NATS (En Route) plc

Financial statements

Year ended 31 March 2020

Company Number: 04129273

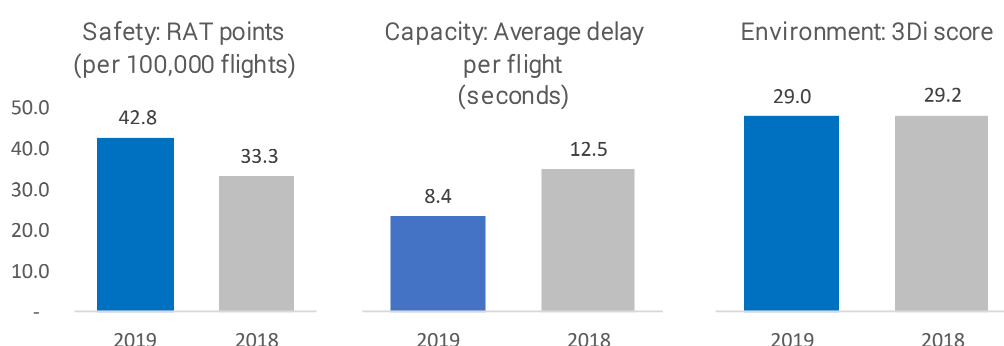
Highlights

Financial highlights (year ended 31 March)

£m (unless specified)	2020	2019	Change (%)
Revenue	736.7	733.0	+0.5
Profit before tax[a]	28.9	86.0	-66.4
Capital expenditure	151.0	150.1	+0.6
Net debt[b]	263.2	168.8	+55.9
Gearing[c] (%)	29.0%	25.7%	+12.8
Dividends	57.0	57.0	no change

[a] Profit before tax for the year ended 31 March 2020 is after a goodwill impairment charge of £49m (2019: nil)
[b] Excludes derivative financial instruments
[c] Ratio of NERL's net debt (as defined by its licence) to regulatory assets

Operational highlights (calendar year)



Note: the operational metrics shown above are measured on a calendar year basis for regulatory purposes.

- We handled 2.48m flights (2019: 2.54m) in the financial year. There was a steep reduction in March 2020 as governments sought to control the outbreak of Covid-19.
- A category B airprox[1] was attributed to our operation during the financial year (2019: nil).
- Our North Atlantic en route service began using space-based surveillance, with the aim of improving safety, flight efficiency and reducing emissions.
- We rejected the Civil Aviation Authority's (CAA) price control for Reference Period 3 (RP3: 2020-2024) leading to a referral to the Competition and Markets Authority (CMA). CMA's findings upheld key elements of our referral while sustaining other aspects of the CAA's proposals. However, many of their findings have been overtaken by the impacts of Covid-19 on the sector. The CAA will need to redetermine the price control by the start of 2023.
- In conjunction with the CAA and the Department for Transport, we established the Airspace Change Organising Group (ACOG) to coordinate essential airspace modernisation in RP3 across the industry.
- The MOD renewed its military area radar contract to 2030.
- Our response to Covid-19 was to protect staff and continue to ensure a safe operation while controlling our expenditure and managing our liquidity and, in August 2020, we secured an additional £380m bank facility.

[1] A number of explanatory notes are provided on page 91 of this report.

Contents

	Page
Strategic report	
Highlights	1
Our business	2
Chief Executive's review	3
Business review	7
Financial review	10
Going concern	15
Principal risks and uncertainties	16
Engaging with our stakeholders	21
S172 statement	22
Governance report	
NATS governance framework	24
Report of the directors	27
Independent auditor's report	31
Financial statements	
Income statement	36
Statement of comprehensive income	36
Balance sheet	37
Statement of changes in equity	38
Cashflow statement	39
Additional information	
Explanatory notes	91

Who we are

NATS (En Route) plc (NERL) provides Air Traffic Control (ATC) services to aircraft flying in airspace over the UK and the eastern part of the North Atlantic. NERL operates under a licence from the Secretary of State for Transport granted under the Transport Act 2000. It is economically regulated by the CAA which until 1 January 2021 is within the framework of the European Commission's (EC) Single European Sky (SES).

Our purpose

Advancing aviation, keeping the skies safe.

Our objectives

- Deliver a safe, efficient and reliable service every day.
- Deliver SESAR[2] 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.

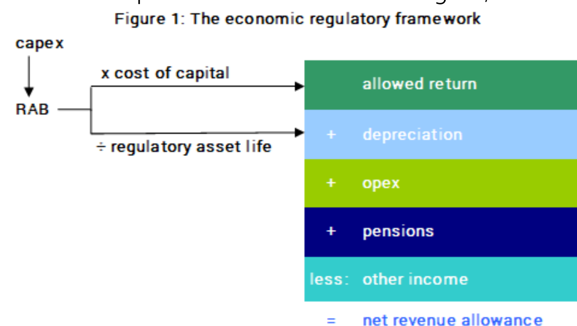
Our business model

Under the regulatory framework, the CAA establishes revenue allowances for a price control period which remunerate 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. For Reference Period 2 (2015-2019), the CAA set the cost of capital at 5.9% (pre-tax real).

The RAB represents the value ascribed to the capital employed in the regulated businesses. Income from other 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 price control period. This model is illustrated in Figure 1.

The CAA's price control also sets targets, and

Figure 1: The economic regulatory framework



provides incentives, for service, environmental performance, capital investment and gearing levels. If regulatory assumptions are borne out, and NERL efficiently meets its targets, then NERL would earn a return at the cost of capital. NERL can out-perform if it is more cost efficient than the CAA's assumptions, finances at lower cost, if traffic volumes (after risk sharing - see below) are higher than forecast or if it beats service targets. NERL would earn lower returns if the opposite applied.

Regulatory mechanisms mitigate the impact of variations in traffic volumes, inflation and pension contributions from the level assumed and result in adjustments to charges in future periods.

Chief Executive's review

Covid-19

Covid-19 is presenting an unprecedented challenge to the aviation sector, in terms of its impact on the demand for air travel and the level of uncertainty of its recovery. As provider of the essential ATC service our role throughout this crisis has been to continue to provide customers and the public with the safe and resilient service they expect and to ensure that we are well placed to facilitate the recovery.

The UK's aviation sector was most affected from early March onwards as governments introduced measures to contain the virus and by the end of the month UK flight volumes fell to around 10% of the previous year and remained at this level through April and May 2020 (see Figure 2).

As it became apparent that the UK would be significantly affected by the virus, we took rapid action on three priorities: 1) protecting the health, safety and wellbeing of our workforce (see below) while maintaining a safe and resilient air traffic control service for our airline and airport customers; 2) preserving our liquidity in the face of a loss of income to ensure the viability of our business for all stakeholders; and 3) securing a revised regulatory settlement for RP3 which provides a balanced plan for dealing with a post Covid-19 operating environment.

In the Financial review we explain in more detail the liquidity challenge, our response and the £380m of new funding which provides us with headroom to deal with a more prolonged period of recovery. One important consideration in conserving liquidity was our capital investment programme. From the commencement of lockdown in the UK, we reduced the number of contractors utilised, reprioritised work and redeployed our own employees. However, as the impact of Covid-19 on the industry became more apparent we suspended all capital investment for a six-month period, with the exception of critical sustainment activities. While our customers' focus is currently on managing the financial impact on their businesses, airspace modernisation (see Business review) remains a priority for them as it will make airspace more efficient and resilient and improve their environmental performance. It is important therefore, that we take some time now to reshape our capital programme for the future so that we can take advantage of lower traffic to make the airspace and technology changes that will deliver the benefits our customers need. Our hope is that we can still deliver some changes to our technology and airspace before significant traffic volumes return. Of course, we cannot predict the pace of recovery, and therefore we need to be agile as to when we resume the programmes to take advantage of the lower traffic.

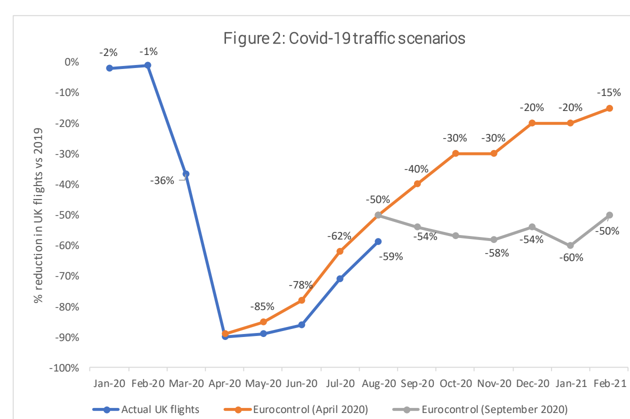


Figure 2: Covid-19 traffic scenarios

Outlook for recovery in traffic

Projections for the aviation industry's recovery from Covid-19 vary widely but there is general agreement that its timing and extent depends on the containment of the health crisis, the loosening of

travel restrictions and border closures and the restoration of passenger confidence to resume flying. While it remains difficult to predict the rate of recovery in air traffic volumes, we do not anticipate a recovery to somewhere close to 2019 levels until 2023 at the earliest. There is no single industry view of the path to recovery and with Covid-19 still prevalent the outlook remains uncertain. Eurocontrol, Europe's network manager, has recently updated its near-term scenario (see Figure 2) which assumes a coordinated response between European governments and institutions. The most recent scenario suggests air traffic volumes will stabilise at up to 60% below 2019 levels this winter. We developed our own internal scenario for planning for our finances and managing liquidity which is somewhat more pessimistic.

In September 2020 UK flight volumes appeared to level off at around 60% below September 2019 levels, which was slightly better than our internal scenario. Airlines will soon publish their winter schedules which will be indicative of passenger demand and the trajectory of the recovery in flight volumes in the short-term.

We are closely engaged with the Department for Transport and the CAA to support the safe, coordinated recovery of operations as traffic begins to increase.

Our workforce

I am immensely grateful to, and proud of our people who have maintained the UK's essential ATC service during the pandemic. I cannot think of a better example of how our people embody the company's values. Our overriding priority from the start of the Covid-19 outbreak was the health and safety of the workforce. At the outset we took protective measures to ensure operational staff attending our centres could operate under social distancing rules and to provide resilience to the service. We closed our training and simulations capability and stopped all but essential onsite maintenance. We also closed our corporate centre, initiating working from home for all non-operational staff enabled by the digital workspace we implemented earlier in the year. This has allowed us to continue to collaborate and communicate effectively during the crisis, including regular updates to staff on business developments from me and my executive team. It is clear that our digital workspace has enabled a more flexible way of working for much of the workforce and I intend to integrate the positive aspects of this fully into our future operating model.

I am also grateful to staff who were furloughed during this period of uncertainty as this enabled us to use the government's job retention scheme.

We have also conducted regular wellbeing surveys to enable us to gauge how best to support staff through this challenging period and we are now starting to develop plans for what a return to the office might look like, though we do not expect large numbers to return to our sites before early 2021.

It is never desirable to have to announce job reductions, but there is no escape from the fact that there are going to be fewer flights and therefore less company income for a number of years. Customers and the regulator will expect and require us to play our part to support the recovery through efficient pricing, consistent with a smaller business than the RP3 performance plan assumed. As a result, in August 2020 we announced a voluntary redundancy

programme, and we will not be recruiting until at least next summer.

Notwithstanding Covid-19 and the challenging operating environment, our people strategy remains to attract, develop and retain the highly skilled and increasingly diverse workforce we need to meet the demands of our industry.

Economic regulation

Last autumn, the Board took the difficult decision to reject the CAA's decision for NERL's price control for Reference Period 3 (RP3: 2020 to 2024), which led to a reference to the Competition and Markets Authority (CMA) by the CAA. We did so because we could not conceive of a plan that would deliver the operational service, technology change and airspace modernisation that was needed by the aviation industry with the resources that the CAA was proposing, and for this reason we believed the plan was not in the public interest. Also, accepting the plan and then failing to deliver it would have significantly damaged our reputation and put us at risk of a breach of our licence.

Until Covid-19, the CMA reference was a key priority for NERL's executive team and its Board. It is clear that our concerns and the evidence we presented was understood and acknowledged by the CMA in their conclusions. We did not persuade the CMA of our arguments in all the areas of dispute with the CAA. However, the CMA's decision sets important principles in key areas such as capital expenditure governance, cost of capital, the recovery of satellite data charges relating to the Oceanic service and the extent of NERL's ability to generate non-regulated income. The CMA's decision, while in many areas overtaken by Covid-19, continues to set us a stretching plan but addresses some of our concerns about the balance of funding for that plan.

The regulatory framework was never designed for an event as unprecedented as Covid-19 but provision exists for regulatory settlements to be re-set following major traffic shocks, and this is the case for RP3. The process for this review will not be known until CAA undertakes its consultation. However, we anticipate that this review will enable us to develop and consult on a new business plan with our stakeholders which will reflect their views and priorities for the remainder of the RP3 period. Our fundamental strategy remains to modernise our technology, in line with SESAR principles, and to enable airspace transformation that will deliver significant benefits to customers. However, we recognise that this must be set within a very different economic climate.

Despite the near-term uncertainty for the recovery of air traffic volumes and the regulatory framework for RP3, the long-term fundamentals of our business remain sound. Over the next twelve months we will engage our stakeholders to understand their priorities post-Covid-19. As the regulatory commitment to the traffic risk sharing mechanism indicates, there are limits to the extent that air traffic costs can respond to changes in traffic volumes. Nevertheless, we wish to use the room for manoeuvre that we have and have started to re-size our business to reflect a lower level of demand for our service over the next few years. In doing so we are considering the needs of all our stakeholders, including our airline customers, the travelling public and the workforce, ensuring that the decisions we make support the recovery in aviation and are in service of the long-term success of the

company. We provide an essential public service and we are resolutely committed to delivering our strategy to advance aviation and keep the skies safe in the interests of all stakeholders.

Martin Rolfe, FRAeS

Chief Executive

Business review

In addition to developments outlined by the Chief Executive, up until the full impact of Covid-19 became apparent, we had made considerable progress towards achieving other priorities for 2019/20 which are summarised here.

Delivering a safe, efficient and reliable service every day from our airports and centres

	2020	2019	Change
	('000s)	('000s)	%
Chargeable Service Units*	12,166	12,167	-
UK flights	2,483	2,544	(2.4%)
Oceanic flights	493	502	(1.8%)

* a CSU is a function of aircraft weight and distance flown in UK airspace, and is the billing unit for UK en route charges.

Until the global spread of Covid-19 and the measures by governments to contain it caused a dramatic reduction in the demand for air travel in 2020, we were handling record flight volumes. However, we ended the financial year having handled 2.48 million flights, which was 2.4% below the previous year (2019: 2.54 million).

Service performance: calendar year to date	2019		2018	
	Target	Actual	Target	Actual
C1: avg. En route delay at FAB level (seconds)	15.6	13.2	15.6	16.9
C2: avg. delay per flight (seconds)	10.8	8.4	10.8	12.5
C3: delay impact (score)[3]	24.0	15.8	26.0	17.0
C4: delay variability (score)[3]	2,000.0	63.0	2,000.0	16.1
C3Di: 3Di metric (score)[4]	26.3-29.1	29.0	26.7-29.5	29.2

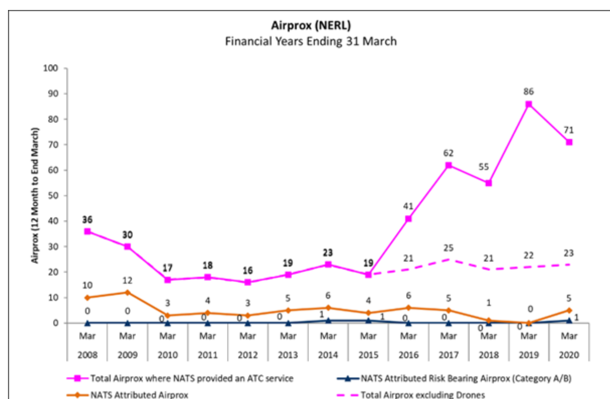
The C1 metric is a Functional Airspace Block (FAB) level target introduced for RP2.
C3 target is the C3 Upper target adjusted for traffic based CY 2019 actual traffic.

Our service performance improved on the prior year and we met the regulator's 2019 calendar year targets[3,4]. We achieved an average delay per flight of 8.4 seconds (2018 calendar year: 12.5 seconds) and a flight efficiency 3Di score[4] of 29.0 (2018 calendar year: 29.2).

For calendar year 2019 and Reference Period 2 (2015 to 2019) we achieved the regulator's safety targets, which were based on: the effectiveness of safety management; the use of the Risk Analysis Tool (RAT) to assess the severity of safety events[5]; and the extent of Just Culture training.

On a 12-month rolling basis, for calendar year 2019, NERL achieved a RAT score of 42.8 points per 100,000 movements (calendar year 2018: 33.3, adjusted after moderation) relative to a stretching internal target of 28.2, due to higher traffic volumes and better monitoring and reporting. The relationship between traffic volumes and safety is complex but the industry rule of thumb is that as traffic doubles safety incidents increase four-fold. When we set the target we assumed that traffic would grow by 13% during RP2 but higher actual growth meant that we effectively set ourselves the task of delivering a c22% safety improvement over the 5-year period. Notwithstanding that we were unable to meet this stretching internal target, the considerable work that has been undertaken to meet the target will enable long term improvement and has undoubtedly created a safer operation than had we not set a such stretching target.

We also measure our safety performance over a financial year based on airprox incidents, which are assessed independently by the UK Airprox Board. During this financial year the UK Airprox Board considered that a risk-bearing Category B airprox was attributable to our operation. The growth in traffic volumes during the period was likely a contributing factor but when these rare incidents arise we study them carefully and embed lessons learned in our operational procedures and training.



Overall, there was a reduction in the number of airprox during the year, reversing the trend since 2015. This mainly reflected a fall in Remotely Piloted Aircraft Systems (RPAS or drone) related events following a range of measures to improve awareness and training of drone users, which we have been a part of with the CAA, together with the effect of changes in legislation. We have also continued to collaborate with the industry on technology to monitor and respond to drone activity.

Finally, we were encouraged to see a decrease in the number of infringements of controlled airspace during the year, supported by our focused engagement with the general aviation community. To sustain this trend and reduce the number of incidents, we will continue to support the implementation of the mandatory identification of all aircraft in UK airspace and the CAA's initiatives and focus on other improvement activities that we can undertake.

