so impacts its mark to market value.

The following table shows the effect of a 1% increase in breakeven inflation on the amount of interest payable in respect of this swap and the impact on its value when marked to market. A positive number indicates an increase in profit and equity and a negative number a reduction in profit and equity. There would be an equal and opposite impact on profit and equity if breakeven inflation falls by 1%.

	2017 Impact £m	2016 Impact £m
Change in swap interest and mark to market value	**(12.7)**	(18.4)

The mark to market value of the index-linked swap is also sensitive to the discount rates that are used to determine the net present value of the cash flows under the swap agreement. The discount rate is determined by reference to market yields on interest rate swaps. The effect of a 1% increase in the discount rate would be to increase profit and equity by £7.5m (2016: £7.8m). There would be an equal and opposite impact on profit and equity if discount rates decreased by 1%.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the group. The group's exposure to credit risk arises from the risk of default by customers on settlement of trade receivables and from the risk of a failure of a financial institution in which funds are invested for return or held for trading purposes or with whom derivative contracts are entered into. The risk of loss from default by customers and the mitigations against this risk are explained in note 16. With regard to funds or contracts held with financial institutions, the group's policy is to transact with counterparties that hold a minimum credit rating as supplied by independent rating agencies: Standard & Poor's, Moody's and Fitch Ratings.

The group's policy is to allocate limits to the value of investments, foreign exchange transactions and interest rate hedging transactions that may be entered into with a bank or financial institution and to allocate an aggregate credit risk limit. The limits are based upon the institution's credit rating with Standard & Poor's and Moody's; the Fitch rating is only used if one of these agencies does not provide a rating. Where there is a difference in the rating then the lowest rating is applied.

Currently, the group's investments take the form of bank time deposits and money market fund investments. Investments in bank time deposits with maturities up to 3 months and between 3 and 6 months are only entered into with institutions holding a long term minimum credit rating of A- and A+ respectively from Standard & Poor's or Fitch Ratings and A3 and A1 respectively from Moody's. However, dependent on market conditions, tighter restrictions on rating requirements and lower limits may be placed on the duration of deposits. Money market fund investments are restricted to AAAm rated liquidity funds.

The table below sets out the investment limits that are applied to each institution based on its credit rating:

Rating (Standard & Poor's)	**Limit per Institution £m**
AAA & AAAm	70.0
AA+	56.0
AA	42.0
AA-	28.0
A+	21.0
A	14.0
A-	10.5

The following table shows the distribution of the group's deposits at 31 March by credit rating (Standard & Poor's):

	2017			2016		
Rating (Standard & Poor's)	**Number of institutions**	**£m**	**By credit rating %**	Number of institutions	£m	By credit rating %
AAAm	**6**	**163.7**	**55.8**	5	110.7	43.1
AA-	**2**	**47.5**	**16.2**	3	55.1	21.4
A+	**1**	**9.4**	**3.2**	1	9.3	3.6
A	**5**	**57.1**	**19.4**	6	58.3	22.7
A-	**2**	**8.5**	**2.9**	2	10.8	4.2
BBB+	**1**	**7.4**	**2.5**	2	12.9	5.0
		293.6	**100.0**		257.1	100.0

The deposits of £7.4m with a BBB+ rated institution were held in various current accounts that are not subject to the above investment limits.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Liquidity risk management

The responsibility for liquidity risk management, the risk that the group will have insufficient funds to meet its obligations as they fall due, rests with the Board with oversight provided by the Treasury Committee. The group manages liquidity by maintaining adequate reserves and borrowing facilities by monitoring actual and forecast cash flows, including contributions to the defined benefit pension scheme, and ensuring funding is diversified by source and maturity and available at competitive cost.

With regard to NERL, the group's policy is to:

a. maintain free cash equal to between one and two months of UK en route services revenues (see below). Free cash is defined as cash and cash equivalents and short term investments, excluding a debt service reserve account of £39.4m used to fund interest, fees and bond amortisation payments scheduled in the next six months and a liquidity reserve account of £21.3m held to provide liquidity in the event of certain pre-defined circumstances, particularly to ensure compliance with financial covenants;

b. ensure access to bank facilities sufficient to meet 110% of forecast requirements that are not otherwise covered by operating cash flows or other sources of finance through the period of the business plan. At 31 March 2017 NERL had access to bank facilities totalling £400m available until 31 July 2021. The facilities comprise a £350m revolving term loan facility, a £45m revolving credit facility and a £5m overdraft facility;

c. ensure access to long term funding to finance its long term assets. This is achieved in the form of a £600m amortising sterling bond with a final maturity date of 2026;

d. ensure that the ratio of bank funding to total gross borrowings does not exceed 75%; and

e. maintain a portfolio of debt diversified by source and maturity. This is achieved through the issuance of a £600m sterling bond that started to amortise in 2012 and has a final maturity date of 2026 and by having available shorter dated committed bank facilities.

The following table shows the ratio of free cash in NERL to average monthly UK en route services income during the year:

	2017 £m	2016 £m
Average monthly UK en route services income	**49.4**	48.3
Free cash at 31 March	**87.1**	51.2
Ratio of free cash to UK en route services income	**1.8**	1.1

The following table shows the ratio of the group's bank borrowings to its gross borrowings at 31 March:

	2017 £m	2016 £m
Bank borrowings	**-**	95.4
Gross borrowings	**430.2**	564.8
Bank borrowings as a percentage of gross borrowings	**-**	16.9%

It is company policy not to issue new guarantees in respect of the borrowings of subsidiaries or to allow the creation of any new mortgages or other charges over group assets.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Maturity of borrowings

The following table sets out the remaining contractual maturity of the group's non-derivative financial liabilities. The tables have been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the group can be required to repay. The table includes both interest and principal cash flows.

	2017				2016			
	Unsecured loans £m	**Secured loans £m**	**Other liabilities £m**	**Total £m**	Unsecured loans £m	Secured loans £m	Other liabilities £m	Total £m
Due within one year or less	**0.2**	**69.8**	**141.4**	**211.4**	0.7	65.3	157.2	223.2
Between one and two years	**0.2**	**65.3**	**34.7**	**100.2**	0.2	71.0	13.4	84.6
Due between two and five years	**0.7**	**172.8**	**17.4**	**190.9**	0.7	281.7	5.2	287.6
Due in more than five years	**0.9**	**239.9**	**4.6**	**245.4**	1.1	294.9	6.7	302.7
	2.0	**547.8**	**198.1**	**747.9**	2.7	712.9	182.5	898.1
Effect of interest, discount and unamortised bond issue and bank facility arrangement fees	**(0.2)**	**(123.3)**	**-**	**(123.5)**	(0.3)	(154.9)	-	(155.2)
	1.8	**424.5**	**198.1**	**624.4**	2.4	558.0	182.5	742.9

Other liabilities above include trade and other payables excluding deferred income of £93.5m (2016: £72.1m).

In order to manage the liquidity risk arising on the contractual maturity of its borrowings, it is the group's intent to replace bank facilities and bonds with facilities of a similar nature at least 12 months in advance of contractual maturity.

The following table sets out the maturity profile of the group's derivative financial liabilities. Cash flows under the index-linked swap are not fixed and are subject to movements in inflation. Accordingly, the cash flows associated with the index-linked swap have been derived from the group's long term forecasts of inflation as used for business planning purposes. The table shows undiscounted net cash inflows/(outflows) on these derivatives.

