

NATS (En Route) plc  
Financial statements  
Year ended 31 March 2017

Company Number: 04129273

## NATS (En Route) plc (NERL)

NERL is the sole provider of air traffic control (ATC) services for aircraft flying 'en route' in UK airspace and the eastern part of the North Atlantic. It is economically regulated by the Civil Aviation Authority (CAA) within the framework of the European Commission's (EC) Single European Sky (SES) and operates under licence from the Secretary of State for Transport.

### Our purpose

#### **Advancing aviation, keeping the skies safe.**

We are making the skies an even safer and more efficient environment for flying.

### Our objectives

- Deliver a safe, efficient and reliable service every day.
- Deliver SESAR<sup>1</sup> and transform the business for the future.
- Win and retain commercial business.

### Our values

- We are safe in everything we do.
- We rise to the challenge.
- We work together.

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<sup>1</sup> A number of explanatory notes are provided on page 69 of this report

## Financial highlights

Financial year ended 31 March (£m unless otherwise specified)	2017	2016	Change %
Revenue	737.1	718.2	+2.6
Profit before tax and goodwill impairment	115.8	115.1	+0.6
Profit before tax	104.8	22.4	+367.9
Capital expenditure	149.9	144.6	+3.7
Net debt <sup>1</sup>	301.0	481.1	-37.4
Gearing <sup>2</sup> (%)	35.9%	49.1%	-26.9
Dividends	23.0	72.5	-68.3

<sup>1</sup> Excludes derivative financial instruments

<sup>2</sup> Ratio of the net debt to regulatory assets

- ➔ Revenue was £18.9m higher than last year, at £737.1m (2016: £718.2m). While Airspace customers benefited from real price reductions under the RP2 Performance Plan, these were more than offset by additional revenue from the increase in flights handled (see below).
- ➔ Profit before tax and goodwill impairment, at £115.8m (2016: £115.1m) was in line with last year. After taking into account a reduced charge for goodwill impairment, profit before tax at £104.8m (2016: £22.4m) was £82.4m better.

## Deliver a safe, efficient and reliable service every day

- ➔ The volume of flights we handled increased by 7.6% to 2.45 million (2016: 2.28 million).
- ➔ We maintained our safety record, with no risk-bearing Airprox<sup>2</sup> attributable to NERL (2016: nil).
- ➔ Average en route delay per flight increased to 10.9 seconds (2016: 4.3 seconds), reflecting in part higher than expected traffic.
- ➔ We enabled additional annual savings for airline customers of 55,900 tonnes of CO<sub>2</sub> emissions.

## Deliver SESAR and transform the business for the future

- ➔ We consulted customers on our revised investment plan for RP2, which accelerates the deployment of SESAR technology.
- ➔ Important milestones included: implementation of our new flight data processor (iTEC<sup>3</sup>) into Prestwick upper airspace, and live trials of electronic flights strips by the Terminal Control (TC) operation.

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<b>Company Secretary</b>	
Richard Churchill-Coleman	
<b>Registered office</b>	
4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL	
Registered in England and Wales	
Company Number 04129273	
<b>Auditor</b>	
BDO LLP	

## Chief Executive's review

Overall we made good progress in implementing our strategic objectives this year and achieved the priorities we set ourselves. I was pleased with our performance as we handled the most rapid growth in air traffic volumes in a decade while in parallel continuing to make changes to our operation.

Priorities for 2017	How we did
Provide a safe, efficient and reliable service every day from our airports and centres	✓
Deliver SESAR technology and transform the business for the future:	
<ul style="list-style-type: none"> <li>Complete the introduction of iTEC into Scottish Upper Airspace</li> </ul>	✓
<ul style="list-style-type: none"> <li>Deploy and operate electronic flight strips in Swanwick Terminal Control</li> </ul>	✓

### Provide a safe, efficient and reliable service every day

This year we safely handled 7.6% more flights than last year. We saw high growth rates in international flights, particularly from London airports, and the volume of North Atlantic flights exceeded its previous peak in 2008. The number of flights was also higher than projected by the Civil Aviation Authority (CAA) in our Performance Plan for Reference Period 2 (RP2: 2015-2019) which, while challenging to handle operationally, has benefited our revenue.

The basic structure of the UK's airspace (its routes, sectors and holding patterns) was designed over 50 years ago when traffic volumes were far lower than they are today. Airspace in the South East is now operating to its maximum capacity during the busiest times of the year. When the airspace is at capacity our service performance is very sensitive to the timing and distribution of traffic flows across the country. This was evident last summer when periods of bad weather combined with industrial

action in neighbouring countries (causing flights to divert into UK airspace) changed the patterns of flights across the UK. We faced similar operational challenges when particularly high demand coincided with the introduction of new systems (e.g. iTEC) into our operation.

Our primary objective is to ensure that, irrespective of the prevailing conditions, all flights are handled safely. For this reason, on certain days, we regulated traffic flows in some sectors of airspace to maintain safety which resulted in more air traffic delay than has been seen in recent years, and slightly more than our regulatory targets anticipated. However, at no point did our performance fall outside of the bounds of the RP2 Performance Scheme targets which was very good, considering the scale of traffic growth. Our service was also extremely good in comparison to Europe, with delay amounting to one third of the European average.

Learning from last summer, we have been working closely with airlines, airports and the CAA over the winter to assess demand across the UK airspace network and to develop a strategy to minimise delay this summer.

### Deliver SESAR technology and transform the business for the future

The longer term solution to minimising delay during periods of high demand is the combination of new technology and modern UK airspace structures.

The process of modernising airspace started in the previous financial year but further stages have been paused pending Government consultation on a UK aviation strategy over the next year.

We expect this strategy to include greater Government emphasis on airspace modernisation and its effect on those who are overflown.

Modernising airspace will significantly increase its

capacity but, like runway capacity enhancement, there are significant social and political hurdles (such as public opposition to changing aircraft noise patterns) to be overcome, even when the noise impact is an overall improvement for a community. By engaging effectively with local communities, alongside airports and airlines, we can establish rules for respite and distribution that can help mitigate some of the noise impact on the ground.

We also welcome Government's clear decision on the location of a new runway and a faster planning process to deliver it. We have already started working with Heathrow Airport and other stakeholders to review the design of the local airspace, taking account of safety, noise and other environmental considerations.

We consulted customers during the year on a revised capital investment plan for RP2. This follows changes that we have seen in the business environment (such as higher than expected traffic growth) and progress made by the industry in developing SESAR technologies, such as iTEC. In a programme we refer to as Deploying SESAR<sup>4</sup>, we propose to accelerate the deployment of new technology to deliver capacity and safety benefits to customers more quickly while reducing our investment in legacy systems and their running costs. To achieve this, we expect to invest up to £160m more than the RP2 Performance Plan assumed. In order to mitigate the impact of this additional investment on prices in future, we have secured £100m of EU (INEA) funding and we are applying for a further £30m.

As we deploy new technology we will be retiring our legacy systems. This requires significant change to our operation, including the need to train our people in the use of these new systems and in new

methods of operation. While the transition will be challenging we will be doing all we can to minimise any operational impacts for our customers.

This year we achieved key programme milestones, developing our ability to manage similar transitions in future: we delivered a new system to control upper airspace from our Prestwick Centre and we have started trial operational use of electronic flight strips in our Swanwick terminal control operation.

### **Our people**

One of the priorities I have set for the 2018 financial year (see below) is a focus on our people.

We have a record of good relations with our employees and enjoy generally constructive relationships with our Trades Unions. However, all parties faced a challenging pay round last summer and, on its conclusion, we jointly reflected that our ways of working and partnership approach needed to be reinvigorated and renewed. We are now working with union representatives to understand how we can work together more effectively; an objective which will take time but to which we are all committed.

As noted above, a large part of our strategy over the next five years is to replace much of our technical infrastructure. This infrastructure has served us well but is coming to the end of its useful life.

Updating this technology will be a significant change for everyone working for the company and this priority recognises that we will need to support our people through this transformation.

### **UK's EU referendum decision**

While the outcome of the UK's EU referendum decision and the triggering of Article 50 has not had an adverse impact on the demand for air travel to date, it has potentially significant implications for the UK aviation sector.

The company has provided input to the Department for Transport (DfT) on the regulation of Air Traffic Management (ATM) after Brexit. In our view the logical outcome is for the UK to re-establish national economic regulation of UK ATM and to retain control of this critical part of the UK's national infrastructure. This would avoid the complexity and cost of having two regulators (the European Commission and the CAA) and enable the company to be more agile in responding to changing customer requirements. This would also be the most reliable means of ensuring that NERL continues to be able to finance its operating and investing activities.

The UK has played a leading role in the development of SES since its introduction and will have every incentive to continue working with our European partners to maintain high standards of safety and to optimise the use of airspace.

#### **Defined benefit pension scheme**

The Trustees' 2015 triennial valuation reported an increase in the deficit to £459m (2012 triennial valuation: £383m). As a result, the company has agreed to increase its contributions to the scheme and expects to meet this increase through an adjustment to prices in the next Performance Plan period (based on the EU performance scheme regulations).

The Trustees intend to bring forward their next valuation to 31 December 2017. This will help inform the company's Initial Performance Plan for the next regulatory reference period (RP3: 2020-2024) on which we will be consulting customers and other stakeholders from Spring 2018.

#### **Our priorities for 2018**

- Provide safe and resilient air traffic services from our centres;
- Focus on our people and employee relations as we transform our infrastructure;
- Deliver key Deploying SESAR milestones: expanding electronic flight strips in Terminal Control and fit out Combined Operations room at Swanwick;
- Enhance the Oceanic technical platform and Operations at Prestwick.

Our immediate focus is ensuring that we have the right resources to support this summer's airline schedules so as to minimise the need for regulations that cause delay to the travelling public. We are also focusing on continuing the delivery of electronic flight strips which transition from trial to full operational use in our terminal control operation starting in January 2018. Finally, we are starting to turn our attention to developing next year's business plan which will form our initial proposal to customers for RP3 (calendar years: 2020 to 2024). Our key objective in developing this plan will be to ensure that we have sufficient resources in RP3 to continue to deliver a safe and efficient service to the travelling public which is resilient to changing circumstances and operational conditions.

**Martin Rolfe**  
**Chief Executive**

## Financial review

	2017	2016
	£m	£m
Revenue	737.1	718.2
Profit before tax and goodwill impairment	115.8	115.1
Profit before tax	104.8	22.4
Profit after tax	86.7	8.6
Dividends	23.0	72.5

The company reported a profit before tax of £104.8m (2016: £22.4m), an improvement of £82.4m on last year mainly reflecting a reduced goodwill impairment charge (by £81.7m). Profit before goodwill impairment was in line with last year at £115.8m (2016: £115.1m). The factors impacting the results are as follows:

	£m	Profit before tax £m
2016 profit before tax		22.4
<b>Revenue changes</b>		
Airspace		
UK en route revenue	19.3	
Service performance incentive	(5.0)	
Other revenue changes (net)	4.1	
	18.4	
Other service lines	0.5	18.9
<b>Operating cost changes</b>		
Staff pension costs	24.1	
Other staff costs	(9.6)	
Non-staff costs (net of other income)	6.7	
Asset related charges	(22.1)	
		(0.9)
Goodwill impairment		81.7
<b>Finance cost changes</b>		
Fair value movement on derivative contract	(20.2)	
Other net finance costs	2.9	
		(17.3)
<b>2017 profit before tax</b>		<b>104.8</b>

### Regulatory return

We assess the performance of NERL's regulated activities by reference to the RP2 Performance Plan. In its second year of RP2 (calendar year 2016), NERL achieved a pre-tax real return of 8.2% compared with the regulatory return of 5.8% for that year. This mainly reflected additional revenue from faster growth in air traffic volumes than the RP2 Performance Plan and which offset higher

operating costs, which exclude staff pensions, than the economic regulator assumed.

While we have performed better in the early years of the reference period, we face higher costs in the latter years (from pay and the dual running of legacy and new systems during a transition period).

Taking these factors into account we expect to achieve the regulatory rate of return over the five year period.

### Comparison of reported profit and regulatory return

Profit reported in these financial statements is prepared in accordance with IFRS and policies described in note 2 to these accounts. As described below, the CAA applies an economic regulatory building block model which is mainly cash-based. It can give rise to some significant differences between reported operating profit and regulatory return, mainly due to:

- lower historical cost depreciation compared with regulatory depreciation which is indexed to inflation; and
- lower accounting pension costs using best estimate assumptions prescribed by accounting standards compared with cash contributions agreed with Trustees, which include a margin for prudence.

This difference in basis explains why NERL's reported operating profit before goodwill impairment is some £60m higher than its regulatory profit, on the calendar year basis reported for its regulatory accounts.

### Revenue

Revenue at £737.1m (2016: £718.2m) improved by £18.9m, including Airspace UK en route revenue which was £19.3m higher. While Airspace customers benefited from RP2's real price reductions this was more than offset by additional revenue from the increase in flights that we handled. The latter mitigated a small service



penalty of £0.4m (2016: £4.6m bonus) relating to increased delays largely due to capacity.

Other Airspace revenue (including inter-company) improved by £4.1m.

### Operating costs

Operating costs, before goodwill impairment, at £576.8m were in line with last year (2016: £575.9m).

	2017	2016
	£m	£m
Staff costs	(304.2)	(318.7)
Non-staff costs	(125.7)	(132.4)
Asset related charges	(146.9)	(124.8)
Operating costs	(576.8)	(575.9)

Staff costs of £304.2m (2016: £318.7m) were 4.5% lower, mainly due to lower accounting pension costs compared to such costs in the previous year.

Before staff salary sacrifice and past service costs, the accrual rate for the defined benefit scheme this year was 36.0% (2016: 45.4%) of pensionable pay. This offset a £9.6m increase in other staff costs.

The average number of staff employed during the year was 3,159 (2016: 3,126) and there were 3,182 (2016: 3,145) staff in post at 31 March 2017.

Non-staff costs at £125.7m (2016: £132.4m) were £6.7m lower than the previous year. This mainly reflected savings in network communications.

Depreciation and amortisation increased to £146.9m (2016: £124.8m) following the deployment of the new flight data processing system for Prestwick upper airspace.

### Goodwill impairment

A goodwill impairment charge of £11.0m was recognised this year (2016: £92.7m) to write down the carrying value to the recoverable amount (see notes 2 and 3). This has reduced because, although NERL's revenue will benefit from the higher traffic forecast for the remainder of RP2, it will also face higher costs in those years. This charge does not impact NERL's cash flows or its regulatory return.