Space-based surveillance of the North Atlantic

The North Atlantic is the world's busiest area of oceanic airspace. Since March 2019 we have operated the service using space-based surveillance from a network of Iridium satellites. We are using Automatic Dependent Surveillance - Broadcast (ADS-B) data provided by Aireon to deliver a real-time picture of the exact position of every aircraft operating across the North Atlantic, with updates provided about every eight seconds. Prior to this customers received a procedural service reliant on a rigid route structure with speed and separation restrictions and periodic position updates provided by pilots.

ADS-B has enabled us to reduce the longitudinal spacing between aircraft from between 40 to 80 nautical miles (nm) down to 14 nm and to offer airlines that were previously assigned fixed speeds and flight levels more flexible flight paths and optimum trajectories. We have also reduced the lateral separation minima.

These improvements in flight efficiency provide immediate fuel cost savings to airlines and long-term environmental benefits by reducing CO_2 emissions. The ability to safely reduce the separation between aircraft also provides more capacity for us to handle future traffic growth. While significant safety and environmental benefits are derived from this technology, we recognise that the satellite data charge is an additional cost to airline customers. The CAA will be reviewing later in RP3 the progress made in delivering the benefits of ADS-B which, in our view, will now need to take due account of the much lower levels of traffic experienced than were forecast.

Airspace modernisation

Existing airspace and the route network structures that support ATM are in need of modernisation if we are to meet the development expectations of airports, improve environmental performance, enhance services to commercial and general aviation and integrate new airspace users such as

drones. The core elements of this programme are airspace changes across the south east, Scotland and Manchester regions which will deliver significant environmental benefit, through fuel saving and aircraft noise mitigation, free route airspace in the upper airspace and enhanced arrival tools to reduce airborne delay into our major airports.

The programme requires the engagement and full support of Government, the CAA, airports, airlines, business and general aviation. At the request of the Secretary of State for Transport, we set up the Airspace Change Organising Group (ACOG), which is an independent group within NATS. It is headed by Mark Swan, formerly Group Director of Safety and Airspace Regulation at the CAA, and a member of its Board, and it is overseen by a cross-industry steering committee chaired by Sir Timothy Anderson, formerly Chief Operating Officer of Flybe. ACOG will create and maintain a single coordinated implementation masterplan which will be subject to review by the CAA, in consultation with the Secretary of State. Over the next decade, it will coordinate more than 15 airspace change projects across 14 airports and higher level airspace and it will engage with a wide range of stakeholders, including representatives of communities and other airspace users.

While customers agreed that this programme of change was a priority for RP3, we will re-assess the scope and cost of our plans (and those of ACOG) with customers and the CAA through the consultation on a revised RP3 plan to ensure that investment is realigned with airspace user demand as the sector recovers after Covid-19.

During the year we improved the route connectivity to and from Birmingham Airport and provided more flexibility for Heathrow arrivals. We are also redesigning the route structures for Luton and Stansted airports, which are currently shared, to provide each airport with its own arrivals route and holding procedure. We will be holding public consultations with those affected.

Commercial developments

We were delighted that the Ministry of Defence (MOD) renewed its Future Military Area Radar Service (FMARS) contract with us for a further nine years from the existing contract end date until 2030. This allows the MOD to continue to share NERL's technical infrastructure and operations rooms in Swanwick, which is the backbone of our joint civil and military approach to ATC. This also means airline customers will continue to benefit from a lower charge, as the costs of our ATC infrastructure are shared with MOD.

Financial review

Results overview

Profit before tax at £28.9m (2019: £86.0m) was £57.1m lower than last year's result. This primarily reflected the impact of Covid-19 on the carrying values of goodwill (see below) which was impaired by £49.0m and an increase in bad debt exposure of £16.8m reflecting the financial distress within the wider aviation sector from the collapse in demand for air travel (including the failure of Flybe). Higher staff costs were also incurred in the year from the investment in operational staff to meet the growth in traffic volumes expected prior to Covid-19 as well as higher pension costs (see below). Partly offsetting these factors were: improved revenue from our MOD contract and North Atlantic services, lower asset depreciation charges reflecting the timing of ATC system deployments and the movement in fair value of the index-linked derivative contract.

	£m	£m
2019 profit before tax		86.0
Revenue changes		
Airspace		
UK en route revenue	(1.5)	
MOD and North Atlantic en route	3.6	
	2.1	
Other service lines	1.6	
		3.7
Operating cost changes		
Staff costs (excluding pension costs)	(1.5)	
Pension costs	(10.6)	
Expected credit losses	(16.8)	
Depreciation and amortisation (net of grants)	12.2	
Other	1.0	
		(15.7)
Goodwill impairment		(49.0)
Finance cost changes		
Fair value movement on derivative contract	5.1	
Other net finance costs	(1.2)	
		3.9
2020 profit before tax		28.9

After the tax charge, which is explained below, NERL reported a profit of £3.5m (2019: profit of £71.8m).

Our response to the impact of Covid-19

The impact of Covid-19 on the results for 2019/20 is explained above. However, the most significant continuing impact has been the shortfall since the start of 2020/21 in NERL's revenue receipts for en route charges due to the reduction in air traffic volumes and the effect of significantly extending the period by which airlines settle their air traffic control charges, the latter only partly mitigated by advances provided by Eurocontrol. As a result, we assessed that NERL's revenue receipts would be lower by £439m in 2020/21 and by £245m in 2021/22 if traffic volumes been in line with the CAA's RP3 assumption, although these would be largely recovered in later years under the traffic risk sharing mechanism of the regulatory framework

In response, we conserved cash of £200m through a number of measures including: freezing recruitment, staff pay restraint and releasing most external contractors; furloughing staff under the government's job retention scheme; working closely with our suppliers to manage working capital; and deferring £70m of capital investment. Separately, we drew down £395m from our available bank facilities to secure liquidity.

Finally, and most significantly, in August 2020 we agreed additional bank facilities of £380m through to July 2022, in line with the duration of the existing bank facility. The new facility was sized by reference to a range of traffic scenarios, with headroom for a delay in recovery.

The combination of these actions provides the company with liquidity to withstand a prolonged and uncertain recovery in air traffic volumes ahead of a re-set of the regulatory settlement for RP3, and the recovery of revenue shortfalls under the traffic risk

sharing mechanism. With respect to the latter, we fully expect that the re-set will provide a balanced business plan which is aligned with our customers' priorities and flight schedules, taking account of the CMA's findings, the pre-existing commitment to traffic risk sharing and the financeability duties placed on the CAA under the Transport Act 2000.

Through a voluntary redundancy programme in August 2020, we have also taken early action to re-align our cost base to ensure we are well placed to support the recovery in the aviation sector and ahead of the re-set of the regulatory settlement for RP3. The cost of this programme is estimated at £65m.

New accounting standard

The adoption of IFRS 16: *Leases* during the year increased net debt at 31 March 2020 by £65.3m and required recognition of right of use assets of £56.4m (net of previously accrued lease incentives). The standard also resulted in lower operating rental costs for the year by £5.2m, offset by £4.6m of higher depreciation and £1.7m of higher interest cost.

Regulatory return

In the 2019 calendar year, NERL achieved a pre-tax real return of 4.6% (2018 calendar year: 7.1%) compared with the expected regulatory return of 5.9% in the RP2 Performance Plan. This under-performance reflected the investment we made during the last two years of RP2 to increase our operational staff and to accelerate the technology change and airspace programmes to meet the projected growth in air traffic volumes the aviation sector anticipated for RP3 and beyond.

Notwithstanding this investment, over the five-year period of RP2, NERL achieved a return of 7.6%, mainly reflecting the faster growth in air traffic volumes than CAA forecast, which generated higher revenue.

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. This 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;
- goodwill impairment, which is not remunerated by the regulator's building block model; 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.

Regulatory accounts are also prepared on a calendar year basis. These differences mainly explain why NERL's reported operating profit before goodwill impairment of £49m is some £53m higher than its regulatory profit.

Revenue

	2020	2019
	£m	£m
Airspace	730.7	728.6
Other Service lines	6.0	4.4
Total	736.7	733.0

Overall, revenue at £736.7m (2019: £733.0m) was broadly in line with last year. By service line the significant developments were:

Airspace: further real price reductions for our en route service in RP2 offset the benefit of higher traffic volumes than the CAA forecast. From January 2020 we were able to recover the cost of ADS-B satellite

data charges for the North Atlantic en route service. We also provided additional services to the MOD.

Other Service lines: overall revenue was better than the prior year as we continued to support windfarm developers with services to mitigate their impacts on ATC systems.

Operating costs

	2020	2019
	£m	£m
Staff costs	(345.0)	(332.9)
Non-staff costs (net of other operating income)	(166.4)	(150.6)
Depreciation and amortisation, net of grants	(125.5)	(137.7)
Operating costs before goodwill impairment	(636.9)	(621.2)
Goodwill impairment charge	(49.0)	-
Total operating costs	(685.9)	(621.2)

Operating costs before goodwill impairment increased by £15.7m or 2.5% reflecting increases in staff and non-staff costs which were partly offset by lower asset depreciation. The principal reasons have been explained in the Results overview paragraph above.

The average number of employees during the year increased to 3,605 (2019: 3,418) as we invested in operational staff to support the growth in traffic volumes and accelerate the technology change programme.

Goodwill impairment

A goodwill impairment charge of £49.0m (2019: nil) was made to write down its carrying value to the recoverable amount (see notes 2 and 3 to the financial statements).

In assessing the recoverable amount, consideration is given to opportunities to outperform regulatory settlements and any premium above the value of the regulatory asset base (RAB) 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. As a result of the absence of market precedents supporting the level of premium since the outbreak of Covid-19, the RAB premium was reduced from 6% to 0%, resulting in the impairment charge. This charge does not impact NERL's cash flows or its regulatory return. The premium assumption will be assessed again for the review of carrying value in 2020/21.

Net finance costs and fair value movements on financial instruments

Net finance costs of £21.9m were £3.9m lower than last year (2019: £25.8m), including interest on lease liabilities following adoption of IFRS 16.

A fair value credit of £2.1m (2019: £3.0m charge) arose from the change in market value of the index-linked swap liability, which provides an economic hedge for NERL's revenue allowance for financing charges. The fair value is sensitive to market expectations of inflation and swap discount rates over the time to expiry of the contract in 2026.

Taxation

The tax charge of £25.4m (2019: £14.2m) includes current tax of £1.8m (2019: £3.6m) and deferred tax of £23.6m (2019: £10.6m). Overall, the charge was at an effective rate of 87.9% (2019: 16.5%). This is significantly higher than the headline rate of 19%, mainly reflecting the goodwill impairment charge which is not tax deductible and the deferred tax impact of the government's decision to maintain the rate of corporation tax at 19% from April 2020, rather than lower it to 17% as had been legislated previously. NERL'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 NATS' tax policies and guidelines. NERL's UK corporation tax payments were reduced to nil (2019: refund of £1.3m) as the company claims R&D allowances for the capital investment to develop ATC systems.

NERL also pays other taxes such as employer's national insurance contributions, business rates and the apprenticeship levy, which are significant costs. The NATS tax strategy can be viewed at www.nats.aero.

Balance sheet

	2020 £m	2019 £m
Goodwill	149.3	198.3
Tangible and intangible fixed assets	1,072.4	1,044.4
Right-of-use assets	56.4	-
Pension scheme surplus/(deficit)	173.3	(16.5)
Cash and short term deposits	488.3	166.1
Derivatives (net)	(104.7)	(119.7)
Borrowings	(686.2)	(334.9)
Lease liabilities	(65.3)	-
Deferred tax liability	(156.4)	(99.9)
Other net liabilities	(255.9)	(254.6)
Net assets	671.2	583.2

The increase in net assets in the year mainly reflects the change from a deficit to a surplus of £173.3m (2019: deficit £16.5m - see below) in the IAS 19 funding position of the defined benefit pension scheme, and dividends paid in the year.

Capital investment

	2020 £m	2019 £m
SESAR deployment	113.7	113.2
Airspace modernisation	10.0	7.5
Infrastructure	10.8	14.4
Operational systems	6.6	5.0
Other	6.4	8.3
Regulatory capex	147.5	148.4
Military systems	2.5	1.6
Other non-regulatory capex	1.0	0.1
Capital investment	151.0	150.1

Until the outbreak of Covid-19 in the UK became apparent, we maintained our investment in the technology and transformation programme to deploy new ATC equipment and software based on customer priorities for RP3. Since the outbreak of Covid-19, all but essential and sustaining capital investment has been suspended for six months to protect liquidity and to enable the scope of plans to be reviewed against the revised priorities of our customers and the regulator, a process which is likely to lead to an ongoing lower rate of investment than planned pre-Covid..

Defined benefit pensions

NERL bears an economic share of the parent company's final salary defined benefit pension scheme. The scheme was closed to new entrants in 2009 and a defined contribution scheme was put in place. More information on our pension arrangements is provided in note 29 to the financial statements.

a. IAS 19 charge and funding position

The cost (including salary sacrifice and past service) of defined benefit pensions at £56.5m (2019: £50.5m) reflected a higher accrual rate of 42.1% (2019: 35.9%) of pensionable pay, reflecting lower real interest rates at the start of the financial year.

IAS 19 pension surplus	£m
At 1 April 2019	(16.5)
Charge to income statement*	(56.5)
Actuarial gains/(losses):	
- on scheme assets	(129.4)
- on scheme liabilities	299.3
Employer contributions*	76.4
At 31 March 2020	173.3
Represented by:	
Scheme assets	3,491.6
Scheme liabilities	(3,318.3)
Surplus	173.3

* including salary sacrifice

At 31 March 2020, the scheme's assets exceeded its liabilities by £173.3m (2019: £16.5m deficit) as measured under International Accounting Standards

(IAS 19) using best estimate assumptions. The real yield on AA corporate bonds used to value RPI-linked pension obligations increased by 50 basis points during the year, which reduced liabilities by more than the fall in asset values. The size of the scheme relative to the group means changes in financial market conditions can have relatively large impacts on the results and financial position.

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 based on the outcome of their formal valuation. This valuation uses a wide range of financial and demographic assumptions for measuring pension liabilities and legislation requires a margin for prudence. As a result, the Trustees' valuation gives a different outcome to the valuation under IAS 19 for the company's financial statements.

The Trustees completed a formal valuation at 31 December 2017 which reported a funding deficit of £270.4m (NERL's economic share of this deficit is c£204m. The scheme's actuary also determined that the cost of employee benefits accruing in future was 41.8% of pensionable earnings (excluding salary sacrifice). Contributions have reflected this from January 2020 as well as a recovery plan agreed with Trustees aims to repair the deficit by December 2026. During the year the company's parent made deficit contributions of £37.7m (2019: £41.1m). NERL's share being c75%.

NERL's contributions were higher than the regulator assumed for RP2. To the extent that this was caused by changes in financial market conditions, we expect to recover these through higher prices in RP3 and in subsequent reference periods.

Trustees will undertake their next formal valuation at 31 December 2020.

Net debt and cash flows

	Cash and short-term investments	Borrowings (including lease liabilities)	Net debt
	£m	£m	£m
Balance at 31 March 2019	166.1	(334.9)	(168.8)
Lease liabilities under IFRS 16	-	(68.4)	(68.4)
Cash flow	322.2	(347.0)	(24.8)
Non-cash movements	-	(1.2)	(1.2)
Balance at 31 March 2020	488.3	(751.5)	(263.2)

In order to provide liquidity to mitigate the anticipated reduction in en route revenue receipts following the outbreak of Covid-19, the company drew down £395m of its £400m bank facilities. At 31 March 2020, the balance outstanding on the amortising bond was £293.2m (2019: £336.2m). As a result, at 31 March 2020 the company had borrowings of £751.5m (2019: £334.9m), including IFRS 16 lease liabilities, and held cash and short-term investments of £488.3m (2019: £166.1m). Net debt increased to £263.2m (2019: £168.8m), mainly due to the IFRS 16 lease liabilities.

In August 2020, NERL agreed additional bank facilities of £380m. These facilities are coterminous with the existing bank borrowings, expiring in July 2022. More information is provided in note 18 to the financial statements.

The company generated £211.6m of cash (2019: £277.6m) from its operating activities, which was lower than the previous year. This mainly reflected lower cash receipts from a reduction in the en route unit charge and some increases in operating expenditure payments. Dividends, which were paid in May 2019 and November 2019, were maintained at £57.0m.

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 3 to the financial statements describes critical judgements and key sources of estimation uncertainties and note 21 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 2020, the company had cash of £488.3m and access to undrawn committed bank facilities of £5m until July 2022. In August 2020 the company secured an additional bank facility of £380m also available until July 2022 and which is undrawn at the date of approval of these accounts. Alongside the bank facility, lenders agreed to the waiver of certain financial covenants which would otherwise be tested within the going concern period.

Management have prepared and the directors have reviewed cash flow forecasts covering a period of at least 12 months from the date of approval of these financial statements. The directors have had regard to reasonably possible changes in trading performance as well as severe traffic volume scenarios individually and in combination. These reflect the significant estimation uncertainty as to the timing, rate and extent of recovery in air traffic volumes and the severity of a second wave Covid-19 pandemic, alongside unforeseen costs arising from other principal risks. The directors have also considered, through a reverse stress test, the point at which a financial covenant not currently waived would be breached. The company's cash flow forecasts, taking account of reasonably plausible downside scenarios, show that the company should be able to operate within the level of its available bank facilities and within its financial covenants for the foreseeable future.

Accordingly, the directors have formed the judgement that, taking into account the financial resources available, the range of reasonably possible future traffic volume scenarios and potential mitigating actions that could be taken, together with the duties of the CAA and the Secretary of State for Transport under the Transport Act 2000 to exercise their functions in the manner they think best calculated to secure that NERL will not find it unduly difficult to finance its licenced activities, there is no material uncertainty which may cast significant doubt on the company's ability to continue as a going concern. The directors consider 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.

Alistair Borthwick

Chief Financial Officer

Principal risks and uncertainties

The Board takes the management of risk very seriously, paying particular attention to key risk areas.