	Due within one year or less £m	**Due between one and two years £m**	**Due between two and five years £m**	**Due in more than five years £m**	**Total £m**
2017					
Net settled:					
Index-linked swap payable	(7.9)	(10.0)	(43.6)	(84.7)	(146.2)
Gross settled:					
Foreign exchange forward contract receivables	264.4	25.2	47.4	-	337.0
Foreign exchange forward contract payables	(261.8)	(25.4)	(47.0)	-	(334.2)
	(5.3)	**(10.2)**	**(43.2)**	**(84.7)**	**(143.4)**
2016					
Net settled:					
Index-linked swap payable	(3.4)	(8.0)	(38.2)	(102.4)	(152.0)
Gross settled:					
Foreign exchange forward contract receivables	195.8	10.6	14.3	-	220.7
Foreign exchange forward contract payables	(200.2)	(10.6)	(14.0)	-	(224.8)
	(7.8)	**(8.0)**	**(37.9)**	**(102.4)**	**(156.1)**

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Fair value measurements

Set out below is information about how the group determines fair values of various financial assets and financial liabilities.

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into Levels 1 to 3 based on the degree to which the fair value is observable.

> Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.

> Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

> Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Fair value measurements recognised on the balance sheet

	2017				2016			
	Level 1 £m	**Level 2 £m**	**Level 3 £m**	**Total £m**	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets								
Derivative financial instruments in designated hedge accounting relationships	**-**	**4.3**	**-**	**4.3**	-	0.6	-	0.6
Financial liabilities								
Derivative financial instruments in designated hedge accounting relationships	**-**	**(1.5)**	**-**	**(1.5)**	-	(4.1)	-	(4.1)
Derivative financial instruments classified as held for trading	**-**	**(138.6)**	**-**	**(138.6)**	-	(124.8)	-	(124.8)
	-	**(140.1)**	**-**	**(140.1)**	-	(128.9)	-	(128.9)

There were no transfers between individual levels in the year.

Valuation techniques and key inputs

The fair value of the financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the balance sheet date.

The fair values of the financial instruments held at fair value have been determined based on available market information at the balance sheet date and the valuation methodologies listed below:

> the fair values of forward foreign exchange contracts are calculated with reference to well recognised proprietary financial models used by bank counterparties, and verified using discounted cash flow modelling;

> the fair value of the index-linked swap is calculated by adding a credit value adjustment to an amount provided by bank counterparties using proprietary financial models. This is validated using discounted cash flow modelling and observable forward inflation indices at the reporting date and contracted inflation rates, discounted at a rate that reflects the credit risk of the various counterparties. The credit value adjustment is determined by the group to reflect own credit risk by reference to bank margins appropriate to NERL's credit rating; and

> the fair value of the £600m bond has been derived from its externally quoted price.

Notes forming part of the consolidated accounts

19. Financial instruments (continued)

Except as detailed in the following table, the directors consider that the carrying amounts of financial assets and financial liabilities recorded at amortised cost in the financial statements approximate their fair values:

	Carrying amount		Fair value	
	2017 £m	2016 £m	**2017 £m**	2016 £m
Financial liabilities				
£600m 5.25% Guaranteed Secured Amortising Bond	**(428.4)**	(467.4)	**(510.3)**	(543.9)

20. Financial and other liabilities

The group had balances in respect of other non-interest bearing financial and other liabilities as follows:

	2017 £m	2016 £m
Trade and other payables		
Current		
Trade payables	**23.4**	54.3
Other payables	**15.3**	3.3
Tax and social security	**11.6**	10.6
Accruals and deferred income		
deferred grants	**0.7**	0.7
other	**108.0**	102.1
	159.0	171.0
Non-current		
Other payables	**38.8**	16.7
Accruals and deferred income		
deferred grants	**3.9**	4.6
other	**89.9**	62.3
	132.6	83.6
	291.6	254.6

Other payables that are non-current represent regulatory revenue adjustments for calendar year 2016, the period January to March 2017 and previous regulatory control periods, which will be repaid after 31 March 2018 through 2018 and 2019 charges. Other payables that are current represent regulatory revenue adjustments for calendar years 2015 and 2016 and previous regulatory control periods, which will be recovered by 31 March 2018 through 2017 and 2018 charges.

Trade payables and accruals principally comprise amounts outstanding for trade purchases and ongoing costs. The average credit period taken for trade purchases is 43 days (2016: 40 days). The directors consider that the carrying amount of the trade payables approximates to their fair value.

Notes forming part of the consolidated accounts

21. Obligations under finance leases

	Minimum lease payments		Present value of minimum lease payments	
	2017 £m	2016 £m	**2017 £m**	2016 £m
Within one year	**0.2**	0.3	**0.2**	0.2
In the second to fifth years inclusive	**0.9**	0.9	**0.8**	0.8
After five years	**0.9**	1.1	**0.8**	1.0
	2.0	2.3	**1.8**	2.0
Less: future finance charges	**(0.2)**	(0.3)	**-**	-
	1.8	2.0	**1.8**	2.0

Analysed as:

	2017 £m	2016 £m
Current	**0.2**	0.2
Non-current	**1.6**	1.8
	1.8	2.0

The group entered into a finance lease arrangement for certain network equipment in the prior year. The term of this lease is 10 years. For the year ended 31 March 2017, the effective borrowing rate was 3.1%. All leases are on a fixed repayment basis.

The fair value of the group's lease obligations is approximately equal to their carrying amount.

22. Provisions

	Redundancy £m	**Relocation £m**	**Other £m**	**Total £m**
At 1 April 2016	4.4	3.9	7.9	16.2
Additional provision in the year	2.4	0.1	1.2	3.7
Release of provision in the year	-	(0.7)	-	(0.7)
Utilisation of provision	(5.5)	(1.2)	(1.1)	(7.8)
At 31 March 2017	**1.3**	**2.1**	**8.0**	**11.4**

	2017 £m	2016 £m
Amounts due for settlement within 12 months	**4.6**	8.7
Amounts due for settlement after 12 months	**6.8**	7.5
	11.4	16.2

Notes forming part of the consolidated accounts

22. Provisions (continued)

The redundancy provision represents the best estimate of the future cost of redundancy payments to employees that have committed to the redundancy terms at 31 March 2017. The ageing of the provision reflects the expected timing of employees leaving the group.

The relocation provision represents the best estimate of the future cost of relocating staff when the site they work at closes and they are relocated to another site. The ageing of the provision reflects the expected timing of the settlement of relocation costs.

The other provisions represent the best estimate of other liabilities, including property-related costs. The ageing of the provision reflects the best estimate of when these potential liabilities will fall due.

23. Deferred tax

The following are the major deferred tax assets and liabilities recognised by the group and movements thereon during the current and prior reporting period.