The carrying value of NERL's goodwill is intrinsically linked to its regulatory settlements and its regulatory asset base (RAB) in particular. The RAB is uplifted annually for inflation and increases with capital expenditure and reduces by regulatory depreciation. Regulatory depreciation is a source of revenue allowances (explained in the description of NERL's business model). During RP2, NERL's capital investment is projected to be less than regulatory depreciation. As a result, the RAB is expected to contract in real terms over RP2, despite the additional investment described above.

In assessing the carrying value of goodwill, consideration is also given to opportunities to outperform regulatory settlements and any premium a purchaser would be willing to pay for a controlling interest, by reference to the projected financial return indicated by the company's business plan and recent UK and European market transactions in utilities and airport operators.

### Net finance costs

Net finance costs of £44.5m were £17.3m higher than the prior year (2016: £27.2m) mainly reflecting the change in market value of the index-linked swap contract. This swap was taken out in 2003 as an economic hedge for NERL's revenue allowance for financing charges, which is linked to inflation. It does not qualify for hedge accounting under international accounting standards, and changes in its fair value are recognised in the income statement. The fair value varies with changes in the market's expectations of inflation and swap discount rates over the time to expiry of the contract in 2026, and can be volatile. This year, market conditions resulted in an increase in the swap's market value liability, resulting in a charge of £17.6m (2016: £2.6m credit).

Other net finance costs of £26.9m (2016: £29.8m) were £2.9m lower, reflecting a reduction in net debt.

### Taxation

The tax charge of £18.1m (2016: £13.8m) was at an effective rate of 17.3% (2016: 61.6%, mainly reflecting the goodwill impairment charge). This is lower than the headline rate of 20%, mainly reflecting the deferred tax impact of the reduction in the corporation tax rate to 17% from April 2020 and the lower tax rate on patent box income. This is partially offset by the goodwill impairment charge, which is not tax deductible.

The company's taxes generally arise in the UK, though it undertakes business in other countries.

Wherever we operate we organise our operations to pay the correct and appropriate amount of tax at the right time, according to relevant national laws, and ensure compliance with the company's tax policies and guidelines. During the year the company paid UK corporation tax of £14.2m (2016: £25.2m). The company also pays other taxes such as employer's national insurance contributions and business rates, which are significant costs.

The company's tax strategy is reviewed annually by the group's Tax Committee and covers the application of all direct and indirect taxes to our business including corporation tax, payroll taxes and value added tax. The Tax Committee reports to the Audit Committee and comprises the Finance Director, the Head of Tax and other senior finance professionals and takes advice from a professional firm.

We have a positive working relationship with HM Revenue & Customs and we are committed to transparency in all tax matters. This includes annual meetings with HMRC to review the company's performance and its business strategy.

### Dividends

The Board considered dividends at its May and November 2016 meetings. In May it approved a dividend of £23.0m while in November it agreed no

further dividend would be paid for the year. This reflected challenging financial market conditions and the resulting impact on UK defined benefit pension scheme liabilities. Payments in the prior year of £72.5m included some element for accumulated retained earnings not distributed in earlier regulatory reference periods.

In May 2017 the company paid a first interim dividend for the 2017/18 financial year of £27.5m.

### Balance sheet

	2017	2016
	£m	£m
Goodwill	198.3	209.3
Tangible and intangible fixed assets	986.0	983.5
Other non-current assets	15.9	23.3
Cash and short term deposits	147.8	101.4
Derivatives (net)	(135.4)	(128.1)
Borrowings	(448.8)	(582.5)
Pension scheme deficit	(265.3)	(58.9)
Deferred tax liability	(36.0)	(75.4)
Other net liabilities	(135.5)	(31.6)
Net assets	327.0	441.0

The change in financial position since the start of the year mainly reflects an increase in the defined benefit pension scheme IAS19 funding deficit which offset retained earnings and the reduction in net debt, which is explained in this review.

### Capital investment

	2017	2016
	£m	£m
SESAR Deployment	107.2	81.1
Airspace	5.9	8.6
Infrastructure	14.3	17.6
Operational systems	12.5	20.4
Other	7.5	7.2
<b>Regulatory capex</b>	<b>147.4</b>	<b>134.9</b>
Military systems	1.1	4.2
Other non-regulatory capex	1.4	5.5
<b>Capital investment</b>	<b>149.9</b>	<b>144.6</b>

Our revised capital investment plan for RP2 assumes that we invest up to £780m (in outturn prices), compared with £620m (in outturn prices) assumed in the RP2 Performance Plan. This plan is

explained within the review of the Safety, regulatory and economic environment.

This year we spent £149.9m (2016: £144.6m), including £107.2m for SESAR Deployment projects.

### Defined benefit pensions

Most staff benefit from a final salary defined benefit pension scheme. The scheme was closed to new entrants from 1 April 2009 and staff who are not members of this scheme are able to benefit from a defined contribution scheme. More information on our pension arrangements and their governance is provided in note 28 to the financial statements.

#### a. Accounting deficit under IAS 19

At 31 March 2017, measured under international accounting standards (IAS 19) and the associated best estimate assumptions, the defined benefit scheme was in deficit: liabilities (£4,371.9m) exceeded assets (£4,106.6m) by £265.3m (2016: £58.9m).

IAS19 pension deficit	£m
At 1 April 2016	(58.9)
Charge to income statement	(75.2)
Actuarial gains/(losses):	
- on scheme assets	819.6
- on scheme liabilities	(1,039.6)
Employer contributions*	88.8
At 31 March 2017	(265.3)
Represented by:	
Scheme assets	4,106.6
Scheme liabilities	(4,371.9)
Deficit	(265.3)

\* including salary sacrifice

Given the size of the scheme relative to the company, changes in financial market conditions can have relatively large impacts on the results and financial position. IAS 19 requires discount rates for valuing pension obligations to be based on AA corporate bonds. During 2017, while the scheme's assets increased by £543.2m, its liabilities increased by £749.6m reflecting a 130 basis point reduction in the real discount rate.

#### b. Trustee valuation and funding obligations

The funding of the defined benefit scheme is subject to agreement between the company's parent (as the employer) and the scheme's Trustees and is determined based on the conclusion of each triennial valuation conducted by the Trustees. This valuation uses a wide range of assumptions for measuring pension liabilities and legislation requires a margin for prudence. As a result the triennial valuation gives rise to a different valuation than that disclosed under international accounting standards.

Last year the Trustees completed a triennial valuation as at 31 December 2015 (the 2015 valuation). This reported a funding deficit of £458.7m, an increase of £76.1m from their 2012 valuation (the company's economic share is c.£349m). This mainly reflected a deterioration in financial market conditions, principally from lower gilt yields, which was only partially offset by investment returns. In addition, the scheme's actuary determined the cost to NATS of staff benefits accruing in future at 31.8% of pensionable earnings, up from 29.4% in 2012.

Following the 2015 valuation, Trustees agreed to continue with the recovery plan for the 2012 deficit and to a new 11-year recovery plan for the increase in deficit at 31 December 2015. As a result, the company's share of deficit contributions of £30.3m will be paid for the 2017 calendar year in addition to normal contributions at 31.8% of pensionable pay. The company paid contributions of £78.4m (2016: £80.0m), excluding salary sacrifice, equivalent to 43.6% (2016: 40.6%) of pensionable pay of £180m (2016: £197m). These contributions are higher than the regulator assumed for RP2 and we expect to recover these through higher prices in subsequent reference periods. The Trustees intend to bring forward their next valuation to 31 December 2017

to better inform NERL's Initial Performance Plan for RP3.

### Net debt

	Cash and short-term		Net debt
	investments	Borrowings	
	£m	£m	£m
Balance at 31 March 2016	101.4	(582.5)	(481.1)
Cash flow	35.9	134.8	170.7
Short-term investments	10.5	-	10.5
Non-cash movements	-	(1.1)	(1.1)
<b>Balance at 31 March 2017</b>	<b>147.8</b>	<b>(448.8)</b>	<b>(301.0)</b>

At 31 March 2017, borrowings were £448.8m (2016: £582.5m) and cash and investments were £147.8m (2016: £101.4m). Net debt decreased by £180.1m to £301.0m (2016: £481.1m).

The company has bank facilities of £400m, with a maturity date of 31 July 2021 and an option to extend these to 31 July 2022. At 31 March 2017, NERL had no outstanding bank loans (2016: £95.0m). At 31 March 2017, the balance outstanding on NERL's bond was £428.4m (2016: £467.4m). More information is provided in note 17 to the financial statements.

### Cash flow

	2017	2016
	£m	£m
Net cash from operating activities	<b>380.3</b>	339.2
Net cash used in investing activities	<b>(152.2)</b>	(150.2)
Net cash used in financing activities	<b>(192.2)</b>	(193.7)
Increase/(decrease) in cash and cash equivalents	<b>35.9</b>	(4.7)
Cash and cash equivalents at end of year	<b>108.4</b>	72.5

Cash and cash equivalents increased by £35.9m to £108.4m (2016: £72.5m).

The company generated £380.3m (2016: £339.2m) from its operating activities. This mainly reflected higher cash receipts and lower tax payments. The cash from operations financed the company's capital investment and debt service obligations.

### Outlook for 2018

We expect our revenue next year to be broadly in line with 2017 as further price reductions for Airspace customers are offset by additional revenue from the growth in flights. However, overall, we expect a reduction in profit before tax as

we incur additional costs to support the growth in traffic and as we start to bear the operating costs to support new systems, including operational staff training.

### Going concern

The company's business activities, together with the factors likely to affect its performance and financial position, its cash flows, liquidity position and borrowings are set out in this Strategic report. In addition, note 20 to the financial statements describes the company's objectives, policies and processes for managing its capital and its financial risks; and details its financial instruments and hedging activities.

At 31 March 2017, the company had cash of £108.4m and access to undrawn committed bank facilities of £400m that are available until July 2021 (with an option to extend to July 2022). The company's forecasts and projections, which reflect its expectations for RP2 and taking account of reasonably possible changes in trading performance, show that the company should be able to operate within the level of its existing facilities for the foreseeable future. NERL also benefits from some protections against traffic volume risk afforded by its price control conditions. As a result, the directors believe that the company is well placed to manage its business risks. The directors have formed a judgement that, taking into account the financial resources available, the company has adequate resources to continue to operate for a period of at least twelve months from the date of approval of the financial statements, and have therefore adopted the going concern basis in the preparation of the financial statements.

**Nigel Fotherby**  
Finance Director

## Safety

### Safety performance

Our main priority is the safety of aircraft and the travelling public. Our commitment to improving operational safety performance is embedded in our RP2 plan.

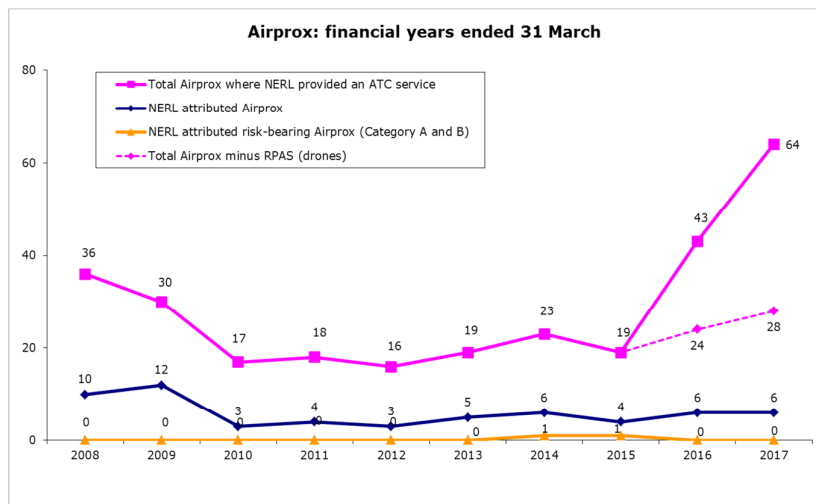
We have continued to meet the three safety performance targets set by the UK and European regulators in the SES performance scheme for the end of RP2, which were based on: the effectiveness of safety management; the use of the Risk Analysis Tool (RAT<sup>5</sup>) to assess the severity of safety events; and the extent of Just Culture training<sup>6</sup>.

In a year of unexpectedly high traffic growth, particularly at some airports, and as we invested in changes to our operation, we safely handled 7.6% more flights. However, we did not meet the self-imposed, internal safety target we set for RP2 calculated using the RAT. This set a RAT score which represents a reduction in safety risk (defined

as the accident risk per flight) of 13% by the end of RP2. Our performance for the 2016 calendar year achieved a RAT score<sup>5</sup> of 41.5 RAT points per 100,000 flights relative to our target of 31.3. This was due to an increase in the number of low severity events within the RAT scoring scheme.

To address this, we are focusing on tactical activities that will target known risks, while also exploring 'predict and prevent' analysis techniques to help us to direct our efforts. These actions will ensure we maintain a safe operation as we Deploy SESAR.

For the 2017 financial year, there were no category A or B Airprox<sup>2</sup> events attributable to NERL (2016: nil). The overall number of Airprox events in NERL airspace was 64 (2016: 43), with six attributable to NERL. The increase in Airprox overall was driven by events involving Remotely Piloted Aircraft Systems (RPAS or drones), none of which are attributable to NERL (see graph).



This pattern is consistent with the rise in drone activity in the UK. This will continue to evolve and grow and we are ensuring that we develop effective relationships and procedures to continue to operate safely in an increasingly complex air traffic network. In the third quarter of the year we began a series of improvement activities focused on drones. We have

partnered with the CAA on their integrated drone programme, which is largely targeting the hobby community. We developed a DroneSafe website, point of sale publicity for retailers and used social media to engage and educate users. Also, we created Drone Assist, a drone safety app which provides users with an interactive map of the airspace used by

commercial air traffic to be avoided and other danger areas and hazards. We are also reviewing the process for approving non-standard flight applications in controlled airspace by drone operators, collaborating internationally on emerging regulation and conducting analysis to understand the changing nature of drone operations across the UK.

### **Managing safety and change**

Our approach to safety is underpinned by a commitment to continually improve our operational safety performance and minimise our contribution to the risk of an aircraft accident. We do this through a formalised, explicit and proactive approach to safety management.

We prepare Safety Cases that analyse and assess the impact of changes in people, technology, operational software and airspace structures to provide assurance that such changes are safe to implement. For the same reason, we conduct hazard analysis on any changes to ATC procedures. We also seek to optimise operational staff performance through annual training, competency assessments and the development of new systems. This is particularly relevant as we introduce new technology and methods of operation as we Deploy SESAR and as airspace is modernised.

This last year we safely introduced iTEC into the Prestwick operation which provides additional monitoring capabilities for controllers. 'Point merge' was introduced into Terminal Control to sequence arrival flows in Thames airspace. Both of these enhance safety performance.