The system for the identification, evaluation and management of emerging and principal risks is embedded within the company's management, business planning and reporting processes, accords with the Code, and is aligned with the ISO31000 risk management standard. Detailed risk identification, assessment, and control mapping is carried out at business unit, departmental, and executive levels and is recorded and measured in a structured and controlled enterprise-wide database. NATS' risks are mapped against risk tolerance statements which have been agreed by the Board. Risk update reports are submitted to the NATS Executive team which address changes in risk, risk tolerance, business controls and the progress of mitigating actions associated with NATS' risks. Regular reviews are also carried out by the Audit, Safety and Transformation Committees in accordance with their remits.

Taking into account the work of the Committees, the Board formally reviews emerging and principal risks and the risk management processes and mitigations in place on a six monthly basis. In addition, monthly Executive reports to the Board identify by exception any changes in inherent or residual 'top risks' particularly if the change means a risk falls outside agreed tolerance.

Safety risks remain a priority for the business and as such are considered at every Board meeting in addition to the regular six-month review.

Our risk management framework has identified the key risks that the Board believes are likely to have the most significant potential impact on our business, financial position, results and reputation based on the severity and likelihood of risk exposure and has undertaken a robust assessment of those that would threaten its business model, future performance, solvency or liquidity.

The list below is not intended to be exhaustive and reflects the Board's assessment as at the date of this report. NATS processes categorise risks according to their linkage to strategic objectives. The risks outlined are the most important safety, strategic, operational, transformation and financial risks currently facing the company in seeking to achieve its strategic objectives (other risk categories assessed by the Board are commercial, governance and legal risks). The company focuses on mitigating these risks, although many remain outside of its control – for example changes in regulation, security threats, environmental factors and the impact of longevity and financial markets on pension funding.

These risks, including the impact of Covid-19 and risks to our finances, are reflected in and have been considered in assessing going concern as explained on page 15. Further explanation of the impact of Covid-19 on

specific key risks is also included under those risks in the commentary which follows. An explanation of the estimation uncertainties arising from Covid-19 is included in note 3 of the financial statements.

Safety: the risk of an aircraft accident

A failure of the company's ATM controls that results in an accident in the air or on the ground would significantly impact the company and its reputation. The reputational damage could result in the loss of future contracts and a reduction in revenue. If notice were given by the Secretary of State requiring the company to take action as a result of the accident and it was unable or failed to comply then ultimately this could result in revocation of its licence.

As a provider of a safety-critical service, safety is the company's highest priority. To further embed the existing safety culture across the organisation and to mitigate safety risk, the company maintains a Strategy for the Future Safety of ATM to 2030 and an Implementation Plan. The company 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 to safety risk.

The impact of the COVID19 pandemic has been analysed to understand and manage the hazards. Key issues identified are i) managing the safety of the operation during periods of very low traffic volume by maintaining controller vigilance , ii) managing the skills competency of controllers and engineers to ensure a safe operation as traffic volumes recover and iii) adjusting the operation for traffic patterns and densities which may have changed significantly.

Strategy: political environment and Brexit

The UK government determines the UK's aviation policy, including the framework for the future provision of ATC. In addition, International policy and legislation decision makers also define aviation and ATM-related policies or regulations, which the company is required to follow. These policy decisions directly affect our businesses and changes in policy may affect the company's ability to meet policy requirements. We seek to mitigate this risk by providing independent input to policy studies, lobbying for policy guidance and taking a leadership role where we believe this is required (such as UK airspace policy and airspace modernisation) and responding to industry consultations. For example, we outlined earlier in this report the importance of proceeding with airspace modernisation and the role of ACOG in the broader project management and coordination role of modernising flight paths both in airspace above 7,000 ft and airspace below this level, which remains the responsibility of others to design and deliver. Achieving this will require cross-industry support and the engagement and full support of the UK Government and the CAA. Our ability, and that of the UK, to influence EU developments post Brexit will be curtailed.

Strategy: regulatory settlement

The company's ability to fulfil the safety, capacity. environmental and cost efficiency targets and other obligations of its licence requires a balanced price control settlement from the CAA. Based on CAA's RP3 decision, we could not conceive a viable plan that would deliver the operational service, technology change and airspace modernisation that was needed by the aviation industry with the resources and the risks that the CAA was proposing and did not accept that plan, leading to the referral to the CMA. Accepting the plan and then failing to deliver it would also have significantly damaged the company's reputation and put it at risk of a breach of the licence.

In seeking to mitigate such regulatory risks, the company maintains engagement with CAA at CEO and Board level on a regular basis. The company's regulatory strategy is overseen by a Board committee, and day to day oversight is provided by the CFO.

The financial impact of Covid-19 on the aviation sector has resulted in greater stakeholder attention to the regulatory protections in place for ANSPs. While the CMA's findings improve NERL's position for RP3 from the CAA's decision, its review has been overtaken by Covid-19. This means that the CAA will need to reset the price control by the start of 2023. We are awaiting a CAA policy statement in respect of this reset, which will also require a sufficiently reliable traffic forecast on which to base a reliable plan. NERL will seek to engage proactively with the CAA and stakeholders on the timing and format of that review.

Operational: business continuity

A catastrophic event has the potential to disrupt the ATC operation and its ability to resume a safe service to an acceptable performance level within a pre-defined period. A resilience plan is required by NERL's licence. Resilience is considered for people, operational technical systems and facilities using NATS incident management processes to assess timely and effective responses. The company's resilience policy programme assesses, documents and tests resilience capability in order to prevent and mitigate such disruptions.

The outbreak of Covid-19 is being managed under business continuity incident management procedures. The potential risk of a loss of operational staff at the outset of the pandemic was mitigated initially by the lower traffic volumes, before strict social distancing measures, separate rosters and absence tracking measures could be implemented.

Operational: physical security

The most significant physical security risk is an internal threat which would impact on reputation, operational effectiveness and the wellbeing of the workforce.

The company seeks to mitigate this risk by operating a range of security measures founded on national security vetting of the workforce. The threat is overseen by a steering group which assesses personnel security using

a CPNI model and through developing risk assessments for all roles. Insider issues are included within employee awareness training. During the period of the Covid-19 pandemic site security has been a focus and work has continued with all key emergency services and support agencies.

Operational: systems security

A malicious cyber-attack could affect the integrity, availability or resilience of NERL's operational ATC and business IT systems adversely impacting the provision of a safe and efficient ATC service and resulting in additional regulatory scrutiny.

The company seeks to mitigate the risk through robust security controls, including identity and access management and security patching, staff training, security monitoring and incident management.

The risk has elevated slightly since Covid-19 due to home working and is being managed by raising staff awareness of cyber threats. Close working relationships are maintained between NATS and the UK's security services, including the National Cyber Security Centre to minimise the risk of a damaging cyber attack.

Operational: employee relations

Employee relations if not managed sensitively could have a significant impact on our service performance. Therefore, every effort is made to continue to build and sustain good employee relations, including joint working groups with union representatives as part of an employee relations improvement project.

The impact of Covid-19 on the workforce and the company's financial position has required more dialogue with trades unions on a range of challenging issues, including staff redundancies. These matters have the potential to increase the risk of industrial action. The company continues to maintain close dialogue with unions representatives through the Working Together approach.

Transformation: schedule delivery

The complex deployment of new DSESAR technology and retirement of legacy systems could affect our ability to maintain service levels during transition and require additional costs to sustain legacy systems and support deployment during this period.

We maintain good programme governance and risk management processes overseen by the executive, the Transformation Review Committee and the Board. We have adopted industry best practice, by using a Portfolio, Programme and Project (P3O) approach to our RP3 portfolio.

As noted in the Chief Executive's review, we responded to the impact of Covid-19 on the company's liquidity and the likely future capacity requirements of airline customers by suspending all but critical sustainment capital investment for a six-month period. The scope of the capital programme and associated risks is subject to ongoing review and is likely to lead to a lower rate of investment than planned pre-Covid.

Financial: defined benefit pension scheme

Adverse movements in the value of scheme assets and liabilities arising from factors such as lower investment returns, lower real interest rates and improving life expectancy may increase the size of the funding deficit and result in significant contributions to fund pension benefits. The Trustees will determine the funding position at their next formal valuation as at 31 December 2020, reflecting market conditions then.

The scheme was closed to new entrants in 2009, pensionable pay rises are capped through an agreement with our trades unions and future service benefits are linked to the Consumer Prices Index. NATS regularly reviews the scheme's funding position and is consulted by Trustees on the design of risk reduction strategies. Also, subject to regulatory review, NERL is able to recover increases in contributions from changes in unforeseen financial market conditions. The directors monitor the funding position of the scheme. NERL's financing arrangements and cash reserves, its projected operating cash flows and mechanisms within the established economic regulatory framework for recovery of such costs enable the company to meet the contributions required.

Financial: other 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 21.

Our stakeholders	Why are they important to us?	How do we engage and have regard to their views in our decisions?
CUSTOMERS	A safe ATC service is an essential given for customers in the aviation industry to whom we provide our services and expertise, and the travelling public. Their requirements are key drivers of our business plan, defining demand for the ATC network, our staffing and capital investment.	We consult airspace users on their priorities and our plans before each reference period and bi-annually on our service performance, capital investment and our charges. Generally, we have good alignment on many of their priorities, but they do not always agree with our plans and we reflect on this and refine our plans accordingly. We have engaged since Covid-19, deferring settlement of charges, reducing cost, reassessing capital investment and preserving liquidity.
WORKFORCE	Our ATC service and infrastructure depends on the skill and professionalism of our workforce. They make a critical difference to our success, and our investment in them protects and strengthens our safety and business culture. Most of our employees are members of trades unions.	Through our Working Together partnership we have an open dialogue with trades unions. We receive feedback on pay and benefits, a safe and healthy working environment, flexible working, talent development and career opportunities, and a diverse and inclusive culture. We operate a Just Safety culture, enabling staff to raise safety matters and the company maintains a whistleblowing facility. Every few years we conduct an employee opinion survey. In the last year, and since Covid-19, the Board has increased its focus on mental health and wellbeing, as well as workforce diversity.
REGULATORS:	Our regulators ensure we provide our service and develop our infrastructure in accordance with our ATC licence and international safety standards. Ensuring we fulfil our licence obligations and develop the business for the long-term ensures the success of the company for all our stakeholders.	The CAA consults stakeholders as our economic regulator on our price control before each new control period before determining the prices, safety, service performance and capital investment targets and incentives. This year the Board did not agree with the CAA's decision for RP3, leading to a referral to the CMA. The CAA's safety regulator oversees the safety integrity of our training, operational processes and technical systems and we receive recommendations on improvements, which we implement to ensure safety standards are met. The CAA approves changes to airspace design over the UK by reference to legal requirements including safety, environment and user need.
GOVERNMENT	The government sets UK Aviation Strategy which provides a long-term vision for the industry and a framework for future ATC provision.	The Chief Executive maintains a regular dialogue with the Department for Transport. The government engages on matters of aviation policy that affects NERL, including airspace modernisation, and (subject to Brexit) the UK's input to the EC's SES performance scheme.
SHAREHOLDERS	We are a wholly owned subsidiary within the NATS group. Our decisions have regard to the group's ultimate shareholders as well as the parent company. These parties provide equity investment which finances our activities and enables us to invest in our ATC service and infrastructure, for which it expects a return.	The Board meets with the group's ultimate shareholders twice a year, including the Annual General Meeting. The NATS Strategic Partnership Agreement enables shareholders to appoint representatives to the Board. Shareholders wish to see remuneration policies which drive executive management to deliver strong sustainable performance aligned with the interests of key stakeholders.
COMMUNITIES AND ENVIRONMENT	Local communities around airports expect the aviation sector to pay attention to aircraft noise and CO_2 emissions. Our ATC service can help mitigate some environmental impacts. We are a significant employer where our UK operations are based. Society expects improvements in sustainability, and we are committed to net zero greenhouse gas emissions from our estate by 2050.	Airspace changes must follow the CAA's guidance on public consultation of airspace use, aircraft movements and environmental impacts. Communities generally identify noise, tranquillity, fuel emissions, local air quality and other quality of life concerns. We work with communities affected by flights below 7,000ft at an early stage of any change, to ensure they have a voice in airspace design. Changes mean some communities may be subject to more overflights than previously, while others are no longer overflown. Following consultation, we appraise design options before making our recommendation to the CAA.
LENDERS	Our lenders provide debt finance that we repay over time and compensate by way of a commercial return. Access to debt finance is necessary to fund our business activities efficiently.	We meet with lenders at least annually to discuss our performance, business plan and capital investment. Lenders wish to understand the robustness of the company's financial strength over the long-term and the principal risks it faces. The importance of these relationships has been demonstrated by the need and ability to raise significant additional finance as a result of Covid-19.
SUPPLIERS	Our suppliers provide goods and services to maintain and develop our operation. Working closely with them minimises risk and combines our expertise to develop innovative ATC solutions.	Our supply chain management approach involves regular and on-going engagement with suppliers for procurement. In addition, we engage on joint projects, hold supplier conferences and supplier workshops. Our joint interests are an open and constructive relationship based on fair terms, good contractual performance and high standards of business conduct.

Having regard to our stakeholders in Board decision-making

Section 172 (1) statement

The directors act in a way that they consider, in good faith, to be most likely to promote the success of the company for the benefit of its parent company and its members as a whole, and in doing so have regard, to the long-term success of the business, the way we work with a large number of important stakeholders, and the importance of maintaining high standards of business conduct and have regard to the impact of the company's operations on the community and the environment.

The Board takes account of the views and interests of a wide range of stakeholders, when making its decisions, and balances different stakeholder perspectives. Inevitably it is not possible to achieve outcomes which meet the interests of all stakeholders.

How our Board and its committees operate, and the way decisions are reached, including the matters discussed during the year, are set out in the Governance section on pages 24 to 30. Set out below are two examples which illustrate how the directors had regard to section 172(1).

The Board's consideration of the CAA's decision for RP3

In 2018 NERL developed a business plan for RP3 after extensive consultation with airline customers and other stakeholders. The Board considered this achieved a balanced set of safety and service outcomes and provided the financial resources to deliver a safe and efficient service day to day while enabling essential investment in ATC systems and airspace modernisation to meet the forecast growth in air traffic volumes. Following its consultation on NERL's plan, the CAA's decision in August 2019 provided revenue allowances for RP3 which were £200 million (2017 CPI prices) less and set more challenging targets and more rigid governance. After very careful consideration, the Board did not accept the CAA's decision as it did not consider this to be in the wider public interest and accepting the plan and then failing to deliver it would damage the company's reputation and risk a breach of licence.

In making its decision, the Board considered that CAA's determination for RP3 would:

- exacerbate the challenge of achieving the requisite safety levels within the complex operating environment anticipated during RP3, to the detriment of a range of stakeholders;
- not enable the staffing and investment to deliver the technology change and airspace modernisation to meet the growth in air traffic volumes from airline and airport customers; reduce the environmental impact of aviation on communities; meet Government aviation policy objectives; and maintain high standards of operational resilience and performance for the flying public;
- adversely affect service quality, innovation and flexibility and NERL would not be able to meet the technology change milestones, leading to service penalties;
- not enable the technological improvements envisaged by NERL for the Oceanic service necessary to deliver safety, technological and operational benefits for airline customers;
- not provide shareholders with a rate of return that adequately reflects the cost of capital for an efficient air navigation service provider over the RP3 period;
- impose a disproportionate regulatory burden through new governance incentives which are neither necessary, justified or likely to deliver better outcomes.

The company has a consistent track record of delivering excellent service and reducing prices to customers, while always maintaining our focus on safety. With this deep understanding of our capabilities the Board concluded that the interests of its stakeholders would best be served by making the case to the CMA.

The Board's engagement with stakeholders during Covid-19

Following the outbreak of Covid-19, the Board established a committee to oversee the company's response. This committee has received updates and monitors measures taken to protect the company's workforce and ensure ATC service resilience and reviewed scenarios of air traffic volumes, liquidity projections and options for financing, cost saving actions and risks. The committee also considered the future economic regulatory framework.

As air traffic control is a critical part of the UK's national infrastructure, and the scale of impact of Covid-19 on the aviation sector, the company and the Board have engaged with a broad range of stakeholders though this crisis and provided updates on the matters set out above:

Workforce: since the crisis the safety and wellbeing of staff has been the company's priority. This has required changes to operational working practices, home working, a focus on wellbeing and regular communications on business developments. Critical facilities were identified for safety, hygiene and maintenance activities including control rooms and airport towers, engineering systems and key sites including data centres, radars, masts and towers. Consultations have taken place with trades unions on staff furloughing, pay and benefits, and voluntary redundancy;

Customers: have been briefed on the measures to ensure ATC service safety and resilience, the suspension of capital investment and actions to reduce the cost base. To support customers, the company deferred the settlement of charges and has passed on cost savings to airport customers. Feedback was received on the industry's views on the outlook for air traffic volumes;

Shareholders: the Board met with shareholders twice in the year and in July 2020. The Chairman wrote to shareholders at the outset of Covid-19 and the Board has provided more granular reports and forward-looking information to the strategic partners (see governance framework);

Lenders: regular engagement since the outset on the impact and actions being taken. Lenders provided liquidity through the existing bond, £400m bank facility and, since the year end, a new £380m bank loan.

Pension trustees: agreed to a short period of deferral of contributions to support liquidity. Trustees have been updated on the liquidity challenge and new funding to inform their assessment of the financial strength of the company to meet pension obligations.

The CAA and the Department for Transport: sought assurances on the safety and resilience of the ATC service, the ability to support repatriation and cargo flights and feedback on proposals to redetermine the RP3 settlement and Eurocontrol's funding proposal for air navigation service providers. We engaged in dialogue to understand the scope and availability of government sponsored finance.

Suppliers: the company has worked closely with suppliers to understand the resilience of the supply chain and support for the company's critical facilities and capital programme. Suppliers have supported measures to improve the company's working capital.

The Strategic report was approved by the Board of directors on 22 October 2020 and signed by order of the Board by:

Richard Churchill Coleman,

Secretary

Governance framework

Introduction

NERL was formed as part of the NATS group's Public Private Partnership in December 2001. A key element of the NATS group's governance structure is the Strategic Partnership Agreement (SPA) between its main shareholders: the Secretary of State for Transport; The Airline Group Limited (AG); and LHR Airports Limited (LHRA)

The SPA sets out the relative responsibilities of the signatories and, in particular, requires the group and its directors to adhere to the UK Corporate Governance Code so far as reasonably practicable and save to the extent inconsistent with the other provisions of the SPA (see below).