	Accelerated tax depreciation £m	Retirement benefits £m	Financial instruments £m	Other £m	Total £m
At 1 April 2015	103.2	(70.6)	(9.2)	(4.2)	19.2
(Credit)/charge to income	(7.9)	(2.5)	1.7	0.9	(7.8)
Charge to equity	-	58.0	1.1	-	59.1
At 31 March 2016	**95.3**	**(15.1)**	**(6.4)**	**(3.3)**	**70.5**
At 1 April 2016	95.3	(15.1)	(6.4)	(3.3)	70.5
(Credit)/charge to income	(0.2)	3.6	(2.1)	(0.2)	1.1
(Credit)/charge to equity	-	(52.6)	0.6	-	(52.0)
At 31 March 2017	**95.1**	**(64.1)**	**(7.9)**	**(3.5)**	**19.6**

Certain deferred tax assets and liabilities have been offset. The following is the analysis of the deferred tax balances (after offset) for financial reporting purposes.

	2017 £m	2016 £m
Deferred tax liabilities	**(95.1)**	(95.3)
Deferred tax assets	**75.5**	24.8
	(19.6)	(70.5)

Notes forming part of the consolidated accounts

24. Share capital

	Authorised		Called up, allotted and fully paid	
	Number of shares	£m	Number of shares	£m
Ordinary shares of £1 each				
At 31 March 2017 and 31 March 2016	144,100,007	144.1	131,000,007	131.0
Ordinary A shares of 80 pence each				
At 31 March 2017 and 31 March 2016	54,272,594	43.4	12,048,193	9.6
		187.5		**140.6**

Each class of ordinary shares have the same voting rights and rights to dividends.

Special share

The authorised and issued share capital of NATS Holdings Limited includes one special rights redeemable preference share with a nominal value of £1. The share is redeemable at any time after the shareholding of the Crown falls below 25%. This share can only be held by a Minister of the Crown, the Treasury Solicitor or any other person acting on behalf of the Crown. The special shareholder is entitled to attend and speak at meetings. The special share does not carry any rights to vote at general meetings except in the following circumstances:

> alterations to the company's share capital;
> alterations to voting rights of any of the company's shares; and
> the removal of any director appointed by a Crown representative.

If an attempt is made to approve any of these events or to pass a resolution to wind up the company at a general meeting, on an ordinary resolution, the special shareholder will have no less than one vote more than the total number of all other votes cast, and on a special resolution, he shall have no less than one vote more than 25% of the total votes cast.

25. Share premium account

	£m
Balance as at 31 March 2017 and 31 March 2016	0.4

26. Non-controlling interest

The non-controlling interest (a 30% ownership interest in NATS Services LLC) recognised at the acquisition date was measured by reference to the fair value of the non-controlling interest and amounted to £0.1m (Omani rial 0.1m).

As at 31 March 2017, a loan to the non-controlling interest amounted to £0.1m (Omani rial 0.1m) and is included in other debtors (see note 16).

Notes forming part of the consolidated accounts

27. Notes to the cash flow statement

	2017 £m	2016 £m
Operating profit from continuing operations	**166.6**	69.1
Adjustments for:		
Impairment of goodwill	**11.0**	92.7
Depreciation of property, plant and equipment	**103.6**	94.8
Amortisation of intangible assets	**45.2**	33.2
Impairment losses	**0.5**	0.7
Deferred grants released	**(0.7)**	(0.7)
Profit on disposal of property, plant and equipment	**(0.1)**	(7.1)
R&D expenditure above the line tax credits	**(1.6)**	(1.8)
Adjustment for pension funding	**(17.8)**	12.4
Operating cash flows before movements in working capital	**306.7**	293.3
Decrease in trade and other receivables	**74.1**	14.8
Increase in trade, other payables and provisions	**23.3**	64.0
Cash generated from operations	**404.1**	372.1
Tax paid	**(16.4)**	(30.4)
Net cash from operating activities	**387.7**	341.7

Cash and cash equivalents, which are presented as a single class of asset on the face of the balance sheet, comprise cash at bank and short term highly liquid investments with a maturity of three months or less.

Notes forming part of the consolidated accounts

28. Financial commitments

	2017 £m	2016 £m
Amounts contracted but not provided for in the accounts	**63.4**	60.8
Minimum lease payments under operating leases recognised in the income statement	**20.4**	22.5

At the balance sheet date the group had outstanding commitments for future minimum lease payments under non-cancellable operating leases, which fall due as follows:

	2017 £m	2016 £m
Within one year	**17.9**	19.5
In the second to fifth years inclusive	**25.0**	35.1
After five years	**51.6**	57.3
	94.5	111.9

Operating lease payments represent rentals payable by the group for certain properties, equipment used for air navigation and vehicles. Leases are negotiated on varying terms depending on the type of asset leased.

Guarantees

NATS Holdings Limited has given guarantees to the Ministry of Defence in relation to NERL's performance under its Future Military Area Radar Services contract with the MOD.

NATS Services has provided a parent company guarantee to the MOD to secure the performance by Aquila of its obligations under the Project Marshall contract.

NATS Services has provided a parent company guarantee to the sellers of shares in Searidge Technologies Inc, to secure the performance by NATS (Services) Canada Inc under the Share Purchase Agreement for any contingent consideration relating to those shares.

As part of the tendering process for new contracts, the NATS group may be required to put in place a tender or bid guarantee which expires once the contract is awarded. Where tenders are successful, contractual terms may also require performance or advance payment guarantees. These guarantees vary in length depending on the life of the contract and may run until the expiry of the contract. The total guarantees provided in these respects at 31 March 2017 was £7.0m (2016: £5.5m).

Notes forming part of the consolidated accounts

29. Share based payments

The company operates an All-Employee Share Ownership Plan for the benefit of employees to hold 5% of the share capital of the company. The plan is administered by NATS Employee Sharetrust Limited. The scheme allows for free shares, dividend shares, partnership shares and matching shares to be awarded to employees. The free shares and matching shares have a vesting period of three years from date of award and may be cash-settled from this date. The shares may be forfeited if the employee leaves within three years of the date of the award, depending on conditions of departure.

A liability is recognised for the current fair value of shares in issue at each balance sheet date. Changes in fair value of the liability are charged or credited to the income statement. The number of shares outstanding at the balance sheet date was:

Date of share awards	No. shares awarded to employees	No. employee shares outstanding at 31 March 2017	No. employee shares outstanding at 31 March 2016
Free share awards			
21 September 2001	3,353,742	**311,410**	347,558
20 October 2003	2,459,000	**293,784**	325,784
10 September 2004	1,966,000	**444,409**	500,611
11 January 2008	1,071,840	**353,289**	403,920
18 September 2009	963,200	**403,555**	465,655
Partnership shares			
1 March 2011	694,783	**380,758**	475,031
26 September 2012	714,959	**574,396**	597,969
30 May 2014	496,738	**429,133**	444,839
31 October 2016	530,303	**520,614**	-
Matching shares			
1 March 2011	694,783	**382,246**	477,729
26 September 2012	714,959	**574,746**	598,369
30 May 2014	496,738	**429,133**	444,839
31 October 2016	530,303	**520,614**	-
		5,618,087	5,082,304
Dividend shares issued on 28 June 2005	247,017	**37,289**	41,686
Total employee shares in issue at 31 March		**5,655,376**	5,123,990

Notes forming part of the consolidated accounts

29. Share based payments (continued)

The movement in the number of employee shares outstanding is as follows:

	Movement in the no. of shares during the year ended 31 March 2017	Movement in the no. of shares during the year ended 31 March 2016
Balance at 1 April	**5,123,990**	5,624,252
Granted during the year	**1,060,606**	-
Forfeited during the year	**(6,735)**	(4,700)
Exercised during the year	**(522,485)**	(495,562)
Balance at 31 March	**5,655,376**	5,123,990

These shares are valued every six months by independent valuers using discounted cash flow and income multiple methods of valuation. As at 31 March 2017 the price of an employee share was valued at £3.95 (2016: £4.20). A valuation at 30 June 2016 valued the shares at £3.65. The liability for the employee shares at 31 March 2017 was £20.8m (2016: £21.1m) included in other accruals and deferred income. The income statement includes a credit of £0.6m (2016: £0.3m credit). The payments made to employees for the shares they exercised during the year was £2.0m (2016: £2.1m).