### **Safety improvements**

The most significant operational risks we deal with are infringements of controlled airspace, human performance and level busts<sup>7</sup>.

We continue to focus on infringements of controlled airspace by engaging with airfields and flying clubs, as well as the CAA and airport operators. We have seen an 11% reduction in infringements to 560 in calendar year 2016 (CY 2015: 630), and a 35% reduction in risk bearing events.

During the year, we participated in the CAA's Solent collaborative airspace trial to help reduce the risks of infringements in the Southampton and Solent areas. This increased the use by the general aviation community of specific transponder codes, enabling an air traffic controller to identify an aircraft and to provide navigational assistance.

In addition, we have continued working with the CAA on the development of a Low Power ADS-B Transceiver (LPAT) to provide the minimum functionality needed to make a general aviation pilot visible to other airspace users, as well as to provide warnings against other suitably equipped aircraft.

Effective human performance is a critical element of ATM safety. A key focus has been improving operational interactions internally and with international and military partners. This was supported by lesson learning and safety awareness activities including: defensive controlling simulations, use of 'avoiding action' briefings, safety briefings in preparation for summer traffic, and the sharing of knowledge on fatigue, visual scanning, and safety culture. Engineering safety days were also delivered to NATS engineers and stakeholders which highlighted the important safety role everyone plays in delivering a safe service.

The number of level busts remained flat during the year. We have continued to work with the CAA and airlines to ensure best practice is followed by both pilots and controllers. We are providing data to airlines to improve their visibility of these incidents.

## Regulatory environment

### Single European Sky (SES)

SES is a European initiative to improve the way Europe's airspace is managed. Its purpose is to modernise Europe's airspace structures, air traffic management technologies and associated operational procedures so as to ensure forecast growth in air traffic can be met, safely and sustainably, whilst reducing costs and improving environmental performance.

From 2012 the EC introduced a regulatory framework to support SES which set targets for safety, environment, airspace capacity and cost efficiency for Functional Airspace Blocks (FAB)<sup>8</sup>. NERL's Performance Plan for RP2 contributed to targets set for the UK-Ireland FAB.

On the technology side, SES is supported by the Single European Sky ATM Research (SESAR) Programme to develop technologies and procedures to modernise and optimise the future European ATM network. Technologies and procedures have been developed and validated by a collaboration of airport operators, ANSPs and aviation industry suppliers and are now being introduced into operation across Europe. The deployment is being coordinated by an alliance of the largest European ANSPs (including NATS), four airlines and 25 airports. The EC is aiming for the initial SESAR projects (or Pilot Common Projects (PCP)) to be deployed by 2025.

The company has deployed the tools of Time-Based Separation (TBS) and Extended Arrival Manager for Heathrow operations so far. TBS significantly enhances landing rates on the windiest days. Extended Arrival Manager (XMAN) coordinates with neighbouring ANSPs to slow down Heathrow arrivals when runway capacity delays of seven minutes or more are predicted, delivering fuel, cost

and environmental savings to customers. In time, TBS will be delivered at Gatwick Airport and XMAN introduced for Gatwick, Manchester and Stansted.

European funding is available through INEA to support the deployment of SESAR technology. To date, NERL has secured INEA funding of £100m which ultimately reduces the cost to customers.

### UK regulation

The principal UK regulatory development in the year relates to airspace strategy. In light of the challenges facing the industry to modernise UK airspace, the CAA has enhanced its regulatory oversight and the requirements relating to NERL's annual service and investment plan consultation with customers, including an independent review of progress against plans.

Also, the basis for a specific licence requirement for NERL to set out detailed plans to raise the UK Transition Altitude<sup>9</sup> to 18,000 feet by 2018 and implement the terminal airspace redesign associated with LAMP<sup>10</sup> has been removed as these changes are not in NERL's direct control and are dependent on public consultation and other stakeholders. As explained below, certain aspects of LAMP will now be delivered in RP3.

### NERL's investment programme for RP2

The objective of NERL's capital investment programme is to sustain, develop and enhance operational capabilities to ensure the ability to provide on-going service performance, resilience to unplanned events (including system failure) and to improve performance and value to customers in line with agreed performance targets.

The investment programme comprises two main areas: airspace and technology. This year NERL consulted its customers on a revised capital investment plan for RP2. This follows changes in the business environment and technological landscape

since NERL's RP2 Performance Plan was produced, such as: higher than expected traffic growth, reduced fuel prices, the EU requirement to implement PCPs and the development of SESAR capable systems such as iTEC. Increased traffic volume means that continuing to exploit our legacy systems is no longer cost-effective or efficient and accelerating investment in new future technologies that enhance capacity and efficiency is necessary. Additionally, adverse public reaction to initial airspace changes coupled with uncertainty about new runway developments, led stakeholders to be wary about supporting changes to lower airspace assumed in NERL's RP2 Performance Plan.

NERL's technology programme updates its core ATC infrastructure, replacing legacy systems that are reaching end of life and deploying a modern and more advanced system to support new operational concepts and modern airspace designs. The new systems will not only further enhance safety, service performance and resilience but will also allow us to meet our obligations in line with the PCP and related EU regulations. This programme will continue to sustain legacy systems to ensure they remain resilient and fit for purpose throughout the transition from old systems and operations to new ones.

The airspace programme delivers a number of independent airspace changes mainly at medium to higher level airspace, with the aim of enhancing safety performance, capacity and fuel efficiency. This approach will help to ensure that each change can be successfully delivered without impacting other airspace changes. The programme will also deliver enhancements in London airspace to improve performance, recognising the need to deliver some aspects of the LAMP in RP3, which the aviation industry agreed. The revised airspace plan

for RP2 includes enhancements to TBS, XMAN and the introduction of Independent Parallel Approach (IPA) for Heathrow. It will also modernise Prestwick lower airspace including Manchester and Scottish TMA as part of a joint programme with airports.

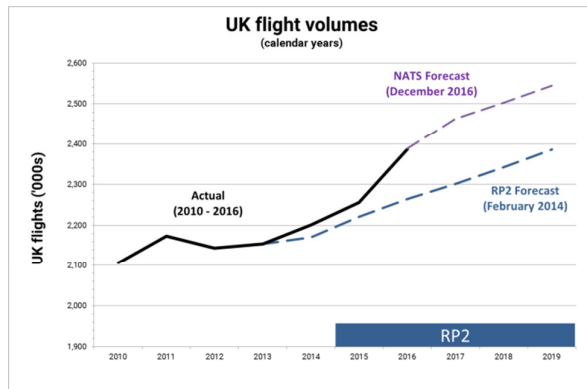
The revised airspace and technology plans for RP2:

- Ensure that beneficial airspace changes can be delivered in RP2 and the capability is in place to deliver subsequent changes in RP3;
- Accelerate the deployment of SESAR capable systems and replacement of NERL's ageing legacy systems essential to improve service performance and deliver airspace capacity;
- Prioritise early replacement of technology that will soon become obsolete and increasingly difficult to maintain, to avoid the risk of service degradation;
- Deliver a single, common technology platform and capability across both Prestwick and Swanwick to provide improved service resilience and operational flexibility;
- Optimise the overall level of capital investment required over RP2 and RP3; and
- Secure the maximum European INEA funding to support deployment projects and benefit customers through reduced future prices.

In summary, the focus of NERL's RP2 Performance Plan is delivering airspace change that can largely be delivered using existing systems and transforming NERL's systems and capabilities supporting upper airspace. The focus of RP3 will be transforming NERL's systems supporting lower airspace and delivering airspace change dependent on these new systems including Free Route Airspace and modernised airspace in the London TMA<sup>11</sup>.



## Outlook for air traffic volumes



Historically, the growth in demand for air travel has been closely linked to the strength of the global economy and, for UK air traffic, to that of the UK, US and Eurozone economies. The UK economy is forecast to grow by 1.9% in 2017 (source: Oxford Economics), with growth through 2017 expected to slow as higher inflation offsets some of the benefit of improved trade performance. The US economy is expected to grow at 2.1% during 2017. Eurozone economies also continue to build momentum with a weaker euro supporting stronger exports.

Continued low oil prices have reduced the cost of air travel and are contributing to passenger demand. The Middle East market continues to grow.

The principal risks to the forecast include: the impact on UK growth from its decision to leave the EU; the possibility of protectionist trade policies by the US, possibly outweighed by a more benign fiscal agenda; a slowdown in growth in China, although IATA's forecasts indicate strong demand for air travel there; and the escalation of conflicts in the Middle East.

## People

As explained in the Chief Executive's review a focus on our people is a priority. Our People and Organisation Strategy will ensure that the company has the skills and workforce required to deliver the

operational service today and the talent and capability mix to deliver an organisation that is fit for the future. Our new talent strategy is particularly important as the world of work is changing. As new technology and methods of operation are implemented we will need to develop and train our existing employees and ensure that we attract, and retain, the skills we need for this new environment.

After prolonged discussions, last summer the company agreed a two-year pay deal with staff. This recognised their important contribution to the company's performance and the need to respond to the regulator's cost efficiency targets and the pressures from rising pension costs, all of which are critical to ensuring that our customers receive the right service at the right price. This agreement now enables us to move forward and engage with our people on future developments in the business, including our programme to deploy SESAR technology.

In support of this we have committed to creating an enhanced partnership relationship with our employees and Trades Unions to ensure NERL has a workforce that is prepared and equipped for future challenges. We have established an employee relations improvement project to identify ways to work more effectively with the Trades Unions enhancing our ability to jointly solve problems and deliver essential change. We have also created a series of one-day workshops for managers to better equip them to communicate with their teams and to improve their understanding of how the business works and the challenges we face.

Our overall focus is to make NERL a great place to work, where people are motivated to deliver high levels of performance and are genuinely engaged in the business. This year we have built on a culture survey to leverage the beneficial aspects of NERL

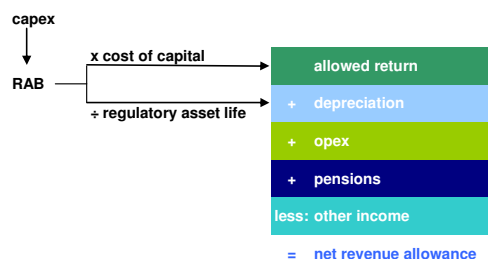
culture and enhance aspects of our people practice; whether it is inducting new colleagues to the organisation more effectively; identifying how we can promote greater health and wellbeing in work; or looking at how we can improve the people aspects of new technology delivery.

We have also continued to support educational institutions. Our Prestwick Centre is collaborating with the University of the West of Scotland across a range of projects embracing joint research and knowledge transfer activity, as well as collaborative education, placements and training programmes. A placement programme will provide opportunities to work on research and development projects that will make a real contribution to air navigation operations of the future. In return, NATS will gain access to academic expertise and research capability.

## Our business model

NERL is the sole provider of air traffic control services for aircraft flying en route in UK airspace and the eastern part of the North Atlantic. It operates under a licence granted by the Secretary of State under the Transport Act 2000. The Act gives the CAA the role of economic regulator. En route, London Approach and North Sea helicopter advisory services are regulated by this licence. NERL also provides the MOD with engineering, surveillance and communications services. These activities are reported within Airspace.

The CAA establishes revenue allowances for NERL’s economically regulated services under SES legislation. These remunerate NERL’s efficient investment (capex), operating costs (opex), pensions and an allowed return on the capital invested in the Regulatory Asset Base (RAB) to recover the cost of capital. The RAB, which represents the value ascribed to the capital employed in the regulated businesses, is adjusted to reflect asset additions, disposal proceeds, regulatory depreciation and the rate of inflation. Income generated outside of NERL’s economically regulated activities is deducted under a ‘single till’, leaving a net revenue allowance. A price per service unit is set to recover this based on forecast traffic for the reference period. This regulatory model is illustrated below.



The price control for RP2 was based on total revenues of £2.7bn (expressed by the CAA in 2012 prices) and provides for a real pre-tax cost of capital

of 5.9%. The CAA also sets targets, and provides incentives, for service and environmental performance. If regulatory and other assumptions are borne out in practice, then NERL would earn a return of 5.9% p.a. It can earn additional returns if it outperforms the CAA’s assumptions by being more cost efficient, by financing its business at lower cost, if traffic volumes (after risk sharing - see below) are higher than forecast or if it outperforms service targets. NERL would earn lower returns if the opposite applied.

The EC legislation provides: a risk-sharing mechanism to protect against certain variations in traffic volumes from the level assumed; an adjustment to charges for differences between actual inflation and assumed inflation; and an adjustment to charges in subsequent reference periods where cash contributions to the defined benefit pension scheme differ from those assumed due to unforeseen financial market conditions. The CAA also sets a target and cap on the level of NERL’s gearing at 60% and 65% of net debt to RAB, respectively. Charges may be adjusted on a year ‘n+2 basis’ for service performance incentives, traffic volume risk-sharing and for inflation.

We are uniquely placed to help airline customers to realise value by making airspace more efficient. We understand the complex interactions at each stage of a flight between airlines, airport operators and ANSPs, including in some of the busiest airspace in the world. We understand the benefit we can provide from fuel efficient flight profiles, approaches and departures, minimising delay, and through arrival and departure management. Our en route operation provides a seamless transition between the North Atlantic and UK en route services.

## Principal risks and uncertainties

The operational complexities inherent in the business leave NERL exposed to a number of significant risks and uncertainties. Our risk management process has identified the key risks that the Board believes are likely to have the most significant impact on our business, financial position, results and reputation based on the severity and likelihood of risk exposure. Risks are reviewed and re-assessed regularly and reflect the Board's assessment as at the date of this report. The list is not intended to be exhaustive.

The company has maintained a focus on mitigating these risks, although many remain outside of our control – for example changes in regulation, security threats, environmental factors and the impact of longevity and financial markets on pension funding.

### **Safety: the risk of an aircraft accident**

A loss of separation attributable to NERL that results in an accident in the air or on the ground would significantly impact NERL and its reputation as a provider of safe air traffic services. This could result in loss of revenue in the short term as investigations take place and the loss of future contracts due to reputational damage. If notice was given by the Secretary of State requiring NERL to take action as a result of the accident and NERL was unable or failed to comply with the notice then ultimately this could result in revocation of NERL's air traffic services licence.

As a provider of a safety critical service, safety is the company's highest priority. To further embed our existing safety culture across the organisation and to mitigate safety risk, NERL has developed a Strategy for the Future Safety of ATM and supports this with a three year rolling Safety Plan. NERL also maintains an explicit Safety Management System.

The latter includes investigations and reviews of operational safety performance and individual incidents to identify and respond to contributors of safety risk.