The Board and Directors

Ultimate responsibility for the governance of NERL rests with the Board of NATS Holdings (NHL), which provides strategic direction and leadership and is responsible for ensuring that the NATS group is run safely, efficiently, effectively and legally, with appropriate internal controls to safeguard shareholders' investment and group assets, ensuring it delivers value to shareholders and fulfils its wider role as a provider of critical national infrastructure. For this reason the NERL Board adheres to the UK Corporate Governance Code.

NERL's Board plays an important leadership role in promoting the desired culture of the organisation. Through governance activities in the year it monitored and provided input to the key aspects of culture including:

- the highest governance and ethical standards reflecting the aspirations of the PPP;
- a prominent safety culture through 'Just Culture' reflecting the company's purpose of advancing aviation and keeping the skies safe;
- consultation with customers on service performance, capital investment and plans for RP3;
- a cost efficient, service oriented and commercially smart organisation, requiring best in class performance of its workforce and partners; and
- diversity and inclusion and fair treatment of its workforce, valuing the contributions of Trades Unions.

As at the date of approval of the accounts, the NERL Board comprised 12 directors, as follows:

Executive Directors

- Chief Executive Officer (CEO); and
- Chief Financial Officer (CFO).

Non-Executive Directors

- a Chair, appointed by AG, subject to the prior approval of the Crown Shareholder;
- five directors appointed by AG;
- three Partnership directors, appointed by the Crown Shareholder; and
- one director appointed by LHRA.

Changes to the Directors

From 1 April 2019 to the date of approval of the accounts, the changes to the directors were:

Executive Directors	
Nigel Fotherby	Resigned 30 June 2019
Alistair Borthwick	Appointed 3 October 2019

Access to legal and professional advice

All directors have access to the advice and services of the Legal Director, Richard Churchill-Coleman. If necessary, in furtherance of their duties, directors

may take independent professional advice at the group's expense.

Board meetings

The NATS group has nested board meetings with NERL Board meetings taking place as part of the NHL meetings. The NERL Board routinely meets seven times per year in January, March, May, June, July, September and November, and supplements these scheduled meetings with additional meetings as business priorities require. Reports and papers are circulated to Board members in a timely manner in preparation for meetings, and this information is supplemented by any information specifically requested by directors from time to time. The directors also receive monthly management reports and information to enable them to review the company's performance.

Compliance with the UK Corporate Governance Code

NERL is committed to maintaining the highest standards of corporate governance. The company applied the principles of the Corporate Governance Code 2018 from 1 April 2019, to the extent considered appropriate by the Board. A number of the principles and provisions in the Code are not relevant to the partnership nature of NATS' ultimate ownership structure and the principal areas where the company did not comply are summarised below.

Provision 9: Independence of the Chair

The Chair is nominated by AG, his appointment being subsequently approved by the Secretary of State for Transport. He therefore does not fully meet the independence criteria as set out in the Code and this affects NERL's compliance with a number of the Code's provisions.

Provisions 11 and 12: Independence of Directors and appointment of Senior Independent Director

The arrangements for appointing non-executive directors, as set out in the SPA, are such that none of the directors meet the Code's criteria for independence. This affects NERL's ability to comply with a number of the Code's provisions, including the requirement to appoint a senior independent director.

Provision 39: Notice or contract periods for non-executive directors

The AG nominee directors and Partnership directors do not have service contracts with NERL. The Partnership directors are typically engaged on three-year fixed-term contracts and have letters of appointment from the DfT. Currently Richard Keys and Maria Antoniou have letters extending their appointments to 31 May 2021. The Chair has a service contract with NHL, details of which are set out in the Remuneration Committee report of NHL's Annual Report and Accounts.

Provision 18: Re-election of directors

The non-executive directors are appointed by the NATS group's ultimate shareholders and are therefore subject to the relevant shareholder's selection processes, rather than those included in the provisions of the Code. They are therefore not subject to annual re-election as stipulated by Provision 18, although Partnership directors are appointed by the Government on three-year fixed-term contracts. The tenure of non-executive directors at 31 March 2020 was as follows:

Name	Date of appointment	Years of service to 31/3/20
Paul Golby	1/4/16	3 years 11 months
Maria Antoniou	1/8/16	3 years 8 months
Harry Bush	1/4/16	3 years 11 months
Mike Campbell	26/5/17	2 years 10 months

Name	Date of appointment	Years of service to 31/3/20
Richard Keys	1/4/16	3 years 11 months
Kathryn Leahy	31/5/18	1 year 10 months
Hugh McConnellogue	4/10/18	1 year 6 months
Iain McNicoll	1/4/16	3 years 11 months
Gavin Merchant	1/4/16	3 years 11 months
Louise Street	29/11/18	1 year 4 months

The company is mindful of the Code principle that the board and its committees should have a combination of skills, experience and knowledge, with consideration of the length of service of the board as a whole and its membership and of the provision relating to the nine year tenure of the Chair.

Provision 3: Engagement with major shareholders

Within the PPP structure NERL is a wholly owned subsidiary of NATS Limited which is in turn a wholly owned subsidiary of NHL. There are no institutional or public shareholders. However, the nature of the SPA is such that the shareholders have representatives amongst the directors with whom they enjoy a close working relationship. All non-executive directors are invited to relay the views of their respective shareholders into Board discussions. The Board is therefore able to take decisions in the best interests of the company and wider NATS group, having taken account of the views of the shareholders. The Chair also has regular discussions with shareholders in addition to the formal shareholder meetings

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 2020.

The Governance report is set out on pages 24 to 26 and forms part of this report.

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 21 to the financial statements.

Dividends

The company paid interim dividends of £29.0m (£2.90 per share) and £28.0m (£2.90 per share) during the year, totalling £57.0m (2019: £57.0m). The Board recommends a final dividend for the year of £nil (2018: £nil).

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

Alistair Borthwick (appointed 3 October 2019)

Dr Harry Bush CB

Michael Campbell

Nigel Fotherby (resigned 30 June 2019)

Dr Paul Golby CBE

Richard Keys

Kathryn Leahy

Hugh McConnellogue

Iain McNicoll CB CBE

Gavin Merchant

Martin Rolfe

Louise Street

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 employees are held by the company's parent company, NATS Limited. The directors are committed to the involvement of employees in the decision-making process through effective leadership at all levels in the organisation, including engagement with the Board through a designated non-executive director. Maria Antoniou is the designated non-executive director for workforce engagement with the Board. Employees are frequently involved through direct discussions with their managers, cross company working groups and local committees. Regular employee consultations cover a range of topics affecting the workforce, including such matters as corporate performance

and business plans. The directors encourage the involvement of employees in the company's performance through the All-Employee Share Ownership Plan. Following the outbreak of Covid-19, the directors had regard to the health and well-being of employees and consulted on and implemented adjustments to the working environment, including social distancing measures and home working, to protect the workforce and the company's operation. The NATS CEO maintains high visibility with employees through visits to NATS sites where he talks to them about current business issues and takes questions in an open and straightforward manner. As a result of coronavirus travel restrictions, the NATS CEO and the Executive team provided regular updates to staff through the company's internal media. Such actions enable employees to achieve a common awareness of those factors affecting the performance of the company. 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 with the Trades Unions. Formal arrangements for consultation with employees 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.

The company 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.

The company 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 employees, including any individuals who become disabled, bearing in mind their particular aptitudes and abilities and the need to maintain a safe working environment.

The company strives to maintain the health, safety and wellbeing 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 Safety Director.

Business relationships

We explain on pages 21 to 23 how the directors have had regard to the need to foster the company's business relationships with suppliers,

customers and other stakeholders, and the effect of that regard, including on principal decisions taken during the financial year.

Going concern and subsequent events

The directors' assessment of going concern is explained in the Financial review section of this report. Subsequent events are disclosed in note 33 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 (EU). 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 relating to the company which is

included on the NATS group'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 IFRS 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.

Auditor

At the meeting to approve the financial statements, the Board resolved to re-appoint BDO LLP as statutory auditor.

Approved by the Board of directors and signed by order of the Board by:

Richard Churchill-Coleman

Secretary

22 October 2020

Registered office

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

Registered in England and Wales

Company Number: 04129273

Opinion

We have audited the financial statements of NATS (En route) plc (the 'Company') for the year ended 31 March 2020 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 to the financial statements, including a summary of significant accounting policies. 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.

In our opinion the financial statements:

- give a true and fair view of the state of the Company's affairs as at 31 March 2020 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 preparing financial statements in accordance with IFRSs as adopted by the European Union, has also applied IFRSs as issued by the International Accounting Standards Board (IASB).

In our opinion, the financial statements give a true and fair view of the financial position of the Company as at 31 March 2020 and of its financial performance and cash flows for the year then ended in accordance with IFRSs as issued by the IASB.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Conclusions relating to going concern

We have nothing to report in respect of the following matters in relation to which the ISAs (UK) require us to report to you where:

- the Directors' use of the going concern basis of accounting in the preparation of the financial statements is not appropriate; or
- the Directors have not disclosed in the financial statements any identified material uncertainties that may cast significant doubt about the Company's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the financial statements are authorised for issue.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team.

Key audit matter	How we addressed the key audit matter in the audit
Carrying value of goodwill In accordance with the Company's accounting policies, management has undertaken an impairment review of the carrying value of goodwill by comparison with the recoverable amount. This has resulted in a £49m impairment due to the impact of Covid-19 at the balance sheet date. As detailed on pages 53 and 54, the premium applied to the regulatory asset base (RAB) in determining the Fair Value Less Costs of Disposal at 31 March 2020 was assessed by management to be 0% (31 March 2019: 5-6%). Management disclose there is significant estimation uncertainty in respect of that judgement assumption due to the impact of Covid-19.	We have obtained and tested management's current assessment of the carrying amount of goodwill. We have reviewed, with the assistance of our valuation specialists, the impairment review methodology. In accordance with IAS 36, the carrying value of goodwill is based on Fair Value Less Costs of Disposal (FVLCD), being higher than Value In Use (VIU). We tested the FVLCD by agreeing the underlying RAB value to the carrying value of the RAB at 31 March 2020. We reviewed the comparison with VIU given the lack of alternative observable market data. We also ensured that costs to dispose were appropriately deducted in the FVLCD calculation. We considered and challenged the reasonableness of management's alternative VIU scenarios, which included varying traffic forecast assumptions. These scenarios gave a range of values which assisted management in determining that a recoverable amount based on FVLCD, using a 0% RAB premium, was an appropriate estimate. We reviewed this judgement and confirmed that it was appropriate and in accordance with IFRS 13. We checked the integrity of the underlying calculations for the FVLCD and VIU scenarios and agreed these to the underlying models.

Key audit matter	How we addressed the key audit matter in the audit
	Key observations We consider the disclosures in the financial statements relating to goodwill, including the critical judgements and estimates, are in line with accounting standards.
Going concern The Covid-19 pandemic has had a significant impact on air traffic and the Company's operations. This is a new risk. There has been a significant impact on the UK economy and the demand for air travel, and therefore the demand for the Company's air traffic control services. Refer to the Directors' Going Concern statement on page 15 and the judgement arising from COVID-19 in note 3 on page 52 of the financial statements. The Company's financial statements are prepared on the going concern basis of accounting.	We have assessed the going concern assumption adopted by the Directors and obtained and reviewed management's forecast cash flows and covenant calculations covering the review period from the date of signing to at least 12 months from the date of approval of the financial statements. We obtained and reviewed management's reverse stress testing on forecasts to understand how severe downside scenarios would have to be to result in the elimination of liquidity headroom or a covenant breach, and have considered management's assessment of the likelihood of such circumstances arising in determining their conclusion related to going concern. We performed a detailed review of all the borrowing facilities to assess their continued availability to the Company and to ensure completeness of covenants identified by management. We reviewed the accuracy of management's financial model by testing the mechanical accuracy of forecasts, assessing the historical forecasting accuracy and assessed management's future air traffic assumptions by comparing these to third party forecasts and actual air traffic data from April 2020 through to September 2020. We reviewed management's assessment of controllable mitigations available to the Company to reduce cash flow spend in the going concern period in order to determine whether such mitigations are realistic. We considered the adequacy of the disclosures in the financial statements against the requirements of the accounting standards. Key observations Our key observations are set out in the Conclusions relating to going concern section of our audit report.
Pension scheme actuarial valuation The Company's parent Company NATS Limited operates a defined benefit pension scheme, which is accounted for in accordance with IAS 19 'Employee Benefits' which requires complex calculations and disclosures. The Company participates in the scheme and accounts for its share of the assets and liabilities in its financial statements. As detailed on page 55 and in note 29 management make a number of judgements and actuarial assumptions, with assistance from their actuary. These have a significant impact on the valuation of pension scheme assets and liabilities and on the amounts shown in the income statement and the statement of comprehensive income. The scheme assets included £181.0m of property assets relating to the Company at the balance sheet date. As a result of the impact of COVID-19 at the balance sheet date the third party property asset manager reported a material valuation uncertainty in respect of this valuation. This represents a significant estimation uncertainty in relation to the valuation of pension scheme property assets.	We have reviewed the accounting treatment of the defined benefit pension scheme and considered this in light of the pension assumptions made ensuring that they are in accordance with IAS 19. We have worked with our pension experts to assess the validity of assumptions applied, in particular discount rates, inflation rates and mortality assumptions and performed a detailed review of the scheme actuary's annual valuation report. In addition, we agreed a sample of member information to source data to ensure it was accurate. We have performed audit procedures in order to substantiate the value of the scheme assets. This included selecting a sample of investments held at the balance sheet date and comparing their value to third party asset confirmations, statements and, in the case of property assets, an independent property valuation. We assessed the adequacy of the disclosures within note 29 to the financial statements to ensure these are in line with IAS 19. We considered the adequacy of the disclosures made in *Note 2 - Basis of preparation and accounting policies*. This note explains that the valuer reported on the basis of a material valuation uncertainty and consequently that less certainty and a higher degree of caution should be attached to the pension scheme property valuations as at 31 March 2020. We discussed this clause with management and our own property experts and obtained sufficient appropriate audit evidence to demonstrate that management's assessment of the suitability of the inclusion of the valuation in the balance sheet and disclosures made in the financial statements are appropriate.

Key audit matter	How we addressed the key audit matter in the audit
	Key observations We consider the pension scheme accounting treatment and disclosures, including the critical judgements and estimates, are in line with accounting standards.
Revenue recognition and recoverability of regulatory assets As detailed on page 55 and 56, in determining airspace revenues recognised, management makes key judgements about the recognition of licence fee revenue and material revenue allowances that are recoverable or payable in subsequent accounting periods in respect of regulatory assets and liabilities.	We have reviewed the airspace revenue stream to ensure that it is accounted for in accordance with IFRS 15. We have completed a test in total on revenue, corroborating each of the underlying revenue streams to supporting contract documentation, to ensure that the revenue is recognised in line with the Company policy. In the case of airspace revenue, we ensured that it is being accounted for in line with the provisions of the air traffic services licence, the regulatory charging mechanisms for the reference period, the RP2 settlement and RP3 requirements. We have considered the regulatory amounts recoverable and payable as revenue allowances under the EC Charging Regulation. We did this by assessing when the net regulatory payable at 31 March 2020 amount would be paid or recovered. We confirmed that any recoverable amounts will be offset in full by regulatory amounts payable. We also considered and challenged management over the basis for recognising licence revenue in the period when UK air traffic volumes fell below normal operating levels due to the impact of COVID-19. We confirmed that this revenue was recognised in accordance with IFRS 15. Key observations We consider management's judgements in respect of the accounting treatment of revenue allowances to be appropriate and the disclosures within the financial statements to be in line with accounting standards.
Capital investment programme: As detailed on page 56 and in notes 14 and 15 the Company invests significant sums in the sustainment and development of air traffic control infrastructure. A substantial proportion of the costs incurred are the amounts charged by staff employed by the Company which are capitalised to specific projects. A key judgement is that either time is not appropriately capitalised or the quantum of the labour rate used could be misstated. In addition, management makes judgements around the useful economic lives of currently deployed systems, assesses indicators of impairment and considers feasibility.	We have met and discussed with project managers outside of the Company finance team in order to gain an understanding of the capital projects, and assessed them for impairment factors. We have tested a sample of capitalised projects which included testing the appropriateness of the labour rates being used and the amount of labour time being capitalised per project to supporting payroll information. By comparing useful economic lives to prior years and our own expectations and challenging project managers to assess performance to date and expected out turn we have assessed management's judgement of the useful economic lives of currently deployed systems to ensure that the position taken is reasonable. We have considered management's assessment of any indicators of impairment for a sample of current capital projects carried forward as either tangible or intangible fixed assets. We ensured that a detailed project by project review had been completed and that the review process was appropriately documented. In addition, we have agreed a sample of externally generated assets to supporting documentation to test existence and that costs are materially accurate. Key observations We consider the judgements made by management in respect of the capital investment programme to be appropriate.