30. Retirement benefit schemes

Defined contribution scheme

The group provides a defined contribution scheme to all qualifying employees who are not members of the defined benefit scheme. The assets of the scheme are held separately from those of the group in funds under the control of a board of Trustees.

The group operates a salary sacrifice arrangement whereby employees sacrifice an element of their salary in favour of contributions to the scheme in a ratio of 2:1, up to a maximum employer contribution of 18%. For the year ended 31 March 2017 employer contributions of £7.0m (2016: £5.8m), excluding employee salary sacrifice contributions of £3.5m (2016: £2.9m), represented 14.6% of pensionable pay (2016: 14.5%).

The defined contribution scheme had 1,043 members at 31 March 2017 (2016: 825).

Defined benefit scheme

NATS Limited (formerly National Air Traffic Services Limited), the company's wholly-owned subsidiary, entered into a deed of adherence with the CAA and the Trustees of the Civil Aviation Authority Pension Scheme (CAAPS) whereby the company was admitted to participate in CAAPS from 1 April 1996. CAAPS is a fully funded defined benefit scheme providing benefits based on final pensionable salaries. At 31 March 2001, the business of NATS was separated from the CAA. As a consequence, NATS became a 'non associated employer' which requires the assets relating to the liabilities of NATS active employees at 31 March 2001 to be separately identified within the CAAPS. CAAPS was divided into two sections to accommodate this, namely the CAA section and the NATS section, and a series of common investment funds was established in which both sections participate for investment purposes. The assets and membership of the scheme prior to transfer were allocated between these sections in accordance with Statutory Instrument 2001 Number 853, Transport act 2000 (Civil Aviation Authority Pension Scheme) Order 2001. The assets of the scheme are held in a separate trustee administered fund. CAAPS is governed by a board of Trustees which is responsible for implementing the funding and investment strategy. The board comprises 6 employer (NATS and CAA) and 6 member-nominated trustees, as well as an independent chairman.

During 2009 the group introduced a number of reforms to manage the cost and risk of pensions. The defined benefit pension scheme was closed to new joiners with effect from 31 March 2009. In addition, from 1 January 2009, annual increases in pensionable salaries were limited to a maximum increase in the retail prices index (RPI) plus 0.5%. A defined contribution scheme was also introduced for new joiners (see above). Finally, pension salary sacrifice arrangements were introduced with effect from 1 April 2009.

Notes forming part of the consolidated accounts

30. Retirement benefit schemes (continued)

During 2013 the group consulted on further pension reforms to mitigate rising pension costs. These included a change to the limit on increases in pensionable salaries to a maximum of the consumer prices index (CPI) plus 0.25%. In addition, the Trustees consulted members of the scheme on a change to the indexation of future service at CPI, rather than RPI. These reforms were agreed by staff.

Pensionable pay awards made for calendar years 2016 and 2017 were in line with CPI.

The defined benefit scheme had the following membership at 31 March:

	2017 No.	2016 No.
Active members	**2,768**	3,324
Deferred members	**1,260**	1,189
Pensioners	**2,586**	2,413
	6,614	6,926

Trustees' funding assessment

A Trustees' funding assessment of the NATS section is prepared at least every three years by the pension scheme actuary at the request of the Trustees in order to establish the financial position of the NATS section and to determine the level of contributions to be paid by NATS in the future.

The last Trustees' funding assessment of the NATS' section was carried out at 31 December 2015 and used the projected unit credit method. The assumptions which have the most significant effect on the result of the valuation are those relating to the rate of return on investments and the rates of increase in salaries and pensions.

The market value of the NATS' section's assets as at 31 December 2015 was £4,544.0m. For the purpose of the Trustees' funding assessment assets were taken at market value. The shortfall of assets relative to the value of benefits that had accrued to existing members was £458.7m, corresponding to a funding ratio of 90.8%.

The 2015 valuation showed that, based on long term financial assumptions, the contribution rate required to meet future benefit accrual was 36.9% of pensionable salaries (31.1% employers and 5.8% employees). In addition, NATS makes payments to the scheme to cover administration costs, including the Pension Protection Fund (PPF) levy, of 0.7% of pensionable salaries.

Contributions to the pension scheme

Following the 2015 valuation, NATS and the Trustees agreed a recovery plan which would see the funding deficit repaid by 2026. Under the schedule of contributions, normal contributions were paid at 29.4% of pensionable pay until 31 December 2016 and are being paid at 31.8% from 1 January 2017 to 31 December 2026. Deficit recovery contributions were made at £2.4m per month for calendar year 2016 and increase by 2.37% annually thereafter until 31 December 2023. An additional £825,000 per month is payable from 1 January 2017 until 31 December 2026 and this also increases by 2.37% annually until 31 December 2026.

During the year the group paid cash contributions to the scheme of £115.8m (2016: £120.3m). This amount included £13.3m (2016: £14.7m) of wages and salaries sacrificed by employees in return for pension contributions. Excluding the effect of salary sacrifice and past service costs, employer cash contributions were paid at a rate of 43.6% (2016: 40.6%) of pensionable pay.

The estimated contributions expected to be paid to the scheme during the financial year ending 31 March 2018 is £115.3m, including salary sacrifice contributions estimated at £11.4m.

Contributions to the scheme are ultimately funded by NATS' two principal operating subsidiaries: NERL and NATS Services, in proportion to their pensionable payrolls.

Notes forming part of the consolidated accounts

30. Retirement benefit schemes (continued)

Company's accounting valuation under international accounting standards

For the purpose of accounting for the scheme in these financial statements, the company obtains an updated valuation from a qualified independent actuary that is prepared in accordance with IAS 19: *Employee Benefits*.

This valuation differs from the Trustees' funding assessment explained above in a number of critical respects, including for example, differences in timing and frequency as well as in valuation assumptions. The Trustees' last funding assessment was prepared as at 31 December 2015, whereas the company's accounting valuation is prepared annually at 31 March. As a result, at each valuation date, the market conditions on which the assumptions are based will be different. Also, the assumptions adopted for the Trustees' funding assessment are set by the Trustees and include appropriate margins for prudence, whereas those adopted for the company's accounting valuation are prescribed by international accounting standards and reflect best estimates.

If an accounting valuation reveals a surplus at the balance sheet date, this is recognised in full to the extent that it can be realised in full by the company.