### **Maintaining continuous operations**

#### **a. Loss of service from ATC centre**

A loss of service would result in a loss of revenue as flow management procedures would be introduced to maintain safe separation. The extent of loss would depend on the time necessary to resume a safe service and the resultant level of air traffic delay. To this end NERL has contingency arrangements which enable the recovery of its service capacity. These arrangements were reviewed in light of the recommendations of the Independent Enquiry into the December 2014 technical failure.

#### **b. Operational systems resilience**

Operational service provision is increasingly dependent on the performance and resilience of engineering systems and communications, surveillance and flight data infrastructure. A number of mechanisms exist to identify systems resilience risks. These include regular reviews of system health through a series of structured questions with evidence-based outcomes. In addition, tactical issues are assessed following engineering updates to NATS' Safety Tracking and Reporting System to determine whether immediate escalation is required and to identify any emerging trends requiring investigation.

### **Political environment and economic regulation**

Policy decisions by the regulator, the UK Government and the European Commission directly affect our businesses. Changes in policy decisions may impact on the company's ability to meet the requirements of the UK and EC's aviation policies. We seek to mitigate this risk by providing independent input to policy studies (such as that

conducted by the Airports Commission), lobbying for policy guidance and action where we believe this is required (such as UK airspace policy and airspace modernisation) and responding to industry consultation. We outlined earlier in this report, the importance of proceeding with airspace modernisation. If this does not proceed in a timely manner, supported by clear government policy, then UK airspace will reach capacity limits causing increasing delay and constraining aviation growth. Also, the company's air traffic services operate under a European regulatory regime which requires key performance targets to be met. Failure to meet these safety, service, environment and efficiency targets could damage our reputation and lead to even more challenging regulatory arrangements. NERL's current environment and capacity targets were based on an RP2 investment plan that included the implementation of lower airspace change in the London area as part of LAMP. Industry consensus was that this is not possible during RP2 due to factors beyond NERL's control. The company is seeking to mitigate regulatory risk by aiming to achieve its RP2 targets through equivalent environmental and fuel saving benefits via a package of other airspace changes that have industry support.

#### **Defined benefit pension scheme**

Adverse movements in pension asset and liability values arising from factors such as lower investment returns, lower real interest rates and improving life expectancy may increase the size of the pension deficit and result in significant contributions to fund pension benefits. Management regularly reviews the financial position of the defined benefit scheme and is consulted by Trustees on the design of the risk reduction strategies that are in place. The scheme

was closed to new entrants in 2009, pensionable pay rises are capped and future service benefits are linked to the Consumer Prices Index.

The Trustees completed a formal triennial valuation of the defined benefit scheme as at 31 December 2015. This reported an increase in the funding deficit and has resulted in additional contributions. Subject to regulatory review, NERL is able to recover over subsequent reference periods increases in contributions from changes in unforeseen financial market conditions. NERL's revenue allowances will also be re-assessed for RP3.

The Trustees will perform their next formal valuation at 31 December 2017, to inform NERL's Initial Performance Plan for RP3. Financial market conditions since the 2015 valuation, characterised by historic low real gilt yields in particular, have continued to be a challenge for most UK defined benefit pension schemes. If today's financial market conditions prevail at 31 December 2017, the group expects Trustees to report a larger deficit that will require the group to increase its contributions to the scheme. The directors are monitoring the funding position of the scheme and consider that further possible actions available to mitigate pension risk, its financing arrangements and cash reserves, its projected operating cash flows and the economic regulatory model enable it to meet credible increases in contributions following the 2017 valuation.

#### **Industry outlook and the impact of the UK's referendum on Europe**

Poor market and economic conditions can reduce NERL's revenues to levels below those assumed by the economic regulator in making the RP2 price determinations. This in turn could impair shareholder returns. NATS monitors the key industry indicators on a monthly basis against RP2 forecasts and has taken action in the past to realign

its cost base with lower revenues. As explained above, NERL has traffic volume risk-sharing arrangements that mitigate revenue reductions to a large extent.

The impact of the UK's decision to leave the EU has not had a material adverse impact on our revenue to date. In the short term the continuing uncertainty could affect the demand for air travel and the volume of air traffic the company handles, though any impact would be mitigated by traffic volume risk-sharing arrangements.

Over the longer term, the impact depends to a large extent on the type of relationship that is forged between the UK and the EU. An important consideration for the company is the extent of participation in the SES and the legislation governing the economic regulation of NERL.

Under the UK Transport Act 2000 the CAA has a duty to ensure that NERL does not find it unduly difficult to finance its activities. Such a duty is not provided for in SES legislation. After leaving the EU, we expect that the UK will no longer be able to participate, with a vote, in the process of drafting and approving SES legislation. Therefore, in our view the logical outcome is for the UK to re-establish national economic regulation of UK ATM outside of the SES.

**Security: electronic and other external and internal threats**

Malicious attack, sabotage or other intentional acts, including breaches of our cyber security, could damage our assets or otherwise significantly impact on our service performance. NATS seeks to mitigate these risks through its business continuity controls, staff awareness training and cyber and physical security processes and procedures, including monitoring political stability and security risks in countries where it conducts its business.

The company has enhanced the physical security of its principal sites and is continuing to enhance its

cyber-security processes and controls. The company maintains a close liaison with the relevant Home Office Constabularies as well as Government security agencies and departments including security advice from the Centre for the Protection of National Infrastructure (CPNI).

**Employee relations**

The deployment of SESAR technology and the company's response to the challenging competitive environment in the UK and overseas will require changes across our organisation. Industrial action could result in reduced air traffic service provision which adversely impacts on service performance. Every effort is made to maintain good employee relations at all times, including through our Working Together programme and through joint working groups as part of an employee relations improvement project, to ensure the delivery of an efficient operational service and associated support.

**Technology**

The deployment of new SESAR technology and retirement of legacy systems could affect the company's ability to maintain service levels during transition and require additional costs to sustain legacy systems and support deployment. NATS maintains programme and project governance and risk management processes which are overseen by the Executive and Board, including the Technical Review Committee.

**Financial risks**

In addition to the top risks set out above, the main financial risks of the company relate to the availability of funds to meet business needs (including meeting obligations to the pension scheme), the risk of default by counterparties to financial transactions, and fluctuations in interest and foreign exchange rates. A detailed description of each of these risks and specific mitigations are set out in note 20.

## Service line performance

We organise our activities according to service lines, which reflect the customer groups to whom we provide our products and services. A brief description is provided under the section entitled 'Our business model'. This service line structure was introduced in this financial year, to align financial reporting with the group's operational focus on its customers. Prior year service line information has been restated on a like for like basis.

This section explains the financial and operational performance of each service. The principal financial measures are revenue and contribution. The former includes intra-group revenue, while the latter reflects the operating costs which managers are able to influence directly. A reconciliation of service line contribution to operating profit is provided in the notes to the financial statements.

### Airspace

	2017	2016
<b>Financial performance:</b>		
Revenue (£m)	733.5	715.1
Service line contribution (£m)	358.5	322.7
Capital expenditure (£m)	149.7	140.4
<b>Operational performance:</b>		
Flights handled ('000s)	2,450	2,278
Risk-bearing airprox (no.)	nil	nil
Average delay per flight (seconds)	10.9	4.3
Environmental efficiency (3Di score)*	30.3	30.1

\* for the calendar year to 31 December.

Overall, the volume of UK flights handled by NERL increased by 7.6% this year, reflecting strong growth in transatlantic arrivals and departures and overflights. The growth in chargeable service units (CSUs<sup>12</sup>) reflected more northerly routes taken by transatlantic flights due to the jet stream, resulting in longer distances flown in UK airspace. By contrast, the RP2 settlement assumed flight volumes

and CSUs would grow by 1.9% and 1.8% per annum on average.

	2017 ('000s)	2016 ('000s)	Year on year change %
<b>Chargeable Service Units</b>	<b>10,935</b>	10,102	8.2%
<b>Total UK traffic (flights):</b>			
Domestic	394	377	4.5%
North Atlantic	361	333	8.4%
Other	1,695	1,568	8.1%
<b>Total</b>	<b>2,450</b>	<b>2,278</b>	<b>7.6%</b>
<b>Oceanic traffic (flights)</b>			
Chargeable flights	<b>479</b>	447	7.2%

Airspace generated revenue of £733.5m, a 2.6% increase on the previous year. Customers continued to benefit from the real price reductions required by the RP2 Performance Plan. This was more than offset by additional revenue earned from the increase in UK en route flights. This flight growth also mitigated a small service penalty of £0.4m (2016: £4.6m bonus), explained below. Other Airspace revenue improved by £4.1m.

Service line contribution of £358.5m (2016: £322.7m) was 11.1% higher. In addition to revenue, this largely reflected lower accounting pension costs compared with such costs in the previous year, which offset other staff and non-staff cost increases.

As explained in the Chief Executive's review, during the busiest periods last summer, we regulated traffic flows in some sectors resulting in delay. For the financial year, delay attributable to Airspace increased to 10.9 seconds per flight (2016: 4.3 seconds), with 99.0% of flights not delayed (2016: 99.6%). Service performance incentives are assessed by the economic regulator on a calendar year basis. This delay performance for 2016 was just outside of the regulator's target, resulting in a small penalty.

Service performance: calendar years	2016		2015	
	Target	Actual	Target	Actual
C1: avg. En route delay at FAB level (secs)	15.6	17.8	15.0	4.8
C2: avg. delay per flight (secs)	10.8	12.8	10.2	2.4
C3: delay impact (score)	24.8	25.0	22.3	5.2
C4: delay variability (score)	2,000.0	176.7	2,000.0	14.2
C3Di: 3Di metric (score)	29.3	30.3	29.7	30.1

The C1 metric is a Functional Airspace Block (FAB) level target introduced for RP2.

In addition to measures of delay, we are targeted on flight efficiency (the environmental performance of our network), and for 2016 our performance at 30.3 was within the economic regulator's service performance range.

This year we enabled fuel savings of 17,600 tonnes (2016: 11,000 tonnes) worth c.£6.2m to our customers (based on an average fuel price of £353 per tonne over the year), generating associated environmental benefit.

NATS Airspace invested £149.7m (2016: £140.4m) on its air traffic control infrastructure in the year. Of most significance was progress with SESAR projects, including the deployment of iTEC and the limited in-service use of electronic flight strips in TC.

### Other Service lines

	2017	2016
<b>Financial performance:</b>		
Revenue (£m)	3.6	3.1
Service line contribution (£m)	2.8	2.0
Capital expenditure (£m)	0.2	4.2

Other Service lines include defence, consultancy and information services.

Revenue at £3.6m (2016: £3.1m) was £0.5m higher than previously. Service line contribution increased by £0.8m to £2.8m (2016: £2.0m).

*The Strategic report was approved by the Board of directors on 30 June 2017 and signed on its behalf by:*



**Richard Churchill-Coleman**

**Secretary**



## Report of the directors

The directors present their annual report on the affairs of the company, together with the financial statements and the auditor's report for the year ended 31 March 2017.

A review of the company's key business developments in the year and an indication of likely future developments is included within the Strategic report.

Information about the use of financial instruments by the company is given in note 20 to the financial statements.

### Dividends

The company paid dividends of £23.0m (£2.30 per share) in the year (2016: £72.5m). The Board recommends a final dividend for the year of £nil (2016: £nil).

In May 2017, the Board approved and the company paid an interim dividend of £27.5m (£2.75 per share) for the year ending 31 March 2018.

### Directors and their interests

The directors of the company at the date of this report, and details of changes made to the Board during the year and to the date of this report are set out below:

Maria Antoniou (appointed 1 August 2016)

Andrew Barker (appointed 28 September 2016)

Dr Harry Bush (appointed 1 April 2016)

Baroness Dean of Thornton-le-Flyde (appointed 1 April 2016, resigned 28 July 2016)

Michael Campbell (appointed 26 May 2017)

William Facey (appointed 1 April 2016, resigned 30 June 2017)

Nigel Fotherby

Dr Paul Golby (appointed 1 April 2016)

Richard Keys (appointed 1 April 2016)

Andrew Lord (appointed 1 April 2016, resigned 28 September 2016)

Iain McNicoll (appointed 1 April 2016)

Gavin Merchant (appointed 1 April 2016)

Derek Provan (appointed 1 April 2016)

Peter Read (appointed 1 April 2016, resigned 25 May 2017)

Martin Rolfe

Anthony Tyler (appointed 1 April 2016, resigned 28 July 2016)

None of the directors have any interests in the share capital of the company. Interests of the directors in the ordinary shares of the company's parent undertaking NATS Holdings Limited are explained in those accounts.

None of the directors have, or have had, a material interest in any contract of significance in relation to the company's business.

### Directors' indemnities

The company has made qualifying third party indemnity provisions for the benefit of its directors which were made during the year and remain in force at the date of this report.

### Employees

Contracts of employment with staff are held by the company's parent company, NATS Limited. The company continues its commitment to the involvement of employees in the decision-making process through effective leadership at all levels in the organisation. Staff are frequently involved through direct discussions

with their managers, cross company working groups and local committees. Regular staff consultations cover a range of topics affecting the workforce, including such matters as corporate performance and business plans. The NATS CEO maintains high visibility with staff through visits to company sites where he talks to them about current business issues and takes questions in an open and straightforward manner. Also, employees' views are represented through an open dialogue with Prospect and the Public and Commercial Services Union (PCS), the recognised unions on all matters affecting employees. This has been enhanced through the Working Together programme aimed at working towards partnership principles as the basis for our relationship. Formal arrangements for consultation with staff exist through a local and company-wide framework agreed with the Trades Unions.

It is the company's policy to establish and maintain competitive pay rates which take full account of the different pay markets relevant to its operations. In return, employees are expected to perform to the required standards and to provide the quality and efficiency of service expected by its customers.

NATS is an equal opportunities employer. Its policy is designed to ensure that no applicant or employee receives less favourable treatment than any other on the grounds of sex, age, disability, marital status, colour, race, ethnic origin, religious belief or sexual orientation, nor is disadvantaged by conditions or requirements applied to any post which cannot be shown to be fair and reasonable under relevant employment law or codes of practice.

NATS is also committed to improving employment opportunities for disabled people. The company will continue to promote policies and practices which provide suitable training and retraining and development opportunities for disabled staff, including any individuals who become disabled, bearing in mind their particular aptitudes and abilities and the need to maintain a safe working environment.

NATS strives to maintain the health and safety of employees through an appropriate culture, well-defined processes and regular monitoring. Line managers are accountable for ensuring health and safety is maintained and responsibility for ensuring compliance with both legal requirements and company policy rests with the HR & Corporate Services Director.