Our application of materiality	We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements. We consider materiality to be the magnitude by which misstatements, including omissions, could influence the economic decisions of reasonable users that are taken on the basis of the financial statements. Importantly, misstatements below these levels will not necessarily be evaluated as immaterial as we also take account of the nature of identified misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements as a whole. The materiality we applied to the Company equates to 5% of profit before tax and goodwill impairment (2019: 5% of profit before tax). We consider profit before tax and goodwill impairment to be the most significant determinant of the Company's financial performance used by shareholders. Materiality for the financial statements as a whole was £3.6 million (2019: £4.3 million). Performance materiality is set at a level lower than materiality, which was 75% of Company materiality totalling £2.8m (2019: £3.2m). In setting the level of performance materiality, we considered a number of factors including the expected total value of known and likely misstatements (based on past experience and other factors) and management's attitude towards proposed adjustments. Performance materiality is set to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements in the financial statements exceeds materiality for the financial statements as a whole. We agreed with the Audit committee that we would report to them all individual audit differences identified during the course of our audit above clearly trivial, which for significant components was in excess of £72,000 (2019: £86,000). We also agreed to report differences below that threshold that, in our view, warranted reporting on qualitative grounds.
An overview of the scope of our audit	Our Company audit was scoped by obtaining an understanding of the Company and its environment, including the Company's system of internal control, and assessing the risks of material misstatement in the financial statements. There has been no significant change in the Company's operations, other than the significant impact as result of COVID-19, therefore the assessed risks of material misstatement described above, which are those that had the greatest effect on the audit strategy, the allocation of resources in the audit and directing the efforts of the audit team, are the same risks as in the prior year with the addition of going concern. The audit was principally performed in the UK and remotely in light of Covid-19, with people from the Scottish Accounting Unit, Edinburgh, and Corporate Technical Centre, Whiteley. *Extent to which the audit is capable of detecting irregularities, including fraud* We also gained an understanding of the legal and regulatory framework applicable to the Company and the industry in which it operates, and considered the risk of acts by the Company that were contrary to applicable laws and regulations, including fraud. We designed audit procedures to respond to the risk, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion. We focussed on laws and regulations that could give rise to a material misstatement in the financial statements, including, but not limited to the Companies Act 2006, tax legislation, the licence granted under the Transport Act 2000 and economic regulation regulated by the CAA. Our tests included agreeing the financial statement disclosures to underlying supporting documentation, enquiries with management, enquiries of those charged with governance and a review of board meeting minutes from throughout the period and post year end. There are inherent limitations in the audit procedures described above and, the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. We did not identify any key audit matters relating to irregularities, including fraud. As in all of our audits, we also addressed the risk of management override of internal controls, including testing journals and evaluating whether there was evidence of bias by the Directors that represented a risk of material misstatement due to fraud.
Other information	The Directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Opinions 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 the 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 the 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 misstatements in the Strategic report or the Report of the Directors. We have nothing to report in respect of the following matters in relation to which 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.
Responsibilities of Directors	As explained more fully in the Directors' responsibilities statement, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error. In preparing the financial statements, the Directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.
Auditor's responsibilities for the audit of the financial statements	Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.
Other matters	Following the recommendation of the Audit committee in 2014, we were appointed to audit the financial statements for the year ending 31 March 2015 and subsequent financial periods. The period of total uninterrupted engagement is six years, covering the years ended 31 March 2015 to 31 March 2020. The non-audit services prohibited by the FRC's Ethical Standard were not provided to the Company and we remain independent of the Company in conducting our audit. Our audit opinion is consistent with the additional report to the Audit committee.
Use of our report	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.

Christopher Pooles (senior statutory auditor)
For and on behalf of BDO LLP, statutory auditor
Reading
United Kingdom
22 October 2020

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

Income statement
for the year ended 31 March

	Note	2020 £m	2019 £m
Revenue	4	736.7	733.0
Staff costs	7	(345.0)	(332.9)
Services and materials		(46.2)	(47.2)
Repairs and maintenance		(38.7)	(40.9)
Depreciation, amortisation and impairment of property, plant, equipment, intangible and right-of-use	6	(125.7)	(138.0)
Goodwill impairment	3, 6, 13	(49.0)	-
Change in expected credit losses	17	(16.8)	-
Other operating charges		(68.4)	(68.5)
Other operating income		3.5	6.0
Profit on disposal of non-current assets		0.2	-
Deferred grants released	6	0.2	0.3
Net operating costs		(685.9)	(621.2)
Operating profit	6	50.8	111.8
Investment income	8	2.4	2.6
Fair value movement on derivative contract	9	2.1	(3.0)
Finance costs	10	(26.4)	(25.4)
Profit before tax		28.9	86.0
Tax	11	(25.4)	(14.2)
Profit for the year attributable to equity shareholders		3.5	71.8

Statement of comprehensive income
for the year ended 31 March

	Notes	2020 £m	2019 £m
Profit for the year after tax		3.5	71.8
Items that will not be reclassified subsequently to profit and loss:			
Actuarial gain/(loss) on defined benefit pension scheme	29	169.9	(125.6)
Deferred tax relating to actuarial gain/(loss) on defined benefit pension scheme	24	(32.0)	21.9
Items that may be reclassified subsequently to profit and loss:			
Change in fair value of hedging derivatives		0.8	0.2
Transfer to income statement on cash flow hedges		3.7	(0.9)
Deferred tax relating to items that may be reclassified	24	(0.9)	0.2
Other comprehensive income/(loss) for the year, net of tax		141.5	(104.2)
Total comprehensive income/(loss) for the year attributable to equity shareholders		145.0	(32.4)

IFRS 16 was adopted on 1 April 2019 for statutory reporting without restating prior year figures. As a result, the primary financial statements are shown on an IFRS 16 basis for the year ended 31 March 2020 and on an IAS 17 basis for the year ended 31 March 2019. Further details are provided in note 32.

Balance sheet
at 31 March

	Notes	2020 £m	2019 £m
Non-current assets			
Goodwill	13	149.3	198.3
Other intangible assets	14	608.3	564.8
Property, plant and equipment	15	464.1	479.6
Right-of-use assets	16	56.4	-
Retirement benefit asset	29	173.3	-
Trade and other receivables	17	14.1	21.6
Derivative financial instruments	20	3.9	1.7
		1,469.4	1,266.0
Current assets			
Trade and other receivables	17	96.0	116.7
Current tax assets		3.1	-
Short term investments	21	37.3	36.4
Cash and cash equivalents	21	451.0	129.7
Derivative financial instruments	20	4.1	2.5
		591.5	285.3
Total assets		2,060.9	1,551.3
Current liabilities			
Trade and other payables	22	(175.7)	(223.2)
Borrowings	18	(40.9)	(42.7)
Lease liabilities	19	(5.8)	-
Provisions	23	(2.0)	(0.8)
Derivative financial instruments	20	(19.1)	(13.6)
		(243.5)	(280.3)
Net current assets		348.0	5.0
Non-current liabilities			
Trade and other payables	22	(184.6)	(162.9)
Borrowings	18	(645.3)	(292.2)
Lease liabilities	19	(59.5)	-
Retirement benefit obligations	29	-	(16.5)
Deferred tax liability	24	(156.4)	(99.9)
Provisions	23	(6.8)	(6.0)
Derivative financial instruments	20	(93.6)	(110.3)
		(1,146.2)	(687.8)
Total liabilities		(1,389.7)	(968.1)
Net assets		671.2	583.2
Equity			
Called up share capital	25	10.0	10.0
Hedge reserve		4.1	0.5
Special reserve		34.9	34.9
Other reserves		8.4	9.4
Retained earnings		613.8	528.4
Total equity		671.2	583.2

IFRS 16 was adopted on 1 April 2019 for statutory reporting without restating prior year figures. As a result, the primary financial statements are shown on an IFRS 16 basis at 31 March 2020 and on an IAS 17 basis at 31 March 2019. Further details are provided in note 32.

The financial statements (Company No. 04129273) were approved by the Board of directors and authorised for issue on 22 October 2020 and signed on its behalf by:

Martin Rolfe
Chief Executive

Alistair Borthwick
Chief Financial Officer

Statement of changes in equity
for the year ended 31 March

	Equity attributable to equity holders of the company					
	Share capital £m	Hedge reserve £m	Special reserve[1] £m	Other reserves[1] £m	Retained earnings £m	Total £m
At 1 April 2018	10.0	1.0	34.9	10.5	616.2	672.6
Profit for the year	-	-	-	-	71.8	71.8
Other comprehensive loss for the year	-	(0.5)	-	(1.1)	(102.6)	(104.2)
Total comprehensive loss for the year	-	(0.5)	-	(1.1)	(30.8)	(32.4)
Dividends paid	-	-	-	-	(57.0)	(57.0)
At 31 March 2019	10.0	0.5	34.9	9.4	528.4	583.2
At 1 April 2019	10.0	0.5	34.9	9.4	528.4	583.2
Profit for the year	-	-	-	-	3.5	3.5
Other comprehensive income/(loss) for the year	-	3.6	-	(1.0)	138.9	141.5
Total comprehensive income/(loss) for the year	-	3.6	-	(1.0)	142.4	145.0
Dividends paid	-	-	-	-	(57.0)	(57.0)
At 31 March 2020	10.0	4.1	34.9	8.4	613.8	671.2

[1] 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	2020 £m	2019 £m
Net cash from operating activities	26	211.6	277.6
Cash flows from investing activities			
Interest received on short term investments		1.2	1.3
Purchase of property, plant and equipment and other intangible assets		(148.0)	(151.6)
Proceeds of disposal of property, plant and equipment		0.3	-
Changes in short term investments		(0.9)	1.9
Net cash outflow from investing activities		(147.4)	(148.4)
Cash flows from financing activities			
Interest paid		(18.6)	(20.6)
Interest received on derivative financial instruments		(0.5)	(0.2)
Repayment of bond principal		(43.2)	(45.2)
Bank loan drawdown		395.0	-
Repayment of intercompany loan		-	(22.5)
Repayments of obligations under finance leases		-	(0.2)
Principal paid on lease liabilities		(4.8)	-
Interest paid on lease liabilities		(1.7)	-
Index linked swap repayments		(12.1)	(10.1)
Dividends paid		(57.0)	(57.0)
Net cash inflow/(outflow) from financing activities		257.1	(155.8)
Increase/(decrease) in cash and cash equivalents during the year		321.3	(26.6)
Cash and cash equivalents at 1 April		129.7	156.3
Cash and cash equivalents at 31 March		451.0	129.7
Net debt (representing borrowings and lease liabilities, net of cash and short term investments (see notes 21 and 26))		(263.2)	(168.8)

IFRS 16 was adopted on 1 April 2019 for statutory reporting without restating prior year figures. As a result, the primary financial statements are shown on an IFRS 16 basis for the year ended 31 March 2020 and on an IAS 17 basis for the year ended 31 March 2019. As such, net debt at 31 March 2020 contains additional lease liabilities as recognised under IFRS 16. Further details are provided in note 32.

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 30. 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. Basis of preparation and accounting policies

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 the Strategic report. In addition, note 3 to the financial statements describes critical judgements and key sources of estimation uncertainties and note 21 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 2020, the company had cash of £488.3m and access to undrawn committed bank facilities of £5m until July 2022. In August 2020 the company secured an additional bank facility of £380m also available until July 2022 and which is undrawn at the date of approval of these accounts. Alongside the bank facility, lenders agreed to the waiver of certain financial covenants which would otherwise be tested within the going concern period.

Management have prepared and the directors have reviewed cash flow forecasts covering a period of at least 12 months from the date of approval of these financial statements. The directors have had regard to reasonably possible changes in trading performance as well as severe traffic volume scenarios individually and in combination. These reflect the significant estimation uncertainty as to the timing, rate and extent of recovery in air traffic volumes and the possibility of a second wave Covid-19 pandemic, alongside unforeseen costs arising from other principal risks. The directors have also considered, through a reverse stress test, the point at which a financial covenant not currently waived would be breached. The company's cash flow forecasts, taking account of reasonably plausible downside scenarios, show that the company should be able to operate within the level of its available bank facilities and within its financial covenants for the foreseeable future.

Accordingly, the directors have formed the judgement that, taking into account the financial resources available, the range of reasonably possible future traffic volume scenarios and potential mitigating actions that could be taken, together with the duties of the CAA and the Secretary of State for Transport under the Transport Act 2000 to exercise their functions in the manner they think best calculated to secure that NERL will not find it unduly difficult to finance its licenced activities, there is no material uncertainty which may cast significant doubt on the company's ability to continue as a going concern. The directors consider 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.

Accounting standards

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). 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 issued by the International Accounting Standards Board (IASB).

Accounting standards adopted in the year

The company has adopted the requirements of IFRS 16: *Leases* and IFRIC 23: *Uncertainty over Income Tax Treatments* from 1 April 2019.

IFRS 16 provides a single lessee accounting model requiring the recognition of assets and liabilities for all leases, with options to exclude leases where the lease term is 12 months or less, or where the underlying asset is of low value. As a lessee, the company has recognised right-of-use assets representing its right to use the underlying assets and lease liabilities representing its obligation to make lease payments. Lessor accounting remains substantially the same as under IAS 17, with the distinction between operating leases and finance leases being retained. Further details on the impact of this standard is given in notes 19 and 32. The revised accounting policy for leases is set out below.

Other new and amended standards and Interpretations issued by the IASB have not resulted in any material impact on the financial statements of the company.

Future accounting developments

At the date of authorisation of these financial statements, the following amendments 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 3 (amendments): *Definition of a Business*
- IAS 1 and IAS 8 (amendments): *Definition of Material*
- IFRS 7, IFRS 9, IAS 39 (amendments): *Interest Rate Benchmark Reform*
- Revised Conceptual Framework for Financial Reporting

In January 2020, the IASB issued amendments to IAS 1, which clarify the criteria used to determine whether liabilities are classified as current or non-current. These amendments clarify that current or non-current classification is based on whether an entity has a right at the end of the reporting period to defer settlement of the liability for at least twelve months after the reporting period. The amendments also clarify that 'settlement' includes the transfer of cash, goods, services, or equity instruments unless the obligation to transfer equity instruments arises from a conversion feature classified as an equity instrument separately from the liability component of a compound financial instrument. The amendments are effective for annual reporting periods beginning on or after 1 January 2022.

The company is currently assessing the impact of these new accounting amendments but does not expect that their adoption will have a material impact on the financial statements in future periods.

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.

The company entered into a Management Services Agreement with NATS Limited on 25 July 2001. On 1 October 2009, this agreement was amended so that all relevant secondment obligations are now set out in an Inter-company Secondment Agreement (ISA). This agreement is the basis for

the provision by NATS Limited of personnel to the company. In addition, an Inter-company Trading Agreement is the basis for the provision of central services by NATS Limited to NERL. The cost of central services is recharged based on 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 Trading Agreement on 25 July 2001 (amended 16 December 2014) 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.

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

Revenue recognition

Revenue is recognised from the transfer of goods or services at an amount that the company expects to be entitled to in exchange for those goods or services. Revenue is recognised based on the satisfaction of performance obligations, which are characterised by the transfer of control over a product or service to a customer. Revenue excludes amounts collected on behalf of third parties.

Airspace

Airspace services are economically regulated activities which are governed by the company's air traffic services licence. These include en route ATC services provided in UK airspace and the eastern part of the North Atlantic, approach services for London airports and an advisory service for helicopters operating in the North Sea. Each of these services has the same pattern of transfer to the customer. Revenue from each service is recognised over time (as the customer simultaneously receives and consumes all of the benefits provided by the company as the company performs).

The revenue which NERL is entitled to generate from each service is governed by licence conditions and is established by periodic regulatory reviews (this process is explained in the section on Our business model within the Strategic report). Revenue allowances are set ex ante based on the regulator's forecasts of air traffic volumes, inflation and defined benefit scheme pension contributions. The regulator also sets targets and

incentives for service performance. Variable consideration arises where air traffic volumes, inflation and financial market conditions affecting pension contributions are different to the regulator's forecasts and where the company's service performance results in bonuses or penalties.

The company recognises variable consideration relating to air traffic volumes, inflation and service performance in the financial year in which the service is provided, reflecting its legal entitlement/obligation to recover/rebate this consideration, as it considers that it is highly probable that its inclusion will not result in a significant revenue reversal in the future. This variable consideration is recovered/rebated by way of an adjustment to charges on an 'n+2' basis. Amounts recoverable/payable are discounted at a rate incremental to the party receiving the financing.

The company recognises variable consideration relating to true-ups for the difference between actual pension contributions arising from unforeseen changes in financial market conditions and the regulator's assumption, after review and approval by the regulator and endorsement by the EC. This variable consideration is recovered/ rebated by way of an adjustment to charges over a 15-year period. Amounts recoverable/payable are discounted at NERL's regulatory cost of capital.

Also within Airspace, the company provides ATC services to the MOD, including training services. Revenue is recognised over time, as the service is provided. The MOD contract includes variable consideration relating to a gain share term which enables the MOD to share in cost efficiencies relative to the original contract assumption. Amounts due to the MOD for gain share are recognised over time as the service is provided, and settled at future contractual payment dates. Amounts payable are discounted at NERL's regulatory cost of capital to reflect the financing component.

Revenue for assets funded by customers is recognised over the service life of the asset or the remaining contract term, if shorter.

Income from other sources

Rental income from operating leases is recognised on a straight-line basis over the relevant lease term.

Dividend income is recognised when a shareholder's rights to receive payment has been established.

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

Operating segments

Operating segments are reported in a manner consistent with the internal reporting provided to the group's Executive team, which is considered to be the chief operating decision maker. An operating segment represents a service line organised by customers who receive common products or services. Operating segment 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. Further information is provided in note 5.

Operating profit

Operating profit is stated after charging restructuring costs but before investment income, the fair value movement on financial instruments, finance costs and taxation.

Goodwill (see note 3)

Goodwill 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 RAB 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 as market precedent transactions indicate economically regulated businesses attract valuations in excess of RAB (for 2020 this was assumed to be 0%, for 2019 this was assumed to be at the upper end of the range of 5%-6% of RAB, see notes 3 and 13).

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:

- 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

IAS 23: *Borrowing Costs* requires 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. 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 qualifying assets relate to any additions to new projects that began from 1 April 2009, included in assets under construction.

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).

In order to benefit airspace users, NERL obtains funding from the EC's Innovation and Network Executive Agency (INEA) for SESAR deployment projects. This is initially deferred on the balance sheet, and reported within contract liabilities. Under EC Regulations, and as required by the CAA as NERL's economic regulator, all of the benefit of INEA funding is passed on to airspace users as a reduction in the unit rate charged by NERL for its UK en route services. Accordingly, INEA funding is recognised as a grant relating to income and reported as other revenue in the income statement, offsetting the cost of amounts passed on to customers through the unit rate adjustment.

Leases

Where a contract provides the right to control the use of an asset for a period of time in exchange for consideration, the contract is accounted for as a lease. In order for lease accounting to apply, an assessment is made at the inception of the contract that considers whether:

- the lessee has the use of an identified asset, which entitles it to the right to obtain substantially all of the economic benefits that arise from the use of the asset; and
- the lessee has the right to direct the use of the asset, either through the right to operate the asset or by predetermining how the asset is used.

Further details on the company's approach to the transition to IFRS16 is explained in Note 32.

Measurement at inception

At the lease commencement date the lessee will recognise:

- a lease liability representing its obligation to make lease payments, and;
- an asset representing its right to use the underlying leased asset (a right-of-use asset).

The lease liability is initially measured as the present value of future lease payments, discounted using the interest rate implicit in the lease, or if not available an incremental borrowing rate. Future lease payments will include fixed payments or variable lease payments that depend on an index or rate (initially measured at the rate at the commencement date). In such cases, the initial measurement of the lease liability assumes the variable element will remain unchanged throughout the lease term.