The Trustees' funding assessment carried out as at 31 December 2015 was updated to 31 March 2017 for the company's accounting valuation under IAS 19. The major assumptions used by the actuary for the purposes of the IAS 19 figures at the relevant year ends are set out in the table and narrative below:

	2017	2016	2015
RPI inflation	**3.10%**	2.90%	2.95%
CPI inflation	**2.00%**	1.80%	1.85%
Increase in:			
> Salaries	**2.00%**	1.80%	2.10%
> Deferred pensions	**3.10%**	2.90%	2.95%
> Pensions in payment	**3.10%**	2.90%	2.95%
Discount rate for net interest expense	**2.55%**	3.65%	3.35%

The mortality assumptions have been drawn from actuarial tables 95% S2PMA light and 93% S2PFA light (2016: 101% S1PMA light and 99% S1PFA light) with future improvements in line with CMI 2014 (2016: CMI 2011) projections for male/female members, subject to a long term improvement of 1.5% p.a. (2016: 1.5% p.a.). These tables assume that the life expectancy, from age 60, for a male pensioner is 29.4 years and a female pensioner is 30.8 years. Allowance is made for future improvements in longevity, such that based on the average age of the current membership (45), when these members reach retirement, life expectancy from age 60 will have increased for males to 31.0 years and for females to 32.6 years.

Notes forming part of the consolidated accounts

30. Retirement benefit schemes (continued)

The principal risks to the financial performance of the group arising from the scheme are in respect of:

a. asset volatility: for accounting purposes, scheme liabilities are determined using a discount rate set by reference to high quality corporate bond yields. If scheme assets under-perform relative to this yield, this will create a deficit. As explained below, NATS and Trustees are reviewing measures to de-risk the scheme by investing more in assets which better match the liabilities.

b. changes in bond yields: a decrease in the yield on high quality corporate bonds will increase scheme obligations, although this is partly mitigated by an increase in the value of the scheme's holdings of bonds.

c. inflation risk: the scheme's benefit obligations are linked to inflation, and higher inflation will lead to higher liabilities. The majority of the scheme's assets (such as equities) are real in nature and so provide some inflation protection, but overall, an increase in inflation will adversely impact on the funding position.

d. life expectancy (mortality): the majority of the scheme's obligations are to provide benefits for the life of a member, so an increase in life expectancy will result in an increase in the scheme's obligations.

Sensitivities regarding the principal assumptions used to measure the scheme liabilities are set out below:

Assumption	Change in assumption	Impact on scheme liabilities
Discount rate (bond yields)	Increase/decrease by 0.5%	Decrease by 11.5%/increase by 13.5%
Rate of inflation	Increase/decrease by 0.5%	Increase by 13.3%/decrease by 11.4%
Rate of pensionable salary growth	Increase/decrease by 0.5%	Increase by 3.5%/decrease by 3.2%
Rate of mortality	1 year increase in life expectancy	Increase by 3.1%

Each sensitivity above is based on changing one assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to variations in significant actuarial assumptions, the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as for calculating the liability recognised on the balance sheet.

Notes forming part of the consolidated accounts

30. Retirement benefit schemes (continued)

Amounts recognised in income, in the staff costs line item, in respect of the defined benefit scheme are as follows:

	2017 £m	2016 £m
Current service cost	**(94.6)**	(120.1)
Past service cost	**(0.4)**	(0.8)
Net interest expense	**(0.8)**	(9.8)
Administrative expenses	**(2.2)**	(2.0)
Components of defined benefit costs recognised within operating profit	**(98.0)**	(132.7)

Remeasurements recorded in the statement of comprehensive income are as follows:

	2017 £m	2016 £m
Return on plan assets (excluding amounts included in net interest expense)	**1,101.4**	(140.1)
Actuarial gains and losses arising from changes in financial assumptions	**(1,522.5)**	425.7
Actuarial gains and losses arising from changes in demographic assumptions	**119.6**	-
Actuarial gains and losses arising from experience adjustments	**10.3**	2.4
	(291.2)	288.0

The amount included in the consolidated balance sheet arising from the group's obligations in respect of its defined benefit scheme is as follows:

	2017 £m	2016 £m
Present value of defined benefit obligations	**(5,786.3)**	(4,760.0)
Fair value of scheme assets	**5,435.5**	4,682.6
Deficit in scheme	**(350.8)**	(77.4)

Notes forming part of the consolidated accounts

30. Retirement benefit schemes (continued)

Movements in the present value of the defined benefit obligations were as follows:

	2017 £m	2016 £m
At 1 April	**(4,760.0)**	(5,050.2)
Current service cost	**(94.6)**	(120.1)
Past service cost	**(0.4)**	(0.8)
Interest expense on defined benefit scheme obligations	**(162.4)**	(166.7)
Actuarial gains and losses arising from changes in financial assumptions	**(1,522.5)**	425.7
Actuarial gains and losses arising from changes in demographic assumptions	**119.6**	-
Actuarial gains and losses arising from experience adjustments	**10.3**	2.4
Contributions from scheme members	**-**	(0.1)
Benefits paid	**623.7**	149.8
At 31 March	**(5,786.3)**	(4,760.0)

The average duration of the scheme's liabilities at the end of the year is 24.9 years (2016: 23.6 years). The present value of the defined benefit obligation can be analysed by member group as follows:

	2017 £m	2016 £m
Active members	**2,904.5**	2,517.2
Deferred members	**602.1**	429.5
Pensioners	**2,279.7**	1,813.3
	5,786.3	4,760.0

Movements in the fair value of scheme assets during the year were as follows:

	2017 £m	2016 £m
At 1 April	**4,682.6**	4,697.2
Interest income on scheme assets	**161.6**	156.9
Return on plan assets (excluding amounts included in net interest expense)	**1,101.4**	(140.1)
Contributions from scheme members	**-**	0.1
Contributions from sponsoring company	**115.8**	120.3
Benefits paid	**(623.7)**	(149.8)
Administrative expenses	**(2.2)**	(2.0)
At 31 March	**5,435.5**	4,682.6

Notes forming part of the consolidated accounts

30. Retirement benefit schemes (continued)

The major categories of scheme assets were as follows:

	2017 £m	2016 £m
Cash and cash equivalents	**65.0**	61.3
Equity instruments		
UK	**419.3**	342.9
Europe	**119.7**	96.1
North America	**341.7**	281.4
Japan	**48.1**	39.2
Pacific (excluding Japan)	**135.2**	115.8
Emerging markets	**428.5**	367.3
Global	**804.0**	669.1
	2,296.5	1,911.8
Bonds		
Corporate bonds	**942.5**	895.2
Index-linked gilts over 5 years	**1,457.7**	1,161.4
	2,400.2	2,056.6
Other investments		
Property	**241.7**	255.0
Hedge funds	**215.9**	206.1
Global tactical asset allocation	**130.8**	117.7
Private equity funds	**140.0**	136.2
	728.4	715.0
Derivatives		
Futures contracts	**(54.6)**	(62.1)
	5,435.5	4,682.6

The scheme assets do not include any investments in the equity or debt instruments of group companies or any property or other assets used by the group.

Virtually all equity and debt instruments have quoted prices in active markets. Investments are well diversified, such that the failure of any single investment would not have a material impact on the overall level of assets. A large portion of the assets consist of equities and bonds, although the scheme also invests in property, cash and investment (private equity and hedge) funds.