#### **Going concern and subsequent events**

The directors' assessment of going concern is explained in the financial review on page 11. Subsequent events are disclosed in note 31 to the financial statements.

#### **Directors' responsibilities**

The directors are responsible for preparing the financial statements in accordance with applicable laws and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors have elected to prepare the financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. Under company law the directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the company and

of the profit or loss of the company for that period. In preparing these financial statements, International Accounting Standard 1 requires that directors:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the company's ability to continue as a going concern.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Each person who is a director at the date of approval of these financial statements confirms that:

- so far as the director is aware, there is no relevant audit information of which the company's auditors are unaware; and
- the director has taken all the steps that he/she ought to have taken as director in order to make himself/herself aware of any relevant audit information and to establish that the company's auditors are aware of that information.

This information is given and should be interpreted in accordance with the provisions of s418 of the Companies Act 2006.

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

We confirm that to the best of our knowledge:

- the financial statements, prepared in accordance with International Financial Reporting Standards as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit of the company;
- the Strategic report includes a fair review of the development and performance of the business and the position of the company, together with a description of the principal risks and uncertainties that it faces; and
- the financial statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the company's position and performance, business model and strategy.

**Auditors**

A resolution to re-appoint BDO LLP as statutory auditor will be proposed at the Annual General Meeting.

Approved by the Board of directors and signed on behalf of the Board by:



**Richard Churchill-Coleman**

**Secretary**

30 June 2017

**Registered office**

4000 Parkway, Whiteley, Fareham, Hampshire,  
PO15 7FL

Registered in England and Wales

Company Number: 04129273

### Independent auditor's report to the members of NATS (En Route) plc

We have audited the financial statements of NATS (En Route) plc for the year ended 31 March 2017 which comprise the income statement, the statement of comprehensive income, the balance sheet, the statement of changes in equity, the cash flow statement and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

#### **Respective responsibilities of directors and auditor**

As explained more fully in the statement of directors' responsibilities, the directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Financial Reporting Council's (FRC's) Ethical Standards for Auditors.

#### **Scope of the audit of the financial statements**

A description of the scope of an audit of financial statements is provided on the FRC's website at [www.frc.org.uk/auditscopeukprivate](http://www.frc.org.uk/auditscopeukprivate)

#### **Opinion on financial statements**

In our opinion the financial statements:

- give a true and fair view of the state of the company's affairs as at 31 March 2017 and of its profit for the year then ended;
- have been properly prepared in accordance with IFRSs as adopted by the European Union; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

#### **Separate opinion in relation to IFRSs as issued by the IASB**

As explained in note 2 to the financial statements, the company in addition to applying IFRSs as adopted by the European Union, has applied IFRSs as issued by the International Accounting Standards Board (IASB).

In our opinion the financial statements comply with IFRSs as issued by the IASB.

#### **Opinion on other matters prescribed by the Companies Act 2006**


In our opinion, based on the work undertaken in the course of the audit the information given in the Strategic report and Report of the directors for the financial year for which the financial statements are prepared is consistent with the financial statements and the Strategic report and Report of the directors have been prepared in accordance with applicable legal requirements.

**Matters on which we are required to report by exception**

In the light of the knowledge and understanding of the company and its environment obtained in the course of the audit, we have not identified material misstatement in the Strategic report or the Report of the directors.

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.



Malcolm Thixton (senior statutory auditor)  
For and on behalf of BDO LLP, statutory auditor  
Southampton  
United Kingdom  
30 June 2017

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127).

**Income statement**

for the year ended 31 March

	Notes	2017			2016		
		Result before goodwill impairment	Goodwill impairment	Result for the year	Result before goodwill impairment	Goodwill impairment	Result for the year
		£m	£m	£m	£m	£m	£m
Revenue	4	737.1	-	737.1	718.2	-	718.2
Staff costs	7	(304.2)	-	(304.2)	(318.7)	-	(318.7)
Services and materials		(44.9)	-	(44.9)	(48.1)	-	(48.1)
Repairs and maintenance		(33.1)	-	(33.1)	(32.7)	-	(32.7)
Depreciation, amortisation and impairment	6	(147.4)	(11.0)	(158.4)	(125.1)	(92.7)	(217.8)
Profit/(loss) on disposal of non-current assets		0.1	-	0.1	(0.1)	-	(0.1)
Other operating charges		(51.8)	-	(51.8)	(54.5)	-	(54.5)
Other operating income		4.1	-	4.1	2.9	-	2.9
Deferred grants released	6	0.4	-	0.4	0.4	-	0.4
Net operating costs		(576.8)	(11.0)	(587.8)	(575.9)	(92.7)	(668.6)
<b>Operating profit</b>	6	160.3	(11.0)	149.3	142.3	(92.7)	49.6
Investment revenue	8	0.8	-	0.8	2.8	-	2.8
Fair value movement on derivative contract	9	(17.6)	-	(17.6)	2.6	-	2.6
Finance costs	10	(27.7)	-	(27.7)	(32.6)	-	(32.6)
<b>Profit before tax</b>		115.8	(11.0)	104.8	115.1	(92.7)	22.4
Tax	11	(18.1)	-	(18.1)	(13.8)	-	(13.8)
<b>Profit for the year attributable to equity shareholders</b>		97.7	(11.0)	86.7	101.3	(92.7)	8.6

**Statement of comprehensive income**

for the year ended 31 March

	Notes	2017 £m	2016 £m
<b>Profit for the year after tax</b>		86.7	8.6
<b>Items that will not be reclassified subsequently to profit and loss:</b>			
Actuarial (loss)/gain on defined benefit pension scheme	28	(220.0)	217.5
Deferred tax relating to items that will not be reclassified	23	39.9	(43.8)
<b>Items that may be reclassified subsequently to profit and loss:</b>			
Change in fair value of hedging derivatives		6.5	(3.2)
Transfer to income statement on cash flow hedges		(3.5)	7.4
Deferred tax relating to items that may be reclassified	23	(0.6)	(0.9)
<b>Other comprehensive (loss)/income for the year, net of tax</b>		(177.7)	177.0
<b>Total comprehensive (loss)/income for the year attributable to equity shareholders</b>		(91.0)	185.6

**Balance sheet**

at 31 March

	Notes	2017 £m	2016 £m
<b>Non-current assets</b>			
Goodwill	13	198.3	209.3
Other intangible assets	14	508.6	436.9
Property, plant and equipment	15	477.4	546.6
Trade and other receivables	16	15.9	23.3
Derivative financial instruments	18	1.9	0.2
		<u>1,202.1</u>	<u>1,216.3</u>
<b>Current assets</b>			
Trade and other receivables	16	120.3	192.5
Short term investments	20	39.4	28.9
Cash and cash equivalents	20	108.4	72.5
Derivative financial instruments	18	2.1	0.4
		<u>270.2</u>	<u>294.3</u>
<b>Total assets</b>		<u>1,472.3</u>	<u>1,510.6</u>
<b>Current liabilities</b>			
Trade and other payables	21	(126.3)	(141.9)
Current tax liabilities		(5.4)	(5.5)
Borrowings	17	(46.6)	(38.5)
Provisions	22	(1.0)	(1.9)
Derivative financial instruments	18	(8.3)	(7.6)
		<u>(187.6)</u>	<u>(195.4)</u>
<b>Net current assets</b>		<u>82.6</u>	<u>98.9</u>
<b>Non-current liabilities</b>			
Trade and other payables	21	(117.4)	(70.1)
Borrowings	17	(402.2)	(544.0)
Retirement benefit obligations	28	(265.3)	(58.9)
Deferred tax liability	23	(36.0)	(75.4)
Provisions	22	(5.7)	(4.7)
Derivative financial instruments	18	(131.1)	(121.1)
		<u>(957.7)</u>	<u>(874.2)</u>
<b>Total liabilities</b>		<u>(1,145.3)</u>	<u>(1,069.6)</u>
<b>Net assets</b>		<u>327.0</u>	<u>441.0</u>
<b>Equity</b>			
Called up share capital	24	10.0	10.0
Hedge reserve		2.5	0.1
Special reserve		34.9	34.9
Other reserves		11.7	12.9
Retained earnings		267.9	383.1
		<u>327.0</u>	<u>441.0</u>

The financial statements (Company No. 04129273) were approved by the Board of directors and authorised for issue on 30 June 2017 and signed on its behalf by:



Martin Rolfe  
Chief Executive



Nigel Fotherby  
Finance Director



**Statement of changes in equity**

for the year ended 31 March

	Equity attributable to equity holders of the company					Total £m
	Share capital £m	Hedge reserve £m	Special reserve <sup>1</sup> £m	Other reserves <sup>1</sup> £m	Retained earnings £m	
<b>At 1 April 2015</b>	10.0	(3.2)	34.9	14.1	272.1	327.9
Profit for the year	-	-	-	-	8.6	8.6
Other comprehensive income/(loss) for the year	-	3.3	-	(1.2)	174.9	177.0
Total comprehensive income/(loss) for the year	-	3.3	-	(1.2)	183.5	185.6
Dividends paid	-	-	-	-	(72.5)	(72.5)
<b>At 31 March 2016</b>	<b>10.0</b>	<b>0.1</b>	<b>34.9</b>	<b>12.9</b>	<b>383.1</b>	<b>441.0</b>
<b>At 1 April 2016</b>	10.0	0.1	34.9	12.9	383.1	441.0
Profit for the year	-	-	-	-	86.7	86.7
Other comprehensive income/(loss) for the year	-	2.4	-	(1.2)	(178.9)	(177.7)
Total comprehensive income/(loss) for the year	-	2.4	-	(1.2)	(92.2)	(91.0)
Dividends paid	-	-	-	-	(23.0)	(23.0)
<b>At 31 March 2017</b>	<b>10.0</b>	<b>2.5</b>	<b>34.9</b>	<b>11.7</b>	<b>267.9</b>	<b>327.0</b>

<sup>1</sup> Other reserves arose on completion of the PPP transaction in July 2001. The special reserve arose from a capital reduction in May 2003.

**Cash flow statement**

for the year ended 31 March

	Notes	2017 £m	2016 £m
<b>Net cash from operating activities</b>	25	<u>380.3</u>	<u>339.2</u>
<b>Cash flows from investing activities</b>			
Interest received on short term investments		0.7	0.7
Purchase of property, plant and equipment and other intangible assets		(142.5)	(151.7)
Proceeds of disposal of property, plant and equipment		0.1	-
Changes in short term investments		(10.5)	0.8
<b>Net cash outflow from investing activities</b>		<u>(152.2)</u>	<u>(150.2)</u>
<b>Cash flows from financing activities</b>			
Interest paid		(31.3)	(32.1)
Interest received on derivative financial instruments		0.5	0.6
Repayment of bond principal		(39.2)	(30.8)
Index linked swap repayments		(3.8)	-
Bank and other loans		(95.0)	(57.0)
Bank facility arrangement fees		(0.4)	(1.9)
Dividends paid		(23.0)	(72.5)
<b>Net cash outflow from financing activities</b>		<u>(192.2)</u>	<u>(193.7)</u>
<b>Increase/(decrease) in cash and cash equivalents during the year</b>		35.9	(4.7)
Cash and cash equivalents at 1 April		<u>72.5</u>	<u>77.2</u>
<b>Cash and cash equivalents at 31 March</b>		<u>108.4</u>	<u>72.5</u>
<b>Net debt</b> (representing borrowings net of cash and short term investments)		<u>(301.0)</u>	<u>(481.1)</u>

**1. General information**

NATS (En Route) plc (NERL) is a 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 27. The nature of the company'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 company 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 company'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 11. 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 company 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 company 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 company.

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 company: the adoption of the expected loss impairment model in assessing the fair value of trade and contract receivables; and the option to recognise the impact of changes in own credit risk in other comprehensive income rather than the income statement.

The company 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. 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 company 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 company expects to be entitled to receive. The standard also updates revenue disclosure requirements.

The company's principal sources of revenue are Airspace and other Service lines which include: Defence, Consultancy and Information as described in note 5.

The company 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 major part of the company'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 company's performance as the company. In addition, the transaction price for NERL's economically regulated services include variable consideration for traffic volume risk sharing, inflation adjustments, service performance incentives and financing components. The company's preliminary assessment is that the nature, timing and amount of revenue for these service contracts is not materially different under IFRS 15.

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 company has non-cancellable operating lease commitments of £68.0m as disclosed in note 26. A preliminary assessment indicates that these arrangements will meet the definition of a lease under IFRS 16, and hence the company 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 company's preliminary assessment is that property, plant and equipment is likely to increase by c.£50m, lease liabilities by c.£60m 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.£0.5m 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 company's 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.

At completion of the Public Private Partnership (PPP) transaction on 26 July 2001, a transfer scheme hived down certain of the operating assets and liabilities of National Air Traffic Services Limited (now NATS Limited) to this company.

In addition, the company entered into a Management Services Agreement with NATS Limited on 25 July 2001. This agreement provides for the provision by NATS Limited of personnel and central services to the company. The cost of central services is recharged on the basis of a fair allocation of costs taking into account the most important drivers for the services provided. The company is responsible for paying to NATS Limited an amount equal to the aggregate of all costs incurred by NATS Limited in connection with the employment of the personnel together with appropriate staff related costs and expenses and disbursements.

NERL also entered into an Inter-company Services Agreement on 25 July 2001 with NATS (Services) Limited (NATS Services). Under this agreement the company provides NATS Services with the following services:

- ◆ training services;
- ◆ radar data services at NATS Services airports;
- ◆ engineering and software support services;
- ◆ research and development for NATS Services airports division and business development division; and
- ◆ other services to NATS Services business development division (for example - consultancy and engineering services).

The range of services provided by NATS Services to NERL under the agreement includes:

- ◆ North Sea helicopter advisory services;
- ◆ air traffic services in certain sectors;
- ◆ services to the London Approach service (engineering services and use of communications facilities); and
- ◆ miscellaneous other services.

The company commenced trading from 26 July 2001.

#### *Significant one-off items and goodwill impairment charges*

Significant one-off 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 company.

#### *Operating profit*

Operating profit is stated before investment income, the fair value movement in the index-linked swap contract, finance costs and taxation.

#### *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 NERL's air traffic services licence (including volume risk sharing, service performance incentives, costs exempt from risk sharing and inflation adjustments) 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.
- ◆ 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.
- ◆ Dividend income is recognised when the shareholder's rights to receive payment have been established.

#### *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.

#### *Goodwill*

Goodwill 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 the company 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 company 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 company'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 NERL 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.

For NERL, 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.

*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 company'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 company 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 company 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 (with a RAB terminal value as a proxy for future cash flows).