The right-of-use asset is initially measured at cost, which comprises the amount initially recognised as the lease liability, lease payments made at or before

the commencement date, initial direct costs incurred, and the amount of any provision for estimated costs to be incurred at the end of the lease to restore the site to the required condition stipulated in the lease (dilapidations provision) less any lease incentives received.

For contracts that both convey a right to the lessee to use an identified asset and require services to be provided to the lessee by the lessor, the lessee has elected to account for the entire contract as a lease, i.e. it does not allocate any amount of the contractual payments to, or account separately for, any services provided by the supplier as part of the contract.

Ongoing measurement

Subsequent to initial measurement, the lease liabilities increase as a result of interest charged at a constant rate on the balance outstanding, reduced for lease payments made and are adjusted for any reassessment of the lease as the result of a contract modification. Right-of-use assets are depreciated on a straight-line basis over the remaining term of the lease or asset life if it is shorter.

When the lessee revises its estimate of the term of any lease (because, for example, it re-assesses the probability of a lease extension or termination option being exercised), it adjusts the carrying amount of the lease liability to reflect the payments to be made over the revised term, which are discounted at the same discount rate that applied on lease commencement. The carrying value of lease liabilities is similarly revised when the variable element of future lease payments dependent on a rate or index is revised. In both cases an equivalent adjustment is made to the carrying value of the right-of-use asset, with the revised carrying amount being amortised over the remaining (revised) lease term.

When the company renegotiates the contractual terms of a lease with the lessor, the accounting depends on the nature of the modification:

- If the renegotiation results in one or more additional assets being leased for an amount commensurate with the standalone price for the additional rights-of-use obtained, the modification is accounted for as a separate lease in accordance with the above policy;
- In all other cases where the renegotiated terms increase the scope of the lease (whether that is an extension to the lease term, or one or more additional assets being leased), the lease liability is remeasured using the discount rate applicable on the modification date, with the right-of-use asset being adjusted by the same amount;
- If the renegotiation results in a decrease in the scope of the lease, both the carrying amount of the lease liability and right-of-use asset are reduced by the same proportion to reflect the partial or full termination of the lease with any difference recognised in profit or loss. The lease liability is then further adjusted to ensure its carrying amount reflects the amount of the renegotiated payments over the renegotiated term, with the modified lease payments discounted at the rate applicable on the modification date. The right-of-use asset is adjusted by the same amount.

Short term, low-value leases and expired leases

The company applies recognition exemptions for short term leases and leases of low-value items which are accounted for on a straight-line basis over the lease term.

The company has leases that have expired and have not yet been renewed, 'holding over leases'. These leases have no lease liability and therefore a right-of-use asset is not recognised for these leases. The

annual rent for these properties is charged to profit and loss in the period to which it relates.

Comparative year

For the comparative year, leases were classified as finance leases whenever the terms of the lease transferred substantially all the risks and rewards of ownership to the lessee. All other items were classified as operating leases.

Assets held under finance leases were 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 was included in the balance sheet as a finance lease obligation. Lease payments were 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 were recognised immediately in profit or loss, unless they were directly attributable to qualifying assets in which case they were capitalised in accordance with the company's policy on borrowing costs.

Rentals payable under operating leases were 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 were also spread on a straight-line basis over the lease term.

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, intangible and right-of-use assets excluding goodwill

At each balance sheet date, the company reviews the carrying amounts of its tangible, intangible and right-of-use 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 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 (AESOP) 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 NATS Employee Sharetrust Limited (NESL) 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 is charged to the income statement.

Taxation

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

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

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

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

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

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set current tax assets off 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.

The Finance Bill 2020 was substantively enacted on 17 March 2020 and the main rate of corporation tax was maintained at 19% for the financial years 2020 and 2021 reversing the previous reduction to 17%. The rate of 19% applies from 1 April 2020.

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 CAA 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.

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 29. 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 in the balance sheet when the company becomes a party to the contractual provisions of the instrument. Financial assets are classified as either fair value through profit or loss, fair value through other comprehensive income, or amortised cost. Classification and subsequent re-measurement depends on the company's business model for managing the financial asset and its cash flow characteristics.

The company has financial assets in at amortised cost. The company does not have financial assets at fair value through profit or loss or at fair value through other comprehensive income. Detailed disclosures are set out in notes 17 to 22.

Financial assets:

Amortised cost

These assets arise principally from the provision of goods and services to customers (such as loans and trade receivables), but also incorporate other types of financial assets where the objective is to hold these assets in order to collect contractual cash flows and the contractual cash flows are solely payments of principal and interest. They are initially recognised at fair value and are subsequently carried at amortised cost using the effective interest rate method, less provision for impairment.

Impairment of financial assets

Impairment provisions for trade receivables are recognised based on the simplified approach within IFRS 9 using the lifetime expected credit losses. During this process, the probability of the non-payment of trade receivables is assessed. This probability is then multiplied by the amount of the expected loss arising from default to determine the lifetime expected credit loss for the trade receivables. For trade receivables, such provisions are recorded in a separate provision account with the loss being recognised in the income statement. On confirmation that the trade receivable will not be collectable, the gross carrying value of the asset is written off against the associated provision.

Impairment provisions for other receivables are recognised based on a forward looking expected credit loss model. The methodology used to determine the amount of the provision is based on whether at each reporting date, there has been a significant increase in credit risk since initial recognition of the financial asset.

For those financial assets where the credit risk has not increased significantly since initial recognition, twelve month expected credit losses along with

gross interest income are recognised. For those for which credit risk has increased significantly, lifetime expected credit losses along with the gross interest income are recognised. For those that are determined to be credit impaired, lifetime expected credit losses along with interest income on a net basis are recognised.

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 or loss or other financial liabilities.

Fair value through the profit or loss

Financial liabilities at fair value through profit or 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 20 and 21 to the accounts.

As permitted under IFRS 9, the company has elected to continue to apply the existing hedge accounting requirements of IAS 39 for its cash flow hedges until a new macro hedge accounting standard is implemented by the IASB.

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

Estimation uncertainties arising from Covid-19

The coronavirus 2019 (Covid-19) pandemic and the government protection measures to curtail its spread, such as travel restrictions and social distancing rules, is having a significant impact on the UK economy, and therefore the demand for air travel which has a direct impact on the demand for the company's air traffic control services.

Given the current uncertainty and the variety of outcomes still possible related to the course of the pandemic, the company has considered a range of

factors related to its future performance and financial position. These include: the recovery in demand for air travel and in air traffic volumes; future cash flows and the availability of additional sources of liquidity; the feasibility and effectiveness of planned cost savings and deferral of capital investment; the extent of further support from government measures, the economic regulatory framework for RP3, including the timing and nature of a re-set in the price control; and the general duties of the CAA and the Secretary of State for Transport under the Transport Act 2000 to exercise their functions in the manner they think best calculated to secure that NERL will not find it unduly difficult to finance activities authorised by its licence.

In assessing the impact of different scenarios on the company's future performance and financial position, the directors have made judgements as to the timing, rate and extent of growth in air traffic volumes in calendar years 2020 and 2021 as well as the remaining three years of RP3. The directors fully expect, supported by the general duties of the CAA and the Secretary of State for Transport under the Transport Act 2000, that the economic regulatory framework (including the traffic forecasts) will be re-set to determine the company's revenue entitlement to reflect the change in operating environment following Covid-19, with mitigations for variations in traffic volumes from forecast. The directors consider the timing, rate and extent of recovery in air traffic volumes to be a significant estimation uncertainty.

Impairment of goodwill, intangible, tangible and right-of-use assets

In carrying out impairment reviews of goodwill, intangible, tangible and right-of-use assets, (including assets in the course of construction), a number of significant assumptions have to be made when preparing cash flow projections from which to determine value in use and also in assessing fair values less costs of disposal (see judgement relating to goodwill below). These include air traffic growth, the extent and timing of future cash flows, the value of the regulated asset bases, the scope for outperformance of the regulatory contract, market premia for transactions in similar economically regulated businesses, the company's licence period and the outcome of the regulatory price control determinations. The RAB reflects the capital employed in the economically regulated business and, broadly, is uplifted annually for inflation and increases with capital expenditure and reduces by regulatory depreciation. The market premium, which is applied to the RAB when determining the fair value of goodwill, was assessed at the balance sheet date to be 0% (2019: 5-6%). This judgement reflected the impact of Covid-19 on the demand for air travel and the consequential uncertainties including the lack of reliable traffic forecasts, the timing and extent of traffic returning and therefore the future operating environment, the scope for regulatory outperformance and the requirement for resetting of the RP3 determination by the CAA to take account of the CMA's interim three year determination (2020-2022) and the impact of the pandemic, the timing of which is yet to be set. There is accordingly material uncertainty in respect of the judgement on the RAB premium. As a sensitivity, a 1% change in the RAB premium

would result in a £9.9m change in the goodwill impairment charge.

Should the outcome in respect of these matters differ or changes in expectations arise, further impairment charges may be required which would materially impact operating results in future periods. See notes 13, 14, 15 and 16.

Estimate of disposal costs made for the fair value less costs of disposal of goodwill

IAS 36 defines the costs of disposal which should be deducted from fair value, as the incremental costs directly attributable to the disposal of the CGU, excluding finance costs and income tax expense. Therefore, in order to consider the costs of disposal, the directors have to contemplate a hypothetical disposal by NERL of its licensed activities and associated disposal costs on the basis that the disposal is being undertaken by a market participant unencumbered by any form of overarching agreement between the shareholders, assuming such goodwill had been acquired in a business combination rather than in the manner in which NERL's goodwill was created.

The specific circumstances of NATS Strategic Partnership Agreement (SPA), which recognise the strategic national interest of the Crown, would cause certain disposal costs to be borne directly by the company and others by shareholders. Accordingly, the SPA, between the Crown shareholder, The Airline Group (the Strategic Partner) and Heathrow Airports Limited (LHRA), therefore includes as a reserved matter for the approval of these parties, and not for the directors, any material change in the nature or scope of the business, including the transfer or discontinuation of NERL's licence activity. Moreover, a hypothetical transaction for the full or partial disposal of NERL or of its licensed activity, to realise the value of any of NERL's goodwill, would be under the close control of these parties including appointing and bearing the costs of advisors for the sale process.

The remaining, minority NATS shareholder, the employee share trust, is not a party to the SPA, and would not have any right or expectation to control the sale process. The directors have a duty to ensure that the rights and interests of the minority shareholder are not prejudiced by the specific interests of the shareholders who are the parties to the SPA.

For these reasons, in a hypothetical transaction by a market participant to dispose of NERL or its licensed activity, the directors believe that the parties to the SPA would and should directly bear the costs of the disposal with the exception of due diligence costs that the company would bear in order to enable the directors to fulfil their statutory and fiduciary duties. It is expected that the costs parties to the SPA bear would include any commission or advisor fees relating to the sale itself, as well as advisor fees relating to the impact of the sale on each of the parties to the SPA.

Accordingly, the disposal costs that the parties to the SPA would bear directly, have not been included in the disposal costs deducted from fair value because of the specific circumstances of the SPA.

The directors have estimated the disposal costs which the company would bear directly to be around £1m for legal, financial and actuarial due diligence. These are incremental costs which have been deducted from fair value in calculating fair value less costs of disposal.

Expected credit loss provisions

The company's expected credit loss provisions are established to recognise impairment losses on

specific trade receivables and the aviation sector customer base.

Estimating the amount and timing of future settlements involves significant judgement and an assessment of matters such as future economic conditions and the recovery of air travel, the financial strength of the aviation sector and individual customers and the effect of any government support measures.

The company's expected credit loss provision takes into account past loss experience, payment performance and arrears at the balance sheet date, the financial strength of customers, government support measures and uncertainties arising from the economic environment. The settlement of trade receivables is sensitive to changes in the economic environment and the demand for air travel. It is possible that actual events over the next year differ from the assumptions made resulting in material adjustments to the carrying amount of trade receivables.

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. At 31 March 2020 the funding position of the scheme reported in the financial statements was a surplus of £173.3m. The directors consider that the company has an unconditional right to a refund of surplus at the end of the life of the scheme and, therefore, that the criteria for recognition under IFRIC 14 are met.

The defined benefit pension scheme has a diverse investment portfolio which includes property assets of £181.0m of 5.2% of scheme assets. In valuing the scheme's property assets in the context of Covid-19, the asset manager considered that less weight could be given to previous market evidence for comparison purposes, to inform its opinion of value. As a result, the asset manager reported a 'material valuation uncertainty' as per VPS 3 and VPGA 10 of the RICS Red Book Global and reported that less certainty and a higher degree of caution should be attached to the valuation than would normally be the case. As a sensitivity, a 1% reduction in the value of the scheme's property assets would reduce the retirement benefit asset by £1.8m.

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 29 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.

Revenue recognition and recoverability of/obligation for revenue allowances

Regulatory revenue allowances are established for calendar year periods. This requires the company to assess that part of the revenue allowance to be recognised in the period to 31 March. Taking account of the significant reduction in actual traffic volumes during March 2020, the company recognised revenue based on the forecast revenue allowance for the period adjusted for traffic volume risk sharing which takes account of the difference between actual traffic volumes handled relative to the forecast for that period.

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 (and NERL's Licence) 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 £0.1m of net receivable allowances relating to Reference Period 1 and £9.7m of net receivable allowances relating to Reference Period 3 (2019: £0.1m net receivable allowances relating to Reference Period 1) and £140.2m of net payable allowances relating to the Reference Period 2 (2019: £139.4m of net payable allowances relating to Reference Period 2). 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 ATC 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. The company also capitalises internal labour where this is directly attributable to the development of assets, at a labour rate judged to reflect the underlying cost of staff.

Leases

Determining the lease term

The lease term determined by the lessee comprises non-cancellable periods of lease contracts, periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option and periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. Specific lease term judgements have been taken in relation to property leases in England and Wales that are governed by the Landlord and Tenant Act 1954. For those that are due to expire prior to the end of NERL's minimum operating licence term (31 March 2031) it has been assumed that they will be extended under the Landlord and Tenants Act 1954 to this date.

Determining the incremental borrowing rate used for discounting future cash flows

The incremental borrowing rate is determined using a discount rate that represents the rate of interest that the lessee would have to pay to borrow the funds necessary, taking into consideration its deemed creditworthiness, over a similar term to obtain an asset of a similar value to the right-of-use asset in a similar economic environment.

4. Revenue

The company has recognised the following revenue in the income statement:

	2020 £m	2019 £m
Revenue from contracts with customers	696.3	719.1
Other revenue: EU funding passed to UK en route customers (see note 4a)	36.2	9.7
Revenue from other sources: rental and sub-lease income	4.2	4.2
Total revenue	736.7	733.0
Other operating income	3.5	6.0
Investment income (see note 8)	2.4	2.6
	742.6	741.6

a) Revenue disaggregated by operating segment

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.

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 R&D expenditure above the line tax credits. A reconciliation of service line contribution to operating profit is set out in note 5.

Principal activities

The following table describes the activities of each operating segment:

Airspace	This includes all of the company's economically regulated activities and encompasses services to en route, oceanic and London Approach 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; and Other UK Business providing Consultancy, offering airspace development, capacity improvement and training and Information, providing data to enable future efficiency and flight optimisation.

Segment information about these activities is presented below.

	2020			2019		
	External revenue £m	Intercompany revenue £m	Revenue £m	External revenue £m	Intercompany revenue £m	Revenue £m
Revenue from contracts with customers						
Airspace						
UK air traffic services:						
Services to UK en route customers	558.2	-	558.2	586.3	-	586.3
London Approach services	13.1	-	13.1	13.2	-	13.2
Infrastructure services to the MOD	51.2	-	51.2	49.4	-	49.4
Services for North Sea helicopters	8.5	-	8.5	8.6	-	8.6
Other income	2.2	-	2.2	2.5	-	2.5
	633.2	-	633.2	660.0	-	660.0
North Atlantic air traffic services:						
Services to oceanic en route customers	31.1	-	31.1	29.2	-	29.2
Intercompany revenue	-	26.0	26.0	-	25.5	25.5
Total Airspace revenue from contracts with customers	664.3	26.0	690.3	689.2	25.5	714.7
Other Service lines	5.2	0.8	6.0	4.2	0.2	4.4
Total revenue from contracts with customers	669.5	26.8	696.3	693.4	25.7	719.1
Other revenue: EU funding passed to UK en route customers						
Airspace	36.2	-	36.2	9.7	-	9.7
Revenue from other sources						
Airspace	3.2	1.0	4.2	3.1	1.1	4.2
Total revenue	708.9	27.8	736.7	706.2	26.8	733.0

4. Revenue (continued)

UK air traffic services provide en route air traffic services within UK airspace, 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 over the North Atlantic, including an altitude calibration service.

EC Regulations require that European funding for SESAR deployment received by ANSPs should ultimately be passed on to airspace users through a discount in the unit rate charge for UK en route services. In the financial year ended 31 March 2020, £36.2m (2019: £9.7m) of European funding was passed to airspace users. Accordingly, an equivalent amount was released from contract liabilities to offset the cost of the discount. As a result, the company's revenues from UK en route services reflect the regulatory revenue allowances for which it is entitled for the services provided in the year.