NATS and Trustees implemented a liability driven investment (LDI) programme in 2012 in order to hedge the impact of changes in inflation and interest rates on the value of the scheme's obligations, which are sensitive to inflation and movements in yields in the gilt market. The strategy includes establishing trigger levels which define the rates of interest and inflation rates at which hedging transactions will be executed. In addition, and as an acceleration of the existing strategy, NATS and Trustees agreed during 2014 to increase the level of hedging of interest rates and inflation to 50%, as measured on the Trustee funding basis. Swap transactions are executed with carefully scrutinised banks and collateral is provided in the form of index-linked gilts to protect against the unlikely event of default by a counterparty bank.

Notes forming part of the consolidated accounts

30. Retirement benefit schemes (continued)

At NATS' request, Trustees have also considered further de-risking over time to protect the scheme from the impact of volatility in the value of return-seeking assets. This would involve progressively converting from return-seeking assets into hedging assets to increase the level of matching of the scheme's liabilities. As changing the mix of assets changes the returns achieved, this would impact on contributions payable. Before changing this strategy, NATS and Trustees are likely to consult with CAA on the implications for customers. The strategy will aim to maintain an appropriate balance between the potential impact on contributions and the reduction in volatility of return-seeking assets, and therefore reduced investment risk.

Derivative instruments are used by investment managers to reduce risk or gain exposure to investment classes without the requirement to hold the underlying investment. Trustees monitor derivative positions to ensure that, when combined with the underlying physical position, the aggregate falls within specified investment guidelines.

The actual return on scheme assets for the year ended 31 March 2017 was £1,263.0m (2016: £16.8m).

31. Related party transactions

The NATS group has four shareholders - the Crown, The Airline Group Limited (AG), LHR Airports Limited and the NATS Employee Sharetrust Limited. During the year transactions with the Crown have taken place with the Meteorological Office, the Department for Transport (DfT) and the Ministry of Defence (MOD). In addition there have been transactions with LHR Airports Limited and AG.

AG is a consortium of British Airways plc, Deutsche Lufthansa AG, easyJet Airline Company Limited, the Pension Protection Fund, Thomas Cook Airlines Limited, Thomson Airways Limited, Virgin Atlantic Airways Limited and USS Sherwood Limited. AG has a 42% stake in NATS Holdings Limited. The directors of NATS Holdings Limited are satisfied that the eight members of AG have not exercised undue influence on the group either acting individually or in concert and therefore the individual transactions with each member of AG have not been disclosed in this set of accounts.

Contractual arrangements existed during the year between LHR Airports Limited and NATS Services in relation to air navigation services provided at Heathrow Airport.

Transactions between the company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note. Transactions between the company and its subsidiaries are disclosed in the subsidiary companies' financial statements.

Transactions between the company and its joint ventures and associate, which are related parties, are disclosed below.

Notes forming part of the consolidated accounts

31. Related party transactions (continued)

Trading transactions

During the year, group companies entered into the following transactions with related parties.

	Sales		Purchases		Amounts owed by related parties		Amounts owed to related parties	
	Year ended 31 March 2017 £m	Year ended 31 March 2016 £m	**Year ended 31 March 2017 £m**	Year ended 31 March 2016 £m	**Year ended 31 March 2017 £m**	Year ended 31 March 2016 £m	**Year ended 31 March 2017 £m**	Year ended 31 March 2016 £m
LHR Airports Limited	**54.1**	56.0	**8.1**	7.9	**7.4**	4.7	**-**	-
Ministry of Defence (MOD)	**49.4**	49.3	**4.1**	3.7	**5.4**	5.4	**11.6**	36.2
The Airline Group Limited	**-**	-	**0.2**	0.2	**-**	-	**-**	-
Department for Transport (DfT)	**0.7**	0.6	**-**	-	**-**	-	**-**	-
Meteorological Office	**0.3**	0.3	**0.7**	0.7	**-**	-	**0.1**	0.1
European Satellite Services Provider SAS	**0.1**	0.3	**-**	-	**-**	-	**-**	-
FerroNATS Air Traffic Services SA	**0.6**	0.3	**-**	-	**-**	-	**-**	-
Aquila Air Traffic Management Services Limited	**31.5**	24.9	**-**	-	**1.9**	0.2	**-**	-

Sales are made to related parties at the group's usual rates and purchases at market prices. The amounts outstanding are unsecured and will be settled in cash. No guarantees have been received. No provisions (2016: £nil) have been made for doubtful debts in respect of amounts owed by related parties.

Remuneration of key management personnel

The remuneration of key management personnel of the group, is set out below in aggregate for each of the categories specified in IAS 24: *Related Party Disclosures*. Key management includes the Board of directors of the company and the group's principal subsidiaries. Further information about the remuneration of individual directors is provided in the audited part of the Remuneration Committee report.

	2017 £m	2016 £m
Short term employee benefits	**5.8**	6.2
Post-employment benefits	**0.9**	1.6
Other long term benefits	**0.8**	0.1
Termination benefits	**0.6**	0.7
	8.1	8.6

Notes forming part of the consolidated accounts

32. Subsidiaries, joint ventures and associates

The group's principal subsidiaries at 31 March 2017, all of which have been consolidated in these accounts were:

Name of company	Principal activity	Proportion of ordinary shares and voting rights held	Country of registration	Country of operation
Direct holding:				
NATS Limited*	Corporate services	100%	England and Wales	United Kingdom
Indirect holding:				
NATS (En Route) plc*	En route air traffic services	100%	England and Wales	United Kingdom
NATS (Services) Limited*	Airport air traffic services	100%	England and Wales	United Kingdom
NATS Solutions Limited*	Airport and airfield air traffic services	100%	England and Wales	United Kingdom
NATSNav Limited*	Satellite based navigation	100%	England and Wales	United Kingdom
NATS Employee Sharetrust Limited*	Corporate trustee of employee share plan	100%	England and Wales	United Kingdom
NATS Services DMCC, *Suite 1201, Platinum Tower, Jumeirah Lake Towers, PO Box 392497, Dubai, United Arab Emirates*	ATM consultancy	100%	UAE	UAE
NATS Services LLC, *PO Box 533, Ruwi, PC 112, Muscat, Sultanate of Oman*	ATM consultancy	70%	Oman	Oman
NATS Services (Asia Pacific) Pte. Limited, *3 Raffles Place, #06-01 Bharat Building, Singapore 048617*	Airport and ATM consultancy	100%	Singapore	Singapore
NATS (USA) Inc, *The Corporation Trust Company, 1209 Orange Street, Wilmington, New Castle County, Delaware, United States*	Engineering and ATM consultancy	100%	USA	USA

* The registered office address of the entities registered in England and Wales is: 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL, United Kingdom.

The group had one associate and two joint ventures as at 31 March 2017, details are as follows:

Name of company	Principal activity	Date of acquisition	Proportion of ordinary shares held	Country of incorporation
European Satellite Services Provider SAS, *18, Avenue Edouard Belin - BPI 602, 31 401 Toulouse Cedex 9, France*	Satellite based navigation	1 September 2008	16.67%	France
FerroNATS Air Traffic Services SA, *Calle Principe de Vergara, 135, 28002, Madrid, Spain*	Airport air traffic services	28 January 2011	50.00%	Spain
Aquila Air Traffic Management Services Limited, *2 Dashwood Lang Road, The Bourne Business Park, Addlestone, Surrey, KT15 2NX, United Kingdom*	Asset provision and ATM services to UK MOD	9 October 2014	50.00%	United Kingdom

The associates and joint ventures are indirectly held by NATS Holdings Limited. The investment in ESSP is held by NATSNav Limited and the investments in FerroNATS and Aquila are held by NATS (Services) Limited.