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.

*Share-based payments*

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

In 2001, the company's parent established an All Employee Share Ownership Plan for the benefit of its employees to hold 5% of the share capital of NATS Holdings Limited.



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 company provides finance to NESL (NATS Employee Sharetrust Limited) to enable the trust company to meet its obligations to repurchase vested or eligible shares from employees.

The company's share of the costs of running the employee share trust are 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.

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 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.

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 company 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 company's financial statements as outlined above, subject to the impact of other developments in the company's tax position which may reduce the beneficial effect of this in the company's tax rate.

#### *Foreign currency translation*

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 company enters into forward contracts (see below for details of the company'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 company'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 NATS group and Trustees have introduced a number of pension reforms, as explained in note 28. 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 company has a present obligation as a result of a past event, and it is probable that the company 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 company's balance sheet when the company 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

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 company has financial assets in the categories of other loans and receivables and financial assets at fair value through the profit and loss. The company 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 company after deducting all of its liabilities.

Equity instruments issued by the company are recorded at the proceeds received, net of direct issue costs.

#### *Reserves*

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

- ◆ The special reserve which arose from a capital reduction in May 2003.
- ◆ Other reserves which arose on the completion of the PPP transaction in July 2001.

#### *Derivative financial instruments and hedging activities*

The company's activities expose it primarily to the financial risks of changes in interest rates, inflation and foreign currency exchange rates. The company uses interest rate and index-linked swap contracts and forward foreign exchange contracts to hedge these exposures. These are disclosed in notes 18 and 20 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 company's policies approved by the Board of directors, which provides written principles on the use of financial derivatives. The company 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 company 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.

### **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, the company'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 company 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 company's defined benefit pension scheme which affect the balance sheet position and the company's reserves and income statement. Refer to note 28 of the notes to the 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 company is undertaking a significant capital investment programme to upgrade existing air traffic control infrastructure. This programme requires the company 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.

#### 4. Revenue

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

	2017 £m	2016 £m
Airspace	733.5	715.1
Other Service lines	3.6	3.1
	<u>737.1</u>	<u>718.2</u>
Other operating income	4.1	2.9
Investment revenue (see note 8)	0.8	2.8
	<u>742.0</u>	<u>723.9</u>

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

A portion of the company'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 gain of £3.5m (2016: £7.4m loss).

#### 5. Operating segments

The NATS 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, Defence and Other UK Business, and the products and services provided to each. Reports to the Executive aggregate the performance of Defence and Other UK business and report these as a single service line, Other Service lines.

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), impairment of goodwill, profit/(loss) on disposal of non-current assets, employee share scheme (costs)/credits, redundancy costs and above the line tax credits. A reconciliation of service line contribution to operating profit is set out below.

##### Principal activities

The following table describes the activities of each reporting segment:

Airspace	This includes all of the company'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.
Other Service lines	Other services provided to UK customers including: Defence, providing air traffic control, engineering support and other services to the Ministry of Defence and support to the Aquila joint venture for its Marshall contract; Consultancy, offering airspace development, capacity improvement and training; and Information, providing data to enable future efficiency and flight optimisation.

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 company 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.

Segment information about these activities is presented below.

##### Revenue

An analysis of the company's revenue is as follows:

	2017			2016		
	External revenue £m	Intercompany revenue £m	Revenue £m	External revenue £m	Intercompany revenue £m	Revenue £m
Airspace	707.6	25.9	733.5	689.6	25.5	715.1
Other Service lines	3.6	-	3.6	3.1	-	3.1
	<u>711.2</u>	<u>25.9</u>	<u>737.1</u>	<u>692.7</u>	<u>25.5</u>	<u>718.2</u>

Intercompany revenue includes revenue for services to NATS (Services) Limited of £25.8m (2016: £25.2m) and to NATSNav Limited of £0.1m (2016: £0.3m).

**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	358.5	322.7
Other Service lines	2.8	2.0
Service line contribution	361.3	324.7
<b>Costs not directly attributed to service lines:</b>		
Depreciation and amortisation (net of deferred grants released)	(147.0)	(124.7)
Impairment of goodwill	(11.0)	(92.7)
Profit/(loss) on disposal of non-current assets	0.1	(0.1)
Employee share scheme credits	0.1	0.2
Redundancy costs	(1.4)	(0.9)
Other costs not directly attributed to service lines	(54.4)	(58.7)
R&D expenditure above the line tax credits	1.6	1.8
<b>Operating profit</b>	<b>149.3</b>	<b>49.6</b>

Other costs not directly attributed to service lines include corporate costs providing central support functions.

**Supplementary information**

EC Regulations require air navigation service providers to present income and costs, prepared under international accounting standards, for each of their air navigation services. The following disclosure is provided in this respect:

	2017			2016		
	UK air traffic services	North Atlantic air traffic services	Total	UK air traffic services	North Atlantic air traffic services	Total
	£m	£m	£m	£m	£m	£m
Revenue	707.3	29.8	737.1	689.0	29.2	718.2
Operating costs	(565.1)	(22.7)	(587.8)	(640.3)	(28.3)	(668.6)
Operating profit	142.2	7.1	149.3	48.7	0.9	49.6

UK air traffic services provide en route air traffic services within UK air space, air traffic services for helicopters operating in the North Sea, approach services for London airports, services to the Ministry of Defence and miscellaneous activity connected to the en route business.

North Atlantic air traffic services provide en route air traffic services for the North Atlantic, including an altitude calibration service.

**Geographical segments**

The following table provides an analysis of the company'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	313.4	311.1	1,183.8	1,193.8
Other European Countries	131.2	124.8	1.3	0.4
Republic of Ireland	88.0	80.3	-	-
United States of America	82.9	86.6	-	-
Germany	48.2	45.8	-	-
Countries in Asia	47.0	45.1	-	-
Other North American Countries	20.5	18.6	0.8	0.8
Countries in Africa	3.6	3.5	-	-
Countries in Oceania	1.3	1.3	-	-
Countries in South America	1.0	1.1	-	-
	737.1	718.2	1,185.9	1,195.0

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.

**Information about major customers**

Included in revenues arising from NATS Airspace are revenues of £86.5m (2016: £84.6m) which arose from the company's largest customer.

**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	4.9	5.4
Impairment of goodwill	11.0	92.7
Depreciation of property, plant and equipment	102.2	92.4
Impairment of property, plant and equipment	0.5	0.4
Amortisation of intangible assets	44.7	32.0
Impairment of intangible assets	-	0.3
Deferred grants released	(0.4)	(0.4)
Research and development costs	7.0	12.1
Redundancy costs	1.4	0.9
R&D expenditure above the line tax credits	(1.6)	(1.8)
Auditors remuneration for audit services (see below)	-	-

Fees payable to BDO LLP and their associates for non-audit services to the company are not required to be disclosed because the consolidated financial statements are required to disclose such fees on a consolidated basis.

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

Government grants relating to the purchase of property, plant and equipment and Ministry of Defence (MOD) 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.

Transactions with group companies

	2017 £m	2016 £m
Net charges for services provided by parent undertaking	8.4	8.6
Charges for services provided by other group companies	16.4	17.6

NATS Limited, the immediate parent company, is responsible for employing the staff engaged in the activities carried out by NERL. In addition to the staff costs referred to in note 7a below, NERL is responsible under the Management Services Agreement (MSA) for reimbursing NATS Limited for all other staff related costs which it incurs on behalf of the employees seconded to NERL (including all taxes and social security, redundancy and pension costs) together with appropriate staff related costs and expenses and disbursements. Under the Inter Company Services Agreement (ICSA) NATS Services provides certain services to NERL. The MSA and ICSA are explained in more detail in note 2.

**7. Staff costs****a) Staff costs**

	2017 £m	2016 £m
Salaries and staff costs were as follows:		
Wages and salaries	233.3	230.4
Social security costs	28.5	25.1
Pension costs (note 7b)	82.4	106.5
	<u>344.2</u>	<u>362.0</u>
Less: amounts capitalised	(40.0)	(43.3)
	<u>304.2</u>	<u>318.7</u>

Wages and salaries includes redundancy costs of £1.4m (2016: £0.9m), share-based payment charges, other allowances and holiday pay.

**b) Pension costs**

	2017 £m	2016 £m
Defined benefit pension scheme costs (note 28)	75.2	100.5
Defined contribution pension scheme costs	7.2	6.0
	<u>82.4</u>	<u>106.5</u>

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



**7. Staff costs (continued)****c) Staff numbers**

	2017 No.	2016 No.
The monthly average number of employees (including executive directors) was:		
Air traffic controllers	1,169	1,140
Air traffic service assistants	488	512
Engineers	791	794
Others	711	680
	<u>3,159</u>	<u>3,126</u>

**8. Investment revenue**

	2017 £m	2016 £m
Interest on bank deposits	0.5	0.6
Other loans and receivables	0.3	2.2
	<u>0.8</u>	<u>2.8</u>

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.

**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)
	<u>(17.6)</u>	<u>2.6</u>

**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	3.0
Interest payable on intercompany loans	0.2	0.3
	<u>27.7</u>	<u>32.6</u>

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

**11. Tax**

	2017 £m	2016 £m
<b>Corporation tax</b>		
Current tax	22.8	22.9
Adjustments in respect of prior year	(4.6)	(1.5)
	<u>18.2</u>	<u>21.4</u>
<b>Deferred tax (see note 23)</b>		
Origination and reversal of temporary timing differences	(0.3)	(1.1)
Adjustments in respect of prior year	4.8	1.2
Effects of tax rate change on opening balance	(4.6)	(7.7)
	<u>(0.1)</u>	<u>(7.6)</u>
	<u>18.1</u>	<u>13.8</u>

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		2016	
	£m	%	£m	%
Profit on ordinary activities before tax	<u>104.8</u>		<u>22.4</u>	
Tax on profit on ordinary activities at standard rate in the UK of 20% (2016: 20%)	21.0	20.0%	4.5	20.0%
Tax effect of change in corporation tax rate from 20% to 17% (2016: 20% to 18%)	(4.6)	(4.3%)	(7.7)	(34.3%)
Patent box	(1.4)	(1.3%)	(1.2)	(5.4%)
Goodwill impairment	2.2	2.1%	18.5	82.6%
Tax effect of prior year adjustments - current tax	(4.6)	(4.3%)	(1.5)	(6.7%)
Tax effect of prior year adjustments - deferred tax	4.8	4.5%	1.2	5.4%
Employee share scheme award of partnership and matching shares	(0.3)	(0.3%)	-	0.0%
R&D expenditure increased deductions	1.1	1.0%	(0.1)	(0.4%)
Other permanent differences	(0.1)	(0.1%)	0.1	0.4%
Tax charge for year at an effective tax rate of 17.3% (2016: 61.6%)	<u>18.1</u>	17.3%	<u>13.8</u>	61.6%
Deferred tax (credit)/charge taken directly to equity (see note 23)	<u>(39.3)</u>		<u>44.7</u>	

**12. Dividends**

	2017 £m	2016 £m
Amounts recognised as dividends to equity shareholders in the year:		
First interim dividend of £2.30 per share (2016: £4.83 per share)	23.0	48.3
Second interim dividend of £nil per share (2016: £2.42 per share)	-	24.2
	<u>23.0</u>	<u>72.5</u>

In May 2017, the Board approved and the company paid an interim dividend for the year ending 31 March 2018 of £2.75 per share (totalling £27.5m).

**13. Goodwill**

	£m
<b>Cost</b>	
At 31 March 2016 and 31 March 2017	351.0
<b>Accumulated impairment losses</b>	
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
<b>At 31 March 2017</b>	<b>152.7</b>
<b>Carrying amount</b>	
At 31 March 2017	198.3
At 31 March 2016	209.3
At 1 April 2015	302.0

The company 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 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.

**14. Other intangible assets**

	Operational software £m	Non-operational software £m	Airspace and resectorisation £m	Assets in course of construction £m	Total £m
<b>Cost</b>					
At 1 April 2015	194.9	71.9	26.2	252.2	545.2
Additions internally generated	0.3	0.5	-	29.5	30.3
Additions externally acquired	7.8	1.7	2.9	45.9	58.3
Transfers during the year	14.6	1.7	17.3	(32.9)	0.7
At 31 March 2016	217.6	75.8	46.4	294.7	634.5
Additions internally generated	5.3	0.4	-	28.6	34.3
Additions externally acquired	6.1	5.2	-	70.2	81.5
Transfers during the year	217.8	3.5	0.6	(225.0)	(3.1)
<b>At 31 March 2017</b>	<b>446.8</b>	<b>84.9</b>	<b>47.0</b>	<b>168.5</b>	<b>747.2</b>
<b>Accumulated amortisation</b>					
At 1 April 2015	90.2	42.6	15.7	16.8	165.3
Charge for the year	20.1	9.5	2.4	-	32.0
Impairment provision recognised in income statement	-	-	-	0.3	0.3
Transfer of impairment provision	-	-	1.2	(1.2)	-
At 31 March 2016	110.3	52.1	19.3	15.9	197.6
Charge for the year	31.2	9.3	4.2	-	44.7
Transfer of impairment provision	11.9	-	-	(15.6)	(3.7)
<b>At 31 March 2017</b>	<b>153.4</b>	<b>61.4</b>	<b>23.5</b>	<b>0.3</b>	<b>238.6</b>
<b>Carrying amount</b>					
At 31 March 2017	293.4	23.5	23.5	168.2	508.6
At 31 March 2016	107.3	23.7	27.1	278.8	436.9
At 1 April 2015	104.7	29.3	10.5	235.4	379.9

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.