Intercompany revenue includes revenue for services to NATS (Services) Limited of £27.7m (2019: £26.7m) and to NATSNav Limited of £0.1m (2019: £0.1m).

b) Revenue disaggregated based on economic regulation

	2020			2019		
	External revenue £m	Intercompany revenue £m	Revenue £m	External revenue £m	Intercompany revenue £m	Revenue £m
Regulated income						
Services to UK en route customers	558.2	-	558.2	586.3	-	586.3
London Approach services	13.1	-	13.1	13.2	-	13.2
Services to oceanic en route customers	31.1	-	31.1	29.2	-	29.2
Revenue from contracts with customers	602.4	-	602.4	628.7	-	628.7
Other revenue: EU funding passed to UK en route customers	36.2	-	36.2	9.7	-	9.7
Total regulated income	638.6	-	638.6	638.4	-	638.4
Non-regulated income						
Revenue from contracts with customers	67.1	26.8	93.9	64.7	25.7	90.4
Revenue from other sources	3.2	1.0	4.2	3.1	1.1	4.2
Total non-regulated income	70.3	27.8	98.1	67.8	26.8	94.6
	708.9	27.8	736.7	706.2	26.8	733.0

c) Revenue disaggregated by timing of recognition

	2020			2019		
	External revenue £m	Intercompany revenue £m	Revenue £m	External revenue £m	Intercompany revenue £m	Revenue £m
Over time						
Revenue from contracts with customers	667.3	26.8	694.1	693.4	25.7	719.1
Other revenue: EU funding passed to UK en route customers	36.2	-	36.2	9.7	-	9.7
Revenue from other sources	3.2	1.0	4.2	3.1	1.1	4.2
	706.7	27.8	734.5	706.2	26.8	733.0
At a point in time						
Revenue from contracts with customers	2.2	-	2.2	-	-	-
	708.9	27.8	736.7	706.2	26.8	733.0

4. Revenue (continued)

d) Revenue disaggregated by geographical area

The following table provides an analysis of the company's revenue by geographical area based on the location of its customers:

	2020 £m	2019 £m
Revenue from contracts with customers, including Other revenue: EU funding passed to UK en route customers		
United Kingdom	296.8	300.1
Other European countries	131.4	128.4
United States of America	90.7	86.1
Republic of Ireland	85.4	88.2
Countries in Asia	51.8	51.2
Germany	47.5	46.0
Other North American countries	23.1	22.3
Countries in Africa	3.5	4.8
Countries in Oceania	1.6	1.2
Countries in South America	0.7	0.5
	732.5	728.8
Revenue from other sources		
United Kingdom	3.7	3.7
Other European countries	0.5	0.5
	4.2	4.2
	736.7	733.0

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.

e) Contract balances

Receivables, contract assets and contract liabilities from contracts with customers are disclosed in notes 17 and 22. Significant changes in the contract assets and the contract liabilities balances during the year are as follows.

	Contract assets		Contract liabilities	
	2020 £m	2019 £m	2020 £m	2019 £m
At 1 April	0.3	0.2	(73.5)	(16.7)
Opening contract assets transferred to trade and other receivables	(0.2)	(0.2)	-	-
Cumulative catch-up adjustments	(0.1)	-	-	-
Additional contract asset balances recognised at the balance sheet date	1.3	0.3	-	-
Opening contract liabilities which have now been recognised as revenue	-	-	42.6	4.9
Increases due to cash received, excluding amounts recognised as revenue during the year	-	-	(11.5)	(61.7)
At 31 March	1.3	0.3	(42.4)	(73.5)

Contract assets and contract liabilities are included within "trade and other receivables" and "trade and other payables" respectively on the face of the statement of financial position. The majority of contracts in the Airspace service line are service contracts that do not result in a contract asset or liability position at each reporting date. Other contracts (including consultancy, engineering, training and information services) may result in a contract asset or liability because the cumulative payments received from customers at each balance sheet date does not necessarily equal the amount of revenue recognised on these contracts.

f) Revenue recognised from performance obligations satisfied in previous periods

For the year ended 31 March 2020, no revenue was recognised for performance obligations satisfied in previous periods (2019: £nil).

4. Revenue (continued)

g) Remaining performance obligations

For the vast majority of contracts, the company has a right to consideration from the customer in an amount that corresponds directly to the value to the customer of the company's performance completed to date, or the contract has an original duration of one year or less. For such contracts, the practical expedient in paragraph 121 of IFRS 15 applies.

For the remaining contracts, the amount of revenue that will be recognised in future periods in relation to performance obligations that are partially satisfied at 31 March is approximately as follows:

	2020				
	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
Airspace	12.2	10.2	28.2	-	50.6

	2019				
	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
Airspace	7.6	2.5	1.0	-	11.1
Other Services lines	0.1	-	0.1	-	0.2
	7.7	2.5	1.1	-	11.3

The amounts disclosed above do not include variable consideration which is constrained, which principally relates to pension pass through.

h) Cash flow hedged revenue

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 £5.6m loss (2019: £0.9m gain).

5. Operating segments: 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:

	2020 £m	2019 £m
Airspace	298.8	313.3
Other Service lines	4.3	3.5
Service line contribution	303.1	316.8
Costs not directly attributed to service lines:		
Depreciation and amortisation (net of deferred grants released)	(125.5)	(137.7)
Impairment of goodwill	(49.0)	-
Profit on disposal of non-current assets	0.2	-
Employee share scheme credits/(costs)	4.1	(2.4)
Redundancy costs	(1.3)	(0.5)
Other costs not directly attributed to service lines	(82.0)	(66.3)
R&D expenditure above the line tax credits	1.2	1.9
Operating profit	50.8	111.8

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

5. Operating segments: Operating profit (continued)

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:

	2020			2019		
	UK air traffic services £m	North Atlantic air traffic services £m	Total £m	UK air traffic services £m	North Atlantic air traffic services £m	Total £m
Revenue	705.6	31.1	736.7	703.8	29.2	733.0
Operating costs	(654.1)	(31.8)	(685.9)	(595.9)	(25.3)	(621.2)
Operating profit	51.5	(0.7)	50.8	107.9	3.9	111.8

Under 'single till' principles, UK air traffic services revenue includes intercompany revenue and revenue from other sources.

Non-current asset additions

Additions to non-current assets (including additions to right-of-use assets for 2020) presented by service line are: Airspace £150.2m (2019: £150.0m) and Other Service lines £0.8m (2019: £0.1m).

Geographical segments

The following table provides an analysis of the group's non-current assets (excluding financial assets and, for 2020, retirement benefit assets) by geographical location. An analysis of the group's revenue by geographical location is provided in note 4 d) above.

	Non-current assets	
	2020 £m	2019 £m
United Kingdom	1,281.0	1,248.7
Other European Countries	1.2	0.8
United States of America	0.5	0.7
	1,282.7	1,250.2

6. Operating profit for the year

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

	2020 £m	2019 £m
The CAA regulatory charges	5.5	5.3
Impairment of goodwill (note 13)	49.0	-
Amortisation of intangible assets (note 14)	52.2	55.1
Impairment of intangible assets (note 14)	7.2	2.2
Depreciation of property, plant and equipment (note 15)	61.7	78.8
Impairment of property, plant and equipment (note 15)	-	1.9
Depreciation of right-of-use assets (note 16)	4.6	-
Deferred grants released	(0.2)	(0.3)
Research and development costs	4.0	8.8
Redundancy costs	1.3	0.5
R&D expenditure above the line tax credits	(1.2)	(1.9)
Auditors remuneration for audit services (see below)	-	-

A portion of the company's costs are denominated in foreign currencies and are cash flow hedged. Included in operating costs is the recycling of the effective amount of foreign currency derivatives that are used to hedge foreign currency costs. The amount included in operating cost is £1.9m gain (2019: £nil).

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 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.

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. These fees are borne by NATS Limited and recharged to other group companies.

6. Operating profit for the year (continued)

Transactions with group companies

	2020 £m	2019 £m
Net charges for services provided by parent undertaking	9.8	9.6
Charges for services provided by other group companies	18.8	17.6
Charges for seconded staff under the terms of the ISA provided by NATS Limited (see below)	390.6	373.7

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 Inter-company Secondment Agreement (ISA) 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 Trading Agreement (ICTA) NATS Services provides certain services to NERL. The ISA and ICTA are explained in more detail in note 2.

7. Staff costs

a) Staff costs

	2020 £m	2019 £m
Salaries and staff costs were as follows:		
Wages and salaries	282.1	277.1
Social security costs	34.9	33.6
Pension costs (note 7b)	73.6	63.0
	390.6	373.7
Less: amounts capitalised	(45.6)	(40.8)
	345.0	332.9

Wages and salaries includes redundancy costs of £1.3m (2019: £0.4m), share-based payment charges, other allowances and holiday pay. Pension costs include £nil (2019: £0.1m) for redundancy related augmentation payments which staff elected to receive in lieu of severance payments.

b) Pension costs (see note 29)

	2020 £m	2019 £m
Defined benefit pension scheme costs	56.5	50.5
Defined contribution pension scheme costs	17.1	12.5
	73.6	63.0

Staff pension contributions are included within these pension scheme costs as the company operates a salary sacrifice arrangement. Wages and salaries (note 7a) have been shown net of staff pension contributions.

c) Staff numbers

	2020 No.	2019 No.
The monthly average number of employees (including executive directors) was:		
Air traffic controllers	1,347	1,292
Air traffic service assistants	545	523
Engineers	787	761
Others	926	842
	3,605	3,418

8. Investment income

	2020 £m	2019 £m
Interest on bank deposits	1.1	1.2
Other loans and receivables	1.3	1.4
	2.4	2.6

Interest on bank deposits has been earned on financial assets, including cash and cash equivalents and short term investments. Other loans and receivables includes the effect of unwinding the discount on amounts receivable after more than one year.

9. Fair value movement on derivative contract

	2020 £m	2019 £m
Credit/(charge) arising from change in the fair value of derivatives not qualifying for hedge accounting	2.1	(3.0)

10. Finance costs

	2020 £m	2019 £m
Interest on bank loans and hedging instruments	0.7	0.6
Bond and related costs including financing expenses	19.1	21.3
Interest on lease liabilities (see note 19)	1.7	-
Other finance costs	4.9	3.5
	26.4	25.4

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

11. Tax

	2020 £m	2019 £m
Corporation tax		
Current tax	4.2	6.4
Adjustments in respect of prior year	(2.4)	(2.8)
	1.8	3.6
Deferred tax (see note 24)		
Origination and reversal of temporary timing differences	9.1	8.2
Adjustments in respect of prior year	2.0	2.4
Effects of tax rate change on opening balance	12.5	-
	23.6	10.6
	25.4	14.2

Corporation tax is calculated at 19% (2019: 19%) of the estimated assessable profit for the year.

	2020		2019	
The charge for the year can be reconciled to the profit per the income statement as follows:	£m	%	£m	%
Profit on ordinary activities before tax	28.9		86.0	
Tax on profit on ordinary activities at standard rate in the UK of 19% (2019: 19%)	5.5	19.0%	16.3	19.0%
Tax effect of change in corporation tax rate from 17% to 19% (2019: 19% to 17%) (see below)	12.5	43.3%	(0.1)	(0.1%)
Tax effect of prior year adjustments - current tax	(2.4)	(8.3%)	(2.8)	(3.3%)
Tax effect of prior year adjustments - deferred tax	2.0	6.9%	2.4	2.8%
Patent box	(1.6)	(5.6%)	(1.6)	(1.9%)
Goodwill impairment	9.3	32.2%	-	-
Employee share scheme	0.2	0.7%	0.1	0.1%
R&D expenditure increased deductions	(0.1)	(0.3%)	(0.1)	(0.1%)
Tax charge for year at an effective tax rate of 87.9% (2019: 16.5%)	25.4	87.9%	14.2	16.5%
Deferred tax charge/(credit) taken directly to equity (see note 24)	32.9		(22.1)	

The Finance Bill 2020 was substantively enacted on 17 March 2020 and the main rate of corporation tax was maintained at 19% for the financial years 2020 and 2021 reversing the previous reduction to 17%. The rate of 19% applies from 1 April 2020.

12. Dividends

	2020 £m	2019 £m
Amounts recognised as dividends to equity shareholders in the year:		
First interim dividend of £2.90 per share (2019: £2.85 per share)	29.0	28.5
Second interim dividend of £2.80 per share (2019: £2.85 per share)	28.0	28.5
	57.0	57.0

13. Goodwill

	£m
Cost	
At 31 March 2019 and 31 March 2020	351.0
Accumulated impairment losses	
At 1 April 2018	152.7
Impairment provision recognised in income statement	-
At 31 March 2019	152.7
Impairment provision recognised in income statement	49.0
At 31 March 2020	201.7
Carrying amount	
At 31 March 2020	149.3
At 31 March 2019	198.3
At 1 April 2018	198.3

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

Goodwill is allocated to the Airspace service line. Its recoverable amount is determined by reference to the higher of its fair value less costs of disposal and its value in use. The valuation methodology is consistent with the IFRS 13 level 3 hierarchy.

Fair value less costs of disposal is determined by reference to the value of the regulatory asset bases (RABs) of the relevant cash generating units of UK Air Traffic Services and North Atlantic Air Traffic Services (in aggregate £990.6m; 2019: £1,021.6m), opportunities for out-performance of regulatory settlements and market premia for economically regulated businesses, as well as estimated costs of disposal of £1.0m (see note 3: critical judgements and key sources of estimation uncertainty). A market premium is applied to the value of the RABs. It is assessed annually and for 2020 was 0% (2019: 5-6%). This reduction in premium resulted in the impairment charge. It reflected the impact of Covid-19 on the demand for air travel and uncertainty as to the rate of recovery to previous levels and the risk of some under-performance until a revised regulatory settlement is agreed for Reference Period 3 which reflects new projections of air traffic volumes and associated safety, service performance targets and capital investment requirements.

Fair value less costs of disposal was higher than value in use at 31 March 2020. The carrying value of goodwill at 31 March 2020 was impaired by £49.0m (2019: £nil).

14. Other intangible assets

	Operational software £m	Non-operational software £m	Airspace and resectorisation £m	Assets in course of construction £m	Total £m
Cost					
At 1 April 2018	481.8	90.8	49.5	238.7	860.8
Additions internally generated	3.0	1.2	1.2	24.5	29.9
Additions externally acquired	2.6	2.1	0.2	16.5	21.4
Disposals during the year	-	(0.9)	-	-	(0.9)
Transfers during the year	5.8	10.0	1.4	(14.0)	3.2
At 31 March 2019	493.2	103.2	52.3	265.7	914.4
Additions internally generated	3.2	-	2.0	30.3	35.5
Additions externally acquired	2.8	0.3	-	65.5	68.6
Disposals during the year	(13.4)	-	-	-	(13.4)
Transfers during the year	7.4	1.1	1.9	(11.6)	(1.2)
At 31 March 2020	493.2	104.6	56.2	349.9	1,003.9
Accumulated amortisation					
At 1 April 2018	195.1	69.6	27.7	0.8	293.2
Charge for the year	42.0	9.0	4.1	-	55.1
Impairment provision recognised in income statement	-	-	-	2.2	2.2
Transfer of impairment provision	0.4	0.5	-	(0.9)	-
Disposals in year	-	(0.9)	-	-	(0.9)
At 31 March 2019	237.5	78.2	31.8	2.1	349.6
Charge for the year	41.1	7.0	4.1	-	52.2
Impairment provision recognised in income statement	-	-	-	7.2	7.2
Disposals during the year	(13.4)	-	-	-	(13.4)
At 31 March 2020	265.2	85.2	35.9	9.3	395.6
Carrying amount					
At 31 March 2020	228.0	19.4	20.3	340.6	608.3
At 31 March 2019	255.7	25.0	20.5	263.6	564.8
At 1 April 2018	286.7	21.2	21.8	237.9	567.6

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. During the year, impairment charges of £7.2m (2019: £2.2m) were made in respect of assets in the course of construction reflecting a curtailment of certain projects and assets, and the likelihood of benefits being realised in full.

15. Property, plant and equipment

	Freehold land and buildings £m	Improvements to leasehold land and buildings £m	Air traffic control systems, plant and equipment £m	Vehicles, furniture and fittings £m	Assets in course of construction and installation £m	Total £m
Cost						
At 1 April 2018	246.1	41.2	1,378.3	22.6	91.0	1,779.2
Additions during the year	0.4	0.2	8.8	0.1	89.3	98.8
Disposals during the year	-	-	(0.1)	-	-	(0.1)
Other transfers during the year	0.4	-	12.8	-	(16.4)	(3.2)
At 31 March 2019	246.9	41.4	1,399.8	22.7	163.9	1,874.7
Adjustment on initial application of IFRS 16 (see note below)	-	(0.6)	(2.0)	-	-	(2.6)
At 1 April 2019 (as restated for IFRS 16)	246.9	40.8	1,397.8	22.7	163.9	1,872.1
Additions during the year	0.2	-	7.7	0.2	38.6	46.7
Disposals during the year	-	-	(66.0)	(0.2)	-	(66.2)
Other transfers during the year	0.1	-	9.3	0.1	(8.3)	1.2
At 31 March 2020	247.2	40.8	1,348.8	22.8	194.2	1,853.8
Accumulated depreciation and impairment						
At 1 April 2018	137.1	33.6	1,127.2	16.1	0.5	1,314.5
Provided during the year	7.8	1.2	68.5	1.3	-	78.8
Impairment provision recognised in income statement	-	-	0.1	-	1.8	1.9
Transfer of impairment provision	-	-	0.3	-	(0.3)	-
Disposals during the year	-	-	(0.1)	-	-	(0.1)
At 31 March 2019	144.9	34.8	1,196.0	17.4	2.0	1,395.1
Adjustment on initial application of IFRS 16 (see note below)	-	(0.3)	(0.6)	-	-	(0.9)
At 1 April 2019 (as restated for IFRS 16)	144.9	34.5	1,195.4	17.4	2.0	1,394.2
Provided during the year	7.8	1.1	51.7	1.1	-	61.7
Transfer of impairment provision	-	-	0.3	-	(0.3)	-
Disposals during the year	-	-	(66.0)	(0.2)	-	(66.2)
At 31 March 2020	152.7	35.6	1,181.4	18.3	1.7	1,389.7
Carrying amount						
At 31 March 2020	94.5	5.2	167.4	4.5	192.5	464.1
At 1 April 2019 (as restated for IFRS 16)	102.0	6.3	202.4	5.3	161.9	477.9
At 31 March 2019	102.0	6.6	203.8	5.3	161.9	479.6
At 1 April 2018	109.0	7.6	251.1	6.5	90.5	464.7

The company conducts annual reviews of the carrying values of its property, plant and equipment where there is an indicator of impairment. During the year, the company incurred impairment charges of £nil (2019: £1.9m relating to operational assets and assets in the course of construction and installation reflecting a reassessment of certain projects and assets, and the likelihood of benefits being realised in full).

During the year the company capitalised £nil (2019: £nil) of general borrowing costs at a capitalisation rate of 0.0% (2019: 0.0%), in accordance with IAS 23: *Borrowing Costs,* relating to both property, plant and equipment and other intangible assets.

The company has assets relating to reinstatement provisions that were included under Improvements to leasehold land and buildings above. At 31 March 2019, the carrying value of these assets were £0.3m. The company also has a lease for certain network related assets. As at 31 March 2019, the carrying value of the assets held under this lease were £1.4m and were included within the cost for air traffic control systems, plant and equipment above. From 1 April 2019 leased assets are reported within right-of-use assets on the balance sheet, see notes 16 and 19. Refer to note 32 for details about the change in accounting policy.