Notes forming part of the consolidated accounts

32. Subsidiaries, joint ventures and associates (continued)

Summarised financial information relating to the associate and joint ventures

European Satellite Services Provider SAS (ESSP)

On 1 September 2008, the group acquired 16.67% of the issued share capital of ESSP for cash consideration of €0.2m (£0.1m).

The associate is accounted for using the equity method. Pursuant to the shareholder agreement, the group has the right to cast 16.67% of the votes at shareholder meetings. The financial year end is 31 December 2016. For the purposes of applying the equity method of accounting, the financial statements of ESSP for the year ended 31 December 2016 have been used. These financial statements have been adjusted for a final dividend of €0.4m (£0.4m) declared by ESSP at its AGM on 29 March 2017. No other adjustments are required to be made for the effects of significant transactions between 31 December 2016 and 31 March 2017.

Although the group holds less than 20% of the equity shares of ESSP, the group exercises significant influence by virtue of representation on the Board of directors, participation in policy making decisions of ESSP and the provision of essential technical information to ESSP.

Summarised financial information in respect of ESSP is set out below. These amounts have been prepared in accordance with French GAAP and converted from euro, ESSP's functional currency.

FerroNATS Air Traffic Services SA

In January 2011, the group acquired 50% of the issued share capital of FerroNATS Air Traffic Services SA for a cash consideration of €0.1m (£0.1m). In June 2011 the group purchased an additional €0.4m (£0.3m) of share capital, maintaining a 50% holding of the issued share capital. FerroNATS is a joint venture with Ferrovial Servicios SA.

FerroNATS draws up its accounts to 31 December. For the purpose of these financial statements management accounts have been used to derive its performance as at 31 March 2017.

During the year FerroNATS repaid loan finance of £0.1m to the group (2016: £0.4m). At 31 March 2017, the loan (including interest) outstanding was £nil (2016: £0.1m).

FerroNATS prepares its accounts in accordance with Spanish GAAP and its functional currency is the euro.

Aquila Air Traffic Management Services Limited

In October 2014, the group acquired 50% of the issued share capital of Aquila Air Traffic Management Services Limited (Aquila) for a cash consideration of £0.1m. Aquila provides air traffic management services at military airfields in the delivery of Project Marshall for the Ministry of Defence. Aquila draws up its accounts to 31 March and therefore these accounts have been used to determine its performance for the financial year. It prepares its accounts under IFRS and its functional currency is pounds sterling.

During the year, Aquila drew down loan finance of £10.6m (2016: £3.7m) from the group. At 31 March 2017, the loan (including interest) outstanding was £14.9m (2016: £3.7m).

Notes forming part of the consolidated accounts

32. Subsidiaries, joint ventures and associates (continued)

The summarised financial information above is reconciled to the carrying amount recognised in the consolidated financial statements as follows:

	2017			2016		
	Associate ESSP £m	**Joint venture FerroNATS £m**	**Joint venture Aquila £m**	Associate ESSP £m	Joint venture FerroNATS £m	Joint venture Aquila £m
Non-current assets	**0.9**	**0.1**	**0.7**	0.7	0.4	0.3
Current assets	**27.8**	**7.1**	**54.9**	24.3	5.5	28.1
Current liabilities	**(17.2)**	**(2.2)**	**(47.3)**	(15.7)	(2.6)	(24.0)
Non-current liabilities	**(4.1)**	**-**	**(5.1)**	(1.9)	-	(2.9)
Net assets of associate/joint venture	**7.4**	**5.0**	**3.2**	7.4	3.3	1.5
Group share	**1.3**	**2.5**	**1.6**	1.2	1.7	0.7
Revenue	**52.3**	**11.2**	**81.2**	47.7	9.7	74.4
Profit after tax for the year	**2.8**	**1.5**	**1.8**	2.7	1.1	0.9
Group share	**0.5**	**0.7**	**0.9**	0.4	0.6	0.5
Dividends received	**(0.6)**	**-**	**-**	(0.2)	-	-
Other comprehensive income	**0.1**	**0.1**	**-**	0.1	0.1	-

33. Ultimate controlling party

There is no ultimate controlling party of NATS Holdings Limited. Under the shareholders' agreement, The Airline Group Limited and the Crown have similar reserve rights in respect of material decisions affecting the company.

34. Events after the reporting period

On 26 April 2017, NATS Services established a Canadian subsidiary, NATS (Services) Canada Inc. The subsidiary was established in order to invest in Searidge Technologies Inc. The investment is a 50% joint venture with NAV CANADA. Searidge Technologies works with airports around the world, providing technology that helps reduce delays, increase efficiency, and overall safety. This includes the delivery of digital tower solutions, which see air traffic controllers managing aircraft from remote facilities instead of in traditional airport towers.

In May 2017, the Board approved and the company paid an interim dividend for the year ending 31 March 2018 of 19.92 pence per share, totalling £28.5m.

Company balance sheet

at 31 March

	Notes	2017 £m	2016 £m
Assets			
Non-current assets			
Investments	4	**141.0**	141.0
Net assets		**141.0**	141.0
Equity			
Share capital	5	**140.6**	140.6
Share premium account	5	**0.4**	0.4
Retained earnings		**-**	-
Total equity		**141.0**	141.0

As permitted by section 408 of the Companies Act 2006 the company has elected not to present its own income statement for the year. For the year ended 31 March 2017 the company recognised a profit of £24.0m (2016: £81.7m).

The financial statements (Company No. 04138218) were approved by the Board of directors and authorised for issue on 30 June 2017 and signed on its behalf by:

Paul Golby
Chairman

Nigel Fotherby
Finance Director

Company statement of changes in equity

for the year ended 31 March

	Share capital £m	Share premium £m	Retained earnings £m	Total £m
At 1 April 2015	140.6	0.4	-	141.0
Profit for the year	-	-	81.7	81.7
Other comprehensive income for the year	-	-	-	-
Total comprehensive income for the year	**-**	**-**	**81.7**	**81.7**
Dividends paid	-	-	(81.7)	(81.7)
At 31 March 2016	**140.6**	**0.4**	**-**	**141.0**
At 1 April 2016	140.6	0.4	-	141.0
Profit for the year	-	-	24.0	24.0
Other comprehensive income for the year	-	-	-	-
Total comprehensive income for the year	**-**	**-**	**24.0**	**24.0**
Dividends paid	-	-	(24.0)	(24.0)
At 31 March 2017	**140.6**	**0.4**	**-**	**141.0**

Notes forming part of the company accounts

1. Cash flow statement

No cash flow statement has been provided because the company does not maintain a bank account or have any cash transactions. Dividends were transacted by the company's subsidiary NATS Limited.

2. Significant accounting policies

The separate financial statements of the company are presented as required by the Companies Act 2006. As permitted by that Act, the separate financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the EU.