**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
<b>Cost</b>						
At 1 April 2015	241.9	42.8	1,242.2	16.9	79.9	1,623.7
Additions during the year	1.3	0.4	28.9	2.3	23.1	56.0
Disposals during the year	-	(2.2)	(0.8)	-	-	(3.0)
Other transfers during the year	0.6	0.2	49.7	2.2	(53.4)	(0.7)
<b>At 31 March 2016</b>	<b>243.8</b>	<b>41.2</b>	<b>1,320.0</b>	<b>21.4</b>	<b>49.6</b>	<b>1,676.0</b>
Additions during the year	0.8	-	13.2	0.3	19.8	34.1
Other transfers during the year	1.1	-	28.5	0.1	(26.6)	3.1
<b>At 31 March 2017</b>	<b>245.7</b>	<b>41.2</b>	<b>1,361.7</b>	<b>21.8</b>	<b>42.8</b>	<b>1,713.2</b>
<b>Accumulated depreciation and impairment</b>						
At 1 April 2015	113.8	30.1	881.3	11.9	0.7	1,037.8
Provided during the year	7.9	1.6	81.4	1.5	-	92.4
Impairment provision recognised in income statement	-	-	-	-	0.4	0.4
Transfer of impairment provision	-	-	0.1	-	(0.1)	-
Disposals during the year	-	(0.6)	(0.6)	-	-	(1.2)
<b>At 31 March 2016</b>	<b>121.7</b>	<b>31.1</b>	<b>962.2</b>	<b>13.4</b>	<b>1.0</b>	<b>1,129.4</b>
Provided during the year	7.6	1.4	91.7	1.5	-	102.2
Impairment provision recognised in income statement	-	-	-	-	0.5	0.5
Transfer of impairment provision	-	-	4.6	-	(0.9)	3.7
<b>At 31 March 2017</b>	<b>129.3</b>	<b>32.5</b>	<b>1,058.5</b>	<b>14.9</b>	<b>0.6</b>	<b>1,235.8</b>
<b>Carrying amount</b>						
At 31 March 2017	116.4	8.7	303.2	6.9	42.2	477.4
At 31 March 2016	122.1	10.1	357.8	8.0	48.6	546.6
At 1 April 2015	128.1	12.7	360.9	5.0	79.2	585.9

The company 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 company 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 company entered into a finance lease for certain network related assets. The fair value of the assets held under finance lease are £1.8m and are included within the cost for air traffic control systems, plant and equipment above.

**16. Financial and other assets**

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

**Trade and other receivables**

	2017 £m	2016 £m
<b>Non-current</b>		
Prepayments	1.6	2.2
Accrued income	14.3	21.1
	<b>15.9</b>	<b>23.3</b>
<b>Current</b>		
Receivable from customers (gross)	54.3	59.4
Allowance for doubtful debts	(4.0)	(4.3)
	<b>50.3</b>	<b>55.1</b>
Other debtors	2.5	8.9
Amounts due from fellow undertaking	-	0.8
Prepayments	9.0	6.7
Accrued income	58.5	121.0
	<b>120.3</b>	<b>192.5</b>

The average credit period taken on sales of services is 29 days (2016: 29 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 £4.0m (2016: £4.3m). 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.

**16. Financial and other assets (continued)**

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.

Ageing of past due but not impaired trade receivables

	2017 £m	2016 £m
31-90 days	0.1	0.1

Movement in the allowance for doubtful debts

	2017 £m	2016 £m
Balance at the beginning of the year	4.3	3.8
Increase in allowance recognised in the income statement	0.1	0.7
Foreign exchange movement in the year	0.2	0.4
Amounts recovered during the year	0.1	-
Amounts written off as irrecoverable	(0.7)	(0.6)
Balance at end of year	4.0	4.3

In determining the recoverability of a trade receivable the company 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 company does not hold any collateral over these balances.

Ageing of impaired receivables

	2017 £m	2016 £m
31-90 days	0.4	0.3
91-365 days	0.7	0.9
> 365 days	2.9	3.1
	4.0	4.3

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

**Cash and cash equivalents**

Cash and cash equivalents comprise cash held by the company 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 (excluding prepayments) would be £273.4m (2016: £308.3m).

**17. Borrowings**

	2017 £m	2016 £m
<b>Unsecured loans</b>		
Intercompany loan from fellow subsidiary	22.5	22.5
Obligations under finance leases (see note 19)	1.8	2.0
<b>Secured loans at amortised cost</b>		
£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
Gross borrowings	<u>452.7</u>	<u>586.9</u>
Unamortised bond issue costs	(2.2)	(2.7)
Unamortised bank facility arrangement fees	(1.7)	(1.7)
	<u>448.8</u>	<u>582.5</u>
Amounts due for settlement within 12 months	<u>46.6</u>	<u>38.5</u>
Amounts due for settlement after 12 months	<u>402.2</u>	<u>544.0</u>

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. 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.

	2017 £m	2016 £m
<b>Undrawn committed facilities</b>		
Undrawn committed facilities expire as follows:		
Expiring in more than two years	<u>400.0</u>	<u>305.0</u>

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

**18. Derivative financial instruments****Fair value of derivative financial instruments**

	2017 £m	2016 £m
<b>Non-current assets</b>		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	<u>1.9</u>	<u>0.2</u>
<b>Current assets</b>		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	<u>2.1</u>	<u>0.4</u>
<b>Current liabilities</b>		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	(0.4)	(3.9)
Derivative financial instruments classified as held for trading		
Index-linked swaps	<u>(7.9)</u>	<u>(3.7)</u>
	<u>(8.3)</u>	<u>(7.6)</u>
<b>Non-current liabilities</b>		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	(0.4)	-
Derivative financial instruments classified as held for trading		
Index-linked swaps	<u>(130.7)</u>	<u>(121.1)</u>
	<u>(131.1)</u>	<u>(121.1)</u>

Further details on derivative financial instruments are provided in note 20. 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 company's adoption of international accounting standards.

**19. 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
	<u>2.0</u>	<u>2.3</u>	<u>1.8</u>	<u>2.0</u>
Less: future finance charges	(0.2)	(0.3)	-	-
Present value of minimum lease payments	<u>1.8</u>	<u>2.0</u>	<u>1.8</u>	<u>2.0</u>
			2017 £m	2016 £m
Current			0.2	0.2
Non-current			1.6	1.8
			<u>1.8</u>	<u>2.0</u>

The company 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 company's lease obligations is approximately equal to their carrying amount.

**20. Financial instruments****Capital risk management**

The company manages its capital to ensure that it is able to continue as a going concern, to meet its obligations under its air traffic services licence and to fund returns to shareholders. The capital structure of the company 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 statement of changes in equity.

**External capital requirements**

The 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 company to target a credit profile that exceeds BBB-/Baa3.

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

**Gearing ratio**

Consistent with seeking to maintain an investment grade credit rating, the company sets a gearing target measured as the ratio of net debt to the 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 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.

**Categories of financial instrument**

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

	2017 £m	2016 £m
<b>Financial assets</b>		
Trade and other receivables, excluding prepayments	125.6	206.9
Cash and cash equivalents and short term investments	147.8	101.4
Derivative financial instruments in designated hedge accounting relationships	4.0	0.6
	<u>277.4</u>	<u>308.9</u>
<b>Financial liabilities</b>		
Derivative financial instruments in designated hedge accounting relationships	(0.8)	(3.9)
Derivative financial instruments classified as held for trading	(138.6)	(124.8)
Other financial liabilities at amortised cost	(621.4)	(743.5)
	<u>(760.8)</u>	<u>(872.2)</u>

Other financial liabilities at amortised cost include balances for trade and other payables (excluding deferred income of £75.0m (2016: £55.4m)), the bond and bank borrowings (excluding unamortised bond issue costs and bank facility arrangement fees).

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).

## 20. Financial instruments (continued)

### Financial risk management objectives

The treasury function is mandated by the Board of NATS Holdings Limited 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 company. 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 company's activities include market risk (including currency risk, cash flow interest rate risk and inflation risk), credit risk and liquidity risk.

### Market risk

The company'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 company 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
- index-linked swaps to mitigate the risk of low inflation.

### Foreign currency risk management

The company's principal exposure to foreign currency transaction risk is in relation to UK en route services revenues, accounting for 81% of turnover (2016: 81%). 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 the company, forward foreign currency contracts are entered into. The company 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 company 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.

The carrying amount of the company'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	106.2	97.6	(13.3)	(29.1)
US dollar	0.2	1.5	(2.7)	(3.9)
Canadian dollar	0.1	0.1	(1.8)	(0.1)
	<u>106.5</u>	<u>99.2</u>	<u>(17.8)</u>	<u>(33.1)</u>

### Foreign currency sensitivity analysis

The company has assets and liabilities denominated in foreign currencies including cash balances of £8.0m at 31 March 2017 (2016: £2.8m) in euro, US dollars and Canadian dollars. Furthermore, the company 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 below.

The following table details the company'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	(1.1)	8.9
US dollar	(2.5)	(3.2)
Canadian dollar	(0.1)	-
	<u>(3.7)</u>	<u>5.7</u>

The company'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 company's sensitivity to the US dollar decreased during the year reflecting a net decrease in US dollar denominated monetary assets and a net increase in US dollar denominated forward contracts. Exposure to other currencies has remained fairly constant. NERL believes that this sensitivity analysis accurately reflects its inherent foreign exchange risk.



**20. Financial instruments (continued)****Forward foreign exchange contracts**

The company entered into forward foreign exchange contracts to sell euro forecast to be received from Eurocontrol in respect of UK en route revenues. In addition, NERL entered into other forward foreign exchange contracts to fund purchases of equipment. The company has designated these forward contracts as cash flow hedges. The following contracts were outstanding at year end:

	2017				2016		
	£m	€m	Average exchange rate		£m	€m	Average exchange rate
Euro sold				Euro sold			
0-90 days	149.2	173.4	0.8604	0-90 days	164.8	213.9	0.7704
Euro bought	€m	£m		Euro bought	€m	£m	
0-90 days	5.4	4.6	0.8582	0-90 days	1.5	1.1	0.7524
91-365 days	8.8	7.6	0.8595	91-365 days	7.3	5.9	0.8000
> 365 days	62.2	54.9	0.8822	> 365 days	1.0	0.8	0.8080
	76.4	67.1	0.8779		9.8	7.8	0.7984
US dollar sold	£m	US\$ m		US dollar sold	£m	US\$ m	
0-90 days	3.8	4.7	1.2443	0-90 days	-	-	-
US dollar bought	US\$ m	£m		US dollar bought	US\$ m	£m	
0-90 days	10.9	8.7	1.2480	0-90 days	3.3	2.3	1.4558
91-365 days	13.3	9.4	1.4159	91-365 days	16.1	11.0	1.4596
> 365 days	19.8	13.4	1.4765	> 365 days	30.4	20.6	1.4726
	44.0	31.5	1.3951		49.8	33.9	1.4672
Canadian dollar bought	CAD m	£m		Canadian dollar bought	CAD m	£m	
0-90 days	3.2	1.9	1.6882	0-90 days	-	-	-
> 365 days	1.4	0.8	1.7136	> 365 days	-	-	-
	4.6	2.7	1.6959		-	-	-

At 31 March 2017, the aggregate amount of the unrealised gains under forward foreign exchange contracts deferred in the hedge reserve relating to the exposure on these future transactions was £3.1m (2016: £0.2m unrealised gain). 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**

NERL 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 are kept under continuous review.

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



**20. Financial instruments (continued)**

The following table shows the percentage of fixed, index-linked and floating rate debt as a percentage of 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	<u>301.0</u>		<u>481.1</u>	
	£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)	<u>(127.0)</u>	<u>(42.2)</u>	<u>14.4</u>	<u>3.0</u>
	<u>301.0</u>	<u>100.0</u>	<u>481.1</u>	<u>100.0</u>

In order to reduce its exposure to interest rate risk on its cash balances, the company 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.

**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 company'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	2016
	Impact	Impact
	£m	£m
Cash at bank and short term deposits (2017: £147.8m, 2016: £101.4m)	1.5	1.0
Borrowings (2017: £22.5m, 2016: £117.5m)	<u>(0.2)</u>	<u>(1.2)</u>
	<u>1.3</u>	<u>(0.2)</u>

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

**Inflation rate risk**

The regulatory charge control conditions that apply to the company'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 £600m 5.25% fixed rate bond, the company entered into an amortising index-linked swap with a notional principal of £200m 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 £192m. 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 the company 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	2016
	Impact	Impact
	£m	£m
Change in swap interest and mark to market value	<u>(12.7)</u>	<u>(18.4)</u>

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%.

**20. 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 company. The company'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 company'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 NATS group 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 of the ratings is applied.

Currently, the company's investments take the form of bank time deposits and money market fund investments. Investments in bank time deposits with maturities up to three months and between three and six 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 tables below set 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 company's deposits at 31 March by credit rating (Standard & Poor's):

Rating (Standard & Poor's)	2017			2016		
	Number of institutions	£m	By credit rating %	Number of institutions	£m	By credit rating %
AAA & AAAM	5	89.8	60.7	3	37.7	37.2
AA-	1	20.0	13.5	1	19.6	19.3
A+	1	9.4	6.4	1	9.3	9.2
A	3	27.6	18.7	5	34.8	34.3
A-	1	1.0	0.7	-	-	-
		<u>147.8</u>	<u>100.0</u>		<u>101.4</u>	<u>100.0</u>

**Liquidity risk management**

The responsibility for liquidity risk management, the risk that the company will have insufficient funds to meet its obligations as they fall due, rests with the Board of NATS Holdings Limited with oversight provided by the Treasury Committee. The company 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.

The policy is to:

- 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;
- 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 July 2021. The facilities comprise a £350m revolving term loan facility, a £45m revolving credit facility and a £5m overdraft facility;
- 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;
- ensure that the ratio of bank funding to total gross borrowings does not exceed 75%; and
- 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 to average monthly UK en route services income receipts 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	<u>1.8</u>	<u>1.1</u>

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

	2017 £m	2016 £m
Bank borrowings	-	95.0
Gross borrowings	452.7	586.9
Bank borrowings as a percentage of gross borrowings	<u>0.0%</u>	<u>16.2%</u>

**20. Financial instruments (continued)****Maturity of borrowings**

The following table sets out the remaining contractual maturity of the company'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 company 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	0.4	69.8	114.4	184.6	0.5	65.3	132.9	198.7
Between one and two years	0.5	65.3	33.7	99.5	0.6	71.0	12.3	83.9
Due between two and five years	1.9	172.8	17.3	192.0	1.9	281.7	5.0	288.6
Due in more than five years	25.3	239.9	3.3	268.5	26.2	294.9	6.4	327.5
	28.1	547.8	168.7	744.6	29.2	712.9	156.6	898.7
Effect of interest, discount and unamortised bond issue and bank facility arrangement fees	(3.8)	(123.3)	-	(127.1)	(4.7)	(154.9)	-	(159.6)
	24.3	424.5	168.7	617.5	24.5	558.0	156.6	739.1

Other liabilities above include trade and other payables excluding deferred income of £75.0m (2016: £55.4m).

In order to manage the liquidity risk arising on the contractual maturity of its borrowings, it is the company'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 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 company'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	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)	(84.6)	(146.1)
Gross settled:					
Foreign exchange forward contract receivables	246.3	22.2	47.2	-	315.7
Foreign exchange forward contract payables	(243.1)	(22.3)	(46.8)	-	(312.2)
	(4.7)	(10.1)	(43.2)	(84.6)	(142.6)
2016					
Net settled:					
Index-linked swap payable	(3.4)	(8.0)	(38.2)	(102.4)	(152.0)
Gross settled:					
Foreign exchange forward contract receivables	184.4	8.2	13.8	-	206.4
Foreign exchange forward contract payables	(188.6)	(8.1)	(13.4)	-	(210.1)
	(7.6)	(7.9)	(37.8)	(102.4)	(155.7)

**Fair value measurements**

The information set out below provides information about how the company 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).