The financial statements have been prepared on the historical cost basis. The principal accounting policies are the same as those set out in note 2 to the consolidated financial statements.

Investments in subsidiaries are designated as held to maturity and stated at cost less, where appropriate, provisions for impairment. Income from subsidiaries is recognised when received.

3. Profit for the year and dividends

Profit for the year has been arrived at after charging:

	2017 £m	2016 £m
Staff costs	**-**	-
Auditor's remuneration	**-**	-

	2017 No.	2016 No.
Executive directors	**2**	2
Non-executive directors	**10**	11
	12	13

The company incurred no charge to current or deferred taxes in the year (2016: £nil).

Dividends

Amounts recognised as distributions to equity holders in the period:

	2017 £m	2016 £m
First interim dividend of 16.78 pence per share (2016: 38.03 pence per share) paid in June 2016	**24.0**	54.4
Second interim dividend of nil pence per share (2016: 19.08 pence per share)	**-**	27.3
	24.0	81.7

Notes forming part of the company accounts

4. Investments

	Investments in subsidiary undertakings £m
Investments at 31 March 2017 and 31 March 2016	**141.0**

The company's investments in subsidiary undertakings are as set out in note 32 to the consolidated financial statements.

Pursuant to a loan agreement entered into by NATS (En Route) plc (NERL), the company has granted a legal mortgage and fixed charge over its shares in NATS Limited, NERL's parent company, and a floating charge over all other assets.

5. Share capital and share premium accounts

The movements on these items are disclosed in the consolidated statement of changes in equity and notes 24 and 25 of the consolidated financial statements.

6. Financial instruments

The company held no financial instruments at 31 March 2017 (2016: none).

7. Ultimate controlling party

There is no ultimate controlling party of NATS Holdings Limited. Under the shareholders' agreement, The Airline Group Limited and the Crown have similar reserve rights in respect of material decisions affecting the company.

8. Events after the reporting period

On 26 April 2017, NATS Services established a Canadian subsidiary, NATS (Services) Canada Inc. The subsidiary was established in order to invest in Searidge Technologies Inc. The investment is a 50% joint venture with NAV CANADA. Searidge Technologies works with airports around the world, providing technology that helps reduce delays, increase efficiency, and overall safety. This includes the delivery of digital tower solutions, which see air traffic controllers managing aircraft from remote facilities instead of in traditional airport towers.

In May 2017, the Board approved and the company paid an interim dividend for the year ending 31 March 2018 of 19.92 pence per share, totalling £28.5m. The company recognised a dividend in May 2017 of £28.5m from its subsidiary, NATS Limited.

Abbreviations and definitions

2016	Financial year ended 31 March 2016
2017	Financial year ended 31 March 2017
3Di	3 Dimensional Flight Inefficiency Metric
AESOP	All-Employee Share Ownership Plan
AG	The Airline Group Limited
ANSP	Air Navigation Service Provider
AQUILA	Aquila Air Traffic Management Services Limited
ATC	Air Traffic Control
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
CAA	Civil Aviation Authority
CAAPS	Civil Aviation Authority Pension Scheme
CDO	Continuous Descent Operations
CEO	Chief Executive Officer
CP3	Control Period 3 (2011-2014)
CPI	Consumer Prices Index
DRA	Direct Route Airspace
EC	European Commission
ESSP	European Satellite Services Provider SAS
EU	European Union
ExCDS	Extended Computer Display System
FAB	Functional Airspace Block
FerroNATS	FerroNATS Air Traffic Services SA
FRC	Financial Reporting Council
GAAP	Generally Accepted Accounting Principles
HMG	Her Majesty's Government
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standards
ISO	International Organisation for Standardisation
INEA	Innovation and Networks Executive Agency
IPA	Independent Parallel Approach
KPI	Key Performance Indicator
LAMP	London Airspace Management Programme
LHRA	LHR Airports Limited
LIBOR	London Interbank Offered Rate
LTIP	Long Term Incentive Plan
MOD	Ministry of Defence
NATS	NATS Holdings Limited and its subsidiaries, together the NATS group
NATS Services	NATS (Services) Limited
NERL	NATS (En Route) plc
NESL	NATS Employee Sharetrust Limited
NHL	NATS Holdings Limited
PPP	Public Private Partnership
PCP	Pilot Common Project
RAB	Regulatory Asset Base
RP1	Reference Period 1 (2012-2014)
RP2	Reference Period 2 (2015-2019)
RP3	Reference Period 3 (2020-2024)
RPI	Retail Prices Index
SES	Single European Sky
SESAR	SES ATM Research
SPA	Strategic Partnership Agreement
TANS	Terminal Air Navigation Services
TBS	Time-Based Separation
TMA	Terminal Manoeuvring Area
USS	USS Sherwood Limited
XMAN	Extended Arrival Manager

Explanatory notes

1 Project Marshall is a 22 year contract to transform the military's terminal Air Traffic Control technical services. It was initiated by the MOD to modernise ATM for over 100 MOD locations, of which over 60 are airfields or ranges, including overseas. It provides the foundation to deliver efficient and cost effective terminal ATM services and ensures that this capability keeps pace with modern regulatory demands and Single European Sky standards.

2 Single European Sky ATM Research: a programme to modernise Europe's airspace structure and air traffic management technologies.

3 An Airprox is a situation in which, in the opinion of a pilot or controller, the distance between aircraft as well as their relative positions and speeds have been such that the safety of the aircraft involved was or may have been compromised. The severity of these incidents is assessed periodically by the UK Airprox Board, an independent body, in the interests of enhancing flight safety.

4 interoperability Through European Collaboration.

5 References in this document to Deploying SESAR relate to NERL's investment programme which implements a number of SESAR compliant techologies and methodologies, rather than the European Sky ATM Research programmes that are defining and driving the deployment of technologies and methodologies at the European-wide level.

6 The severity of ground and airborne incidents is scored against six criteria: minimum separation achieved; rate of closure; detection of potential conflict; plan to achieve required separation; execution of the plan; and recovery when separation is lost.

7 Impact score is a measure of delay placing greater weight on long delays and departures in the morning and the evening peaks.

8 Variability score is a daily excess delay score based on weighted delays exceeding pre-determined thresholds on a daily basis.

9 3Di score measures airspace efficiency with reference to the deviation from the preferred profile to the actual radar track of each flight in UK airspace.

10 Training to promote an atmosphere of trust where front line staff feel encouraged to provide essential safety-related information and with clear lines drawn between acceptable and unacceptable behaviour.

11 An aircraft deviation of 300 feet or more from its assigned level.

12 EU Member States are required by SES legislation to form Functional Airspace Blocks with neighbouring ANSPs. FABs are blocks of airspace based on operational requirements and established regardless of State boundaries.

13 The transition altitude is a published height above sea level at which pilots climbing to their cruising level change their barometric altimeter from the regional pressure setting to a common international standard setting.

14 London Airspace Management Programme.

15 London Terminal Manoeuvring Area: the designated area of controlled airspace surrounding London airports and which forms part of the London Airspace Management Programme (LAMP).

16 Chargeable service units are the billing unit for recovering UK en route revenue allowances and a function of aircraft weight and distance flown.

17 Death in service, ill health and income protection arrangements may be restricted or cease if benefits are transferred out of NATS pension arrangements.