	2017				2016			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>								
Derivative financial instruments in designated hedge accounting relationships	-	4.0	-	4.0	-	0.6	-	0.6
<b>Financial liabilities</b>								
Derivative financial instruments in designated hedge accounting relationships	-	(0.8)	-	(0.8)	-	(3.9)	-	(3.9)
Derivative financial instruments classified as held for trading	-	(138.6)	-	(138.6)	-	(124.8)	-	(124.8)
	-	(139.4)	-	(139.4)	-	(128.7)	-	(128.7)

There were no transfers between individual levels in the year.



**23. Deferred tax**

The following are the major deferred tax assets and liabilities recognised by the company, and movements thereon during the current and prior reporting periods.

	Accelerated tax depreciation £m	Retirement benefits £m	Financial instruments £m	Other £m	Total £m
At 1 April 2015	103.5	(53.5)	(9.0)	(2.7)	38.3
(Credit)/ charge to income	(7.6)	(1.8)	1.7	0.1	(7.6)
Charge to equity	-	43.8	0.9	-	44.7
At 31 March 2016	95.9	(11.5)	(6.4)	(2.6)	75.4
At 1 April 2016	95.9	(11.5)	(6.4)	(2.6)	75.4
(Credit)/charge to income	(0.4)	2.7	(2.0)	(0.4)	(0.1)
(Credit)/charge to equity	-	(39.9)	0.6	-	(39.3)
At 31 March 2017	95.5	(48.7)	(7.8)	(3.0)	36.0

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	(95.5)	(95.9)
Deferred tax assets	59.5	20.5
	<u>(36.0)</u>	<u>(75.4)</u>

**24. Share capital**

	Authorised Number of shares	£m	Called up, allotted and fully paid Number of shares	£m
Ordinary shares of £1 each				
At 31 March 2016 and 31 March 2017	10,000,000	10.0	10,000,000	10.0

**25. Notes to the cash flow statement**

	2017 £m	2016 £m
Operating profit from continuing operations	149.3	49.6
Adjustments for:		
Impairment of goodwill	11.0	92.7
Depreciation of property, plant and equipment	102.2	92.4
Amortisation of intangible assets	44.7	32.0
Impairment losses	0.5	0.7
Deferred grants released	(0.4)	(0.4)
(Profit)/loss on disposal of property, plant and equipment	(0.1)	0.1
R&D expenditure above the line tax credits	(1.6)	(1.8)
Adjustment for pension funding	(13.6)	9.1
Operating cash flows before movements in working capital	292.0	274.4
Decrease in trade and other receivables	80.4	20.1
Increase in trade, other payables and provisions	22.1	69.9
Cash generated from operations	394.5	364.4
Tax paid	(14.2)	(25.2)
Net cash from operating activities	<u>380.3</u>	<u>339.2</u>

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.

**26. Financial commitments**

	2017 £m	2016 £m
Amounts contracted but not provided for in the accounts	61.0	58.8
Minimum lease payments under operating leases recognised in the income statement	5.8	6.1

At the balance sheet date the company 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	3.2	3.2
In the second to fifth years inclusive	18.6	17.1
After five years	46.2	50.8
	68.0	71.1

Operating lease payments represent rentals payable by the company for certain of its 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 the company's performance under its Future Military Area Radar Services contract with the MOD.

**27. Share based payments**

The company's parent operates an All-Employee Share Ownership Plan for the benefit of employees to hold 5% of the share capital of NATS Holdings Limited. 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:

	No. employee shares outstanding at 31 March 2017	No. employee shares outstanding at 31 March 2016
Date of share awards		
Free share awards		
21 September 2001	251,804	279,524
20 October 2003	239,813	262,648
10 September 2004	355,972	399,472
11 January 2008	283,849	322,400
18 September 2009	320,155	367,655
Partnership shares		
1 March 2011	304,585	372,391
26 September 2012	450,623	465,612
30 May 2014	334,613	344,019
31 October 2016	409,905	-
Matching shares		
1 March 2011	305,853	374,689
26 September 2012	450,973	466,012
30 May 2014	334,613	344,019
31 October 2016	409,905	-
	4,452,663	3,998,441
Dividend shares issued on 28 June 2005	30,100	33,312
Total employee shares in issue at 31 March	4,482,763	4,031,753



**27. 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	4,031,753	4,330,687
Granted during the year	831,736	-
Forfeited during the year	(3,801)	(3,100)
Exercised during the year	(361,426)	(311,041)
Staff transfers between group companies	(15,499)	15,207
Balance at 31 March	<u>4,482,763</u>	<u>4,031,753</u>

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 £16.4m (2016: £16.6m) included in amounts due to parent company. The income statement includes a credit of £0.1m (2016: £0.2m). The payments made to employees for the shares they exercised during the year was £1.4m (2016: £1.3m).

**28. Retirement benefit schemes****Defined contribution scheme**

NATS Limited, the company's immediate parent undertaking, provides a defined contribution scheme to all qualifying employees who are not members of the defined benefit scheme. The scheme was established on 1 April 2009 for staff who joined from that date. The assets of the scheme are held separately from those of the company in funds under the control of a board of Trustees.

The company operates a salary sacrifice arrangement whereby employees sacrifice an element of their salary in favour of contributions to the pension scheme. The company matches employee 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 £4.8m (2016: £4.0m), excluding salary sacrifice contributions of £2.4m (2016: £2.0m), represented 15.0% of pensionable salaries (2016: 14.8%).

The defined contribution scheme had 722 members at 31 March 2017 (2016: 592).

**Defined benefit scheme**

NATS Limited, the company's immediate parent undertaking, 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 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 six employer (NATS and CAA) and six member-nominated trustees, as well as an independent chairman.

During 2009 the parent company 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 price 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.

During 2013 the parent company consulted on further pension reforms to mitigate rising pension costs. These included a change to the limit on annual 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.

**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 pensionable 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 the 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.

**28. Retirement benefit schemes (continued)****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 are being made at £2.4m per month from 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. NERL's share of deficit recovery contributions is c. 76%.

NATS Limited, the immediate parent of the company, is the employer of, and second to the company, all personnel who undertake the company's business. In that capacity, NATS Limited participates in the Civil Aviation Authority Pension Scheme and bears the employment (including pension) costs of those personnel.

The company pays fees to NATS Limited for the provision of services, including those of the staff. An element of those fees represents the employment costs (including pension contributions) of staff provided by NATS Limited to NERL. In that way, the existence of a pension deficit or surplus may have an indirect impact upon the company through variations in pension contributions and so the level of those fees.

During the year the company paid cash contributions to the scheme of £88.8m (2016: £91.4m). This amount included £10.4m (2016: £11.4m) 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 salaries.

Contributions to the scheme are funded by NATS Limited's two principal operating subsidiaries: NERL and NATS Services, in proportion to their pensionable payrolls. The company's share of the pension scheme's funding is c. 76%.

The estimated contributions expected to be paid to the scheme during the financial year ending 31 March 2018 is £87.6m, including salary sacrifice contributions estimated at £8.7m.

**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 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 by a qualified actuary. 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 active 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.

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

- 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.
- 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.
- 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.
- 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	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.

**28. 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	(72.8)	(91.5)
Past service cost	-	-
Net interest expense	(0.6)	(7.4)
Administrative expenses	(1.8)	(1.6)
Components of defined benefit costs recognised within operating profit	<u>(75.2)</u>	<u>(100.5)</u>

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)	819.6	(84.4)
Actuarial gains and losses arising from changes in financial assumptions	(1,136.6)	300.2
Actuarial gains and losses arising from changes in demographic assumptions	89.3	-
Actuarial gains and losses arising from experience adjustments	7.7	1.7
	<u>(220.0)</u>	<u>217.5</u>

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

	2017 £m	2016 £m
Present value of defined benefit obligations	(4,371.9)	(3,622.3)
Fair value of scheme assets	4,106.6	3,563.4
Deficit in scheme	<u>(265.3)</u>	<u>(58.9)</u>

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

	2017 £m	2016 £m
At 1 April	(3,622.3)	(3,824.2)
Current service cost	(72.8)	(91.5)
Past service cost	-	-
Interest expense on defined benefit scheme obligations	(123.4)	(126.1)
Actuarial gains and losses arising from changes in financial assumptions	(1,136.6)	300.2
Actuarial gains and losses arising from changes in demographic assumptions	89.3	-
Actuarial gains and losses arising from experience adjustments	7.7	1.7
Benefits paid	486.2	117.6
At 31 March	<u>(4,371.9)</u>	<u>(3,622.3)</u>

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	(2,202.6)	(1,913.1)
Deferred members	(392.0)	(286.4)
Pensioners	(1,777.3)	(1,422.8)
	<u>(4,371.9)</u>	<u>(3,622.3)</u>

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

	2017 £m	2016 £m
At 1 April	3,563.4	3,556.9
Interest income on scheme assets	122.8	118.7
Return on plan assets (excluding amounts included in net interest expense)	819.6	(84.4)
Contributions from company	88.8	91.4
Benefits paid	(486.2)	(117.6)
Administrative expenses	(1.8)	(1.6)
At 31 March	<u>4,106.6</u>	<u>3,563.4</u>

**28. Retirement benefit schemes (continued)**

The company's share of the major categories of scheme assets were as follows:

	2017 £m	2016 £m
Cash and cash equivalents	49.1	46.6
Equity instruments		
- UK	316.8	261.0
- Europe	90.4	73.1
- North America	258.2	214.2
- Japan	36.3	29.8
- Pacific (excluding Japan)	102.1	88.1
- Emerging markets	323.7	279.5
- Global	607.5	509.3
	<u>1,735.0</u>	<u>1,455.0</u>
Bonds		
- Corporate bonds	712.1	681.2
- Index-linked gilts over 5 years	1,101.4	883.8
	<u>1,813.5</u>	<u>1,565.0</u>
Other investments		
- Property	182.6	194.0
- Hedge funds	163.1	156.8
- Global tactical asset allocation	98.8	89.6
- Private equity funds	105.8	103.7
	<u>550.3</u>	<u>544.1</u>
Derivatives		
- Futures contracts	(41.3)	(47.3)
	<u>4,106.6</u>	<u>3,563.4</u>

The scheme assets do not include any investments in the equity or debt instruments of the company 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 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 the 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.

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 the Trustees are likely to consult with the 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 £942.4m (2016: £34.3m).

## 29. 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).

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 the AG have not exercised undue influence on the group or the company 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.

Aquila Air Traffic Management Services Limited is a joint venture entity of NERL's fellow subsidiary, NATS (Services) Limited.

### Trading transactions

	Sales		Purchases	
	Year ended	Year ended	Year ended	Year ended
	31 March 2017	31 March 2016	31 March 2017	31 March 2016
	£m	£m	£m	£m
Ministry of Defence (MOD)	48.9	49.1	4.1	3.7
Department for Transport (DfT)	0.7	0.6	-	-
Meteorological Office	0.3	0.3	0.5	0.5
Aquila Air Traffic Management Services Limited	0.5	0.6	-	-
	Amounts owed by related parties		Amounts owed to related parties	
	Year ended	Year ended	Year ended	Year ended
	31 March 2017	31 March 2016	31 March 2017	31 March 2016
	£m	£m	£m	£m
Ministry of Defence (MOD)	5.4	5.4	11.6	36.2
Department for Transport (DfT)	-	-	-	-
Meteorological Office	-	-	0.1	-
Aquila Air Traffic Management Services Limited	0.2	-	-	-

Sales are made to related parties at the company'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.

### Directors' remuneration

The total remuneration payable to the directors of the company in the year was £1,539,000 (2016: £1,659,000). The number of directors paid by the company during the year was two (2016: three). The directors participate in a pension salary sacrifice arrangement. Contributions paid to a defined benefit pension scheme and a defined contribution pension scheme via salary sacrifice have been deducted from this remuneration figure. Contributions to the defined pension benefit scheme, including salary sacrificed by the director of £11,000 and contributions from the company of £80,000 totalled £91,000. Contributions to the defined contribution scheme, including salary sacrificed by the directors of £10,000 and contributions from the company of £20,000 totalled £30,000. The number of directors participating in the defined benefit scheme during the year and at 31 March 2017 was one. The sole director participating in the defined contribution scheme during the year left the scheme prior to 31 March 2017.

Remuneration payable to the highest paid director of the company in the year was £914,000 (2016: £722,000). Contributions paid to a defined contribution pension scheme via salary sacrifice have been deducted from this remuneration figure. Contributions to the defined contribution pension scheme, including salary sacrificed by the director of £10,000 and contributions from the company of £20,000 totalled £30,000.

### Remuneration of key management personnel

The remuneration of key management personnel of the company 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 their executive management teams.

	2017	2016
	£m	£m
Short term employee benefits	4.0	4.4
Post-employment benefits	0.7	1.1
Other long term benefits	0.8	0.1
Termination benefits	0.4	0.7
	<u>5.9</u>	<u>6.3</u>

## 30. Parent undertaking

The company's immediate parent undertaking is NATS Limited and the ultimate parent undertaking is NATS Holdings Limited. Both are private companies incorporated in Great Britain and registered in England and Wales.

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.

The largest and smallest group in which the results of the company are consolidated is that of which NATS Holdings Limited is the parent company. The consolidated accounts of NATS Holdings Limited can be obtained from the company's secretary, at its registered office, 4000 Parkway, Whiteley, Fareham, Hampshire, PO15 7FL.

## 31. Events after the reporting period

In May 2017, the Board approved and the company paid an interim dividend for the year ending 31 March 2018 of £2.75 per share (totaling £27.5m).

## Explanatory notes

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- 1 Single European Sky ATM Research: a programme to modernise Europe's airspace structure and air traffic management technologies.
- 2 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.
- 3 interoperability Through European Collaboration.
- 4 References in this document to Deploying SESAR relate to NERL's investment programme which implements a number of SESAR compliant technologies 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.
- 5 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.
- 6 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.
- 7 An aircraft deviation of 300 feet or more from its assigned level.
- 8 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.
- 9 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.
- 10 London Airspace Management Programme.
- 11 London Terminal Manoeuvring Area: the designated area of controlled airspace surrounding London airports and which forms part of the London Airspace Management Programme (LAMP).
- 12 Chargeable service units are the billing unit for recovering UK en route revenue allowances and a function of aircraft weight and distance flown.