16. Right-of-use assets

	Leasehold land and buildings £m	Air traffic control systems, plant and equipment £m	Vehicles, furniture and fittings £m	Total £m
Cost				
At 1 April 2018 and 31 March 2019	-	-	-	-
At 1 April 2019 (as restated for IFRS 16)	59.9	2.0	0.8	62.7
Additions during the year	-	-	0.2	0.2
Effect of modification to lease terms	0.1	-	-	0.1
At 31 March 2020	60.0	2.0	1.0	63.0
Accumulated depreciation and impairment				
At 1 April 2018 and 31 March 2019	-	-	-	-
At 1 April 2019 (as restated for IFRS 16)	0.3	0.6	-	0.9
Provided during the year	4.1	0.2	0.3	4.6
Charge capitalised in the year	1.1	-	-	1.1
At 31 March 2020	5.5	0.8	0.3	6.6
Carrying amount				
At 31 March 2020	54.5	1.2	0.7	56.4
At 1 April 2019 (as restated for IFRS 16)	59.6	1.4	0.8	61.8
At 31 March 2019	-	-	-	-
At 1 April 2018	-	-	-	-

Leasehold land and buildings contains right-of-use assets (2019: Cost £0.6m, Accumulated depreciation and impairment £0.3m) which were previously recognised as Improvements to leasehold land buildings; and air traffic control systems, plant and equipment contains a right-of-use asset (2019: Cost £2.0m, Accumulated depreciation and impairment £0.6m) which was recognised as a finance lease asset in accordance with IAS 17 until 31 March 2019 (see note 15).

17. Financial and other assets

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

Trade and other receivables

	2020 £m	2019 £m
Non-current		
Receivable from customers gross (nil provision for impairment)	9.4	14.1
Other debtors	0.1	-
Prepayments	4.6	7.5
	14.1	21.6
Current		
Receivable from customers gross	95.4	98.6
Less: provision for impairment	(20.2)	(3.9)
	75.2	94.7
Other debtors	4.2	4.4
Contract assets	1.3	0.3
Amounts due from fellow subsidiary undertaking	4.5	2.9
Prepayments	10.8	14.4
	96.0	116.7

From 1 April 2019, rent payments made in advance are no longer shown within prepayments above. These amounts are now taken into consideration when calculating the right-of-use asset value under IFRS 16 (see note 19).

17. Financial and other assets (continued)

The average credit period on sales of services is 29 days (2019: 30 days). Interest is charged by Eurocontrol to UK en route customers at 9.72% (2019: 9.68%) on balances outstanding after more than 30 days. The settlement of Eurocontrol charges for NERL's UK (and other members state) en route services provided in February 2020 and March 2020 has been deferred to November 2020 and February 2021 respectively to provide financial support to airline customers from the impact of Covid-19. Interest will not accrue on charges settled on or before these due dates. NERL's February and March charges of £46.3m and £32.2m respectively are included in trade receivables. Eurocontrol secured a loan facility to advance en route charge income to member states, including the UK, during the extended settlement period at an amount representing 51% of previously forecast revenue. All other balances are non-interest bearing.

Receivables from customers which are non-current include regulatory revenue adjustments for Reference Period 1, which will be recovered after 31 March 2021. Receivables from customers which are current include unbilled revenue for services provided in March 2020. Prior year receivables from customers included unbilled revenue for services provided in March 2019 and regulatory adjustments for Reference Period 1 which were recovered by 31 March 2020.

Contract assets, which are all current, are expected to transfer to receivables from customers by 31 March 2021.

Movement in the impairment provision

	2020 £m	2019 £m
Balance at the beginning of the year	3.9	4.7
Increase in allowance recognised in the income statement	16.8	-
Foreign exchange movement in the year	0.1	(0.1)
Amounts recovered during the year	-	0.2
Amounts written off as irrecoverable	(0.6)	(0.9)
Balance at the end of the year	20.2	3.9

The company applies the IFRS 9 simplified approach to measuring expected credit losses using a lifetime expected credit loss provision for trade receivables and contract assets. In order to measure the expected credit losses, the credit risk characteristics of trade receivables and contract assets have been considered and a matrix based on the days past due used to summarise historic loss patterns.The historical loss rates calculated reflect the economic conditions in place during the period to which the historical data relates and does not reflect forward looking macro-economic factors. Consideration needs to be made as to whether these historical loss rates were incurred in economic conditions that are representative of those expected to exist during the exposure period at the balance sheet date. Therefore we have reassessed lifetime expected credit losses at 31 March 2020 to reflect the increase in default risk by customers due to the significant impact of Covid-19 on the aviation sector and agreement by States to defer settlement of national en route charges for February and March 2020 to November 2020 and February 2021 respectively and the historic loss rates have been adjusted accordingly to reflect the appropriate expected credit losses.

Contract assets relate to unbilled work in progress and have substantially the same credit risk characteristics as trade receivables for the same types of contracts. The company has concluded that the expected credit loss rates for trade receivables are a reasonable approximation of the expected credit loss rates for contract assets.

At 31 March 2020 the lifetime expected credit loss provision for trade receivables and contract assets is as follows:

	2020								
		Receivables - months past due							
	Unbilled income	Current	1 month	2-3 months	4-6 months	7-12 months	>12 months	In admin-istration	Total £m
Expected credit loss rate (%)	8.0%	13.7%	72.6%	36.2%	54.3%	62.1%	84.7%	100.0%	
Gross carrying amount (£m)	52.0	42.6	3.4	0.3	0.2	0.1	0.6	6.9	106.1
Lifetime expected credit loss (£m)	4.2	5.9	2.4	0.1	0.1	0.1	0.5	6.9	20.2

	2019								
		Receivables - months past due							
	Unbilled income	Current	1 month	2-3 months	4-6 months	7-12 months	>12 months	In admin-istration	Total £m
Expected credit loss rate (%)	0.2%	0.2%	6.1%	20.0%	48.6%	63.1%	81.4%	100.0%	
Gross carrying amount (£m)	64.7	43.8	0.4	0.2	0.2	0.1	0.5	3.1	113
Lifetime expected credit loss (£m)	0.1	0.1	-	-	0.1	0.1	0.4	3.1	3.9

Non-current trade and other receivables consists mainly of pension pass through of £9.1m (2019: £9.6m) which is being recovered over a 15 year period to 31 December 2030. None of these receivables have been subject to a significant increase in credit risk since initial recognition.

As at 31 March 2020, trade receivables of £6.9m (2019: £3.1m) had lifetime expected credit losses of the full value of the receivables. These receivables are in administration, receivership or liquidation.

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 and recoverable VAT) would be £580.6m (2019: £280.4m).

18. Borrowings

	2020 £m	2019 £m
Unsecured loans		
Obligations under finance leases (see below)	-	1.4
Secured loans at amortised cost		
£600m 5.25% Guaranteed Secured Amortising Bond due 2026	293.2	336.2
Bank loans (variable rate revolving term loan and revolving credit facility expiring 2022)	395.0	-
Gross borrowings	688.2	337.6
Unamortised bond issue costs	(1.1)	(1.4)
Unamortised bank facility arrangement fees	(0.9)	(1.3)
	686.2	334.9
Amounts due for settlement within 12 months	40.9	42.7
Amounts due for settlement after 12 months	645.3	292.2

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 2020 were £2,065.2m (2019: £1,551.3m), including goodwill of £149.3m (2019: £198.3m). Further security provisions are also provided by NATS Holdings Limited and by NATS Limited.

In August 2020, NERL agreed a further £380m bank facility expiring in July 2022. The requirement to test some specific covenants relating to this facility and NERL's existing borrowings has been waived until 31 March 2022.

The average effective interest rate on the bank loans in the year was 0.7% (2019: nil) 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.

The company has a lease for certain network related assets. As at 31 March 2019, obligations under finance leases were included within borrowings above. From 1 April 2019 lease liabilities are presented as a separate line item in the balance sheet, see note 19. Refer to note 32 for details about the change in accounting policy.

Undrawn committed facilities	2020 £m	2019 £m
Undrawn committed facilities expire as follows:		
Expiring in more than two years	5.0	400.0

At 31 March 2020, NERL had outstanding drawings of £395.0m (2019: £nil) against its committed bank facilities. These facilities expire in July 2022.

19. Leases

As indicated in note 2 above, the company has adopted IFRS 16: *Leases* which has resulted in changes in accounting policies and to the amounts recognised in the financial statements. The company has chosen not to restate the comparative year.

IFRS 16 results in lessees accounting for most leases in a manner similar to the way in which finance leases were previously accounted for under IAS 17: *Leases*. Lessees recognise a right-of-use asset and a corresponding financial liability on the balance sheet. The asset is amortised over the length of the lease, and the financial liability measured at amortised cost. Lessor accounting remains substantially the same as under IAS 17.

The balance sheet shows the following amounts relating to leases:

	31 March 2020 £m	1 April 2019[(a)] £m
Right-of-use assets		
Leasehold land and buildings	54.5	59.6
Air traffic control systems, plant and equipment	1.2	1.4
Vehicle, furniture and fittings	0.7	0.8
	56.4	61.8
Lease liabilities	(65.3)	(69.8)

Additions to the right-of-use assets during the year ended 31 March 2020 were £0.2m.

(a) In the previous year, the company only recognised lease assets and lease liabilities in relation to leases that were classified as finance leases under IAS 17: *Leases*. The assets were presented as air traffic control systems, plant and equipment in note 15 and the liabilities as part of the company's borrowings. For adjustments recognised on adoption of IFRS 16 on 1 April 2019, please refer to notes 15, 16 and 32.

19. Leases (continued)

The following table sets out the contractual maturity of the company's lease liabilities:

	31 March 2020 £m	1 April 2019 £m
Due within one year or less	7.4	6.4
Due between one and two years	7.4	7.4
Due between two and five years	20.6	21.1
Due in more than five years	39.1	45.8
	74.5	80.7
Less: future finance charges	(9.2)	(10.9)
	65.3	69.8

Analysed as:

	31 March 2020 £m	1 April 2019 £m
Current	5.8	4.5
Non-current	59.5	65.3
	65.3	69.8

The income statement shows the following amounts relating to leases:

	2020 £m	2019[b] £m
Depreciation charge for right-of-use assets		
Leasehold land and buildings	4.1	-
Air traffic control systems, plant and equipment	0.2	-
Vehicle, furniture and fittings	0.3	-
	4.6	-
Interest on lease liabilities (see note 10)	1.7	-
Short term lease expense	0.1	-
Expense relating to leases for cars provided as an employee benefit under IAS19	0.1	-

(b) The company has chosen to adopt IFRS 16: *Leases* from 1 April 2019 using the modified retrospective approach which does not require comparatives to be restated.

Minimum lease payments under operating leases recognised in the income statement are £0.1m (2019: £5.3m).

Nature of leasing activities

The company leases a number of properties in the jurisdictions from which it operates. Some property contracts contain provision for payments to increase each year by inflation others to be reset periodically to market rental rates. In other cases, the periodic rent is fixed over the lease term. The company also leases certain items of plant, equipment and vehicles. Leases of plant, equipment and vehicles comprise only fixed payments over the lease terms.

The percentages in the table below reflect the current proportions of lease payments that are either fixed or variable. The sensitivity reflects the impact on the carrying amount of lease liabilities and right-of-use assets if there was an uplift of 5% on the balance sheet date relative to lease payments that are variable.

Year ended 31 March 2020	Lease contracts No.	Fixed payments %[c]	Variable payments %[c]	Sensitivity £m
Property leases with payments linked to inflation	50	n/a	24.1%	0.8
Property leases with periodic uplifts to market rentals	42	n/a	72.0%	2.4
Property leases with fixed payments	3	0.9%	n/a	n/a
Leases of plant and equipment	2	2.6%	n/a	n/a
Vehicle leases	34	0.4%	n/a	n/a
	131	3.9%	96.1%	3.2

(c) The fixed/variable payment percentage is calculated based on the value of the lease liability outstanding as at 31 March 2020, divided by the company's total lease liability outstanding at that date.

The company sometimes negotiates break clauses in its property leases. On a case-by-case basis, the company will consider whether the absence of a break clause would expose the company to excessive risk. Typically factors considered in deciding to negotiate a break clause include:

- The length of the lease term;
- What the location will be used for e.g. a break clause is more important for a location used to house older technology; and
- Whether the location represents a new area of operations for the company.

At 31 March 2020, the carrying amounts of lease liabilities are not reduced by the amount of payments that would be avoided from exercising break clauses where it was considered reasonably certain that the company would not exercise its right to exercise any right to break the lease. In addition, the carrying amounts of some leases include the period to which the company is reasonably certain that options to extend the leases will be exercised. The remaining lease payments on all these leases is £23.0m, of which £12.7m is potentially avoidable if the leases were not extended and a further £7.0m is potentially avoidable were the company to exercise break clauses at the earliest opportunity.

The amount for leases not yet commenced to which the company is committed at 31 March 2020 is £0.9m.

20. Derivative financial instruments

Fair value of derivative financial instruments

	2020 £m	2019 £m
Non-current assets		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	3.1	1.7
Derivative financial instruments at fair value through profit and loss		
Forward foreign exchange contracts (cash flow hedges)	0.8	-
	3.9	1.7
Current assets		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	2.8	2.5
Derivative financial instruments at fair value through profit and loss		
Forward foreign exchange contracts (cash flow hedges)	1.3	-
	4.1	2.5
Current liabilities		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	(4.5)	(1.4)
Derivative financial instruments classified as held for trading		
Index-linked swap	(14.6)	(12.2)
	(19.1)	(13.6)
Non-current liabilities		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	(0.3)	(0.4)
Derivative financial instruments classified as held for trading		
Index-linked swap	(93.3)	(109.9)
	(93.6)	(110.3)

Further details on derivative financial instruments are provided in note 21. The index-linked swap is classified under international accounting standards as held for trading as it does not qualify for hedge accounting.

Hedge effectiveness is determined at the inception of the hedge relationship and through periodic prospective effectiveness assessments to ensure that an economic relationship exists between the hedged item and hedging instrument. The hedge ratio is established with reference to the cash flows associated with the hedged item and the hedging instrument. Ineffectiveness may arise if the timing of the forecast transaction changes from what was originally estimated, or if there are changes in the credit risk of the hedging instrument counterparties.

21. 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 18, 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 2020, the company had a corporate rating of A+ (negative outlook) from Standard & Poor's (2019: A+) and A2 (negative outlook) from Moody's (2019: 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 2020 was 29.0% (2019: 25.7%).

Categories of financial instrument

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

	2020 £m	2019 £m
Financial assets		
Financial assets at amortised cost		
Trade and other receivables	92.3	114.3
Cash and cash equivalents and short term investments	488.3	166.1
	580.6	280.4
Derivative financial instruments		
In designated hedge accounting relationships	5.9	4.2
At fair value through profit and loss	2.1	-
	588.6	284.6
Financial liabilities		
Financial liabilities at amortised cost		
Trade and other payables	(296.4)	(293.0)
Borrowings	(688.2)	(337.6)
Lease liabilities	(65.3)	-
	(1,049.9)	(630.6)
Derivative financial instruments		
In designated hedge accounting relationships	(4.8)	(1.8)
Held for trading at fair value through profit or loss	(107.9)	(122.1)
	(112.7)	(123.9)
	(1,162.6)	(754.5)

Financial assets at amortised cost includes balances for trade and other receivables (excluding prepayments of £15.4m (2019: £21.9m) and VAT of £2.4m (2019: £2.1m), cash and cash equivalents and short term investments.

Financial liabilities at amortised cost includes balances for trade and other payables (excluding contract liabilities of £42.4m (2019: £73.5m) and deferred income of £21.5m (2019: £19.6m), the bond and bank borrowings (excluding unamortised bond issue costs and bank facility arrangement fees) and lease liabilities.

The index-linked swap is categorised as held for trading. During the year, £12.1m (2019: £10.1m) was repaid in semi-annual amortisation payments. The credit arising from the change in fair value of £2.1m has been recorded in the income statement in the year (2019: £3.0m charge).

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 at least 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.

21. Financial instruments (continued)

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, US dollar satellite data charges for satellite based surveillance services across the North Atlantic and other purchases from foreign suppliers 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 (2019: 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	
	2020 £m	2019 £m	2020 £m	2019 £m
Euro	74.4	97.7	(14.1)	(13.7)
US dollar	2.3	2.2	(3.2)	(1.0)
Canadian dollar	2.1	0.9	(2.2)	(1.2)
	78.8	100.8	(19.5)	(15.9)

Foreign currency sensitivity analysis

The company has assets and liabilities denominated in foreign currencies including cash balances of £7.3m at 31 March 2020 (2019: £3.7m) in euro, Canadian dollars and US 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.

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	2020 Impact £m	2019 Impact £m
Euro	7.0	1.5
US dollar	(10.2)	(1.9)
Canadian dollar	(0.2)	(0.1)
	(3.4)	(0.5)

The company's sensitivity to the euro increased during the year reflecting a net increase in euro denominated forward contracts taken out to hedge future receipts and purchases, and a net decrease in euro denominated monetary assets. The company's sensitivity to the US dollar increased during the year mainly reflecting an increase in US dollar denominated forward contracts taken out to hedge future purchases. Exposure to other currencies has remained fairly constant. NERL believes that this sensitivity analysis accurately reflects its inherent foreign exchange risk.

21. 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, the company entered into various forward foreign exchange contracts to fund capital purchases and services. The company has designated these forward contracts as cash flow hedges. During the year, certain forward foreign exchange contracts were determined to be ineffective, as forecast transactions were no longer certain to arise due to a reduction in demand for satellite data services as a result of Covid-19, and as such any gains or losses arising from these contracts have been recognised in the income statement. The following contracts were outstanding at year end:

	2020			2019		
			Average exchange rate			Average exchange rate
Euro sold	£m	€m		£m	€m	
0-90 days	162.1	186.7	0.8684	143.5	164.2	0.8744
91-365 days	4.2	4.6	0.9164	-	-	-
> 365 days	-	-	-	18.0	19.6	0.9160
	166.3	191.3	0.8695	161.5	183.8	0.8788
Euro bought	€m	£m		€m	£m	
0-90 days	17.0	15.0	0.8823	8.9	7.7	0.8736
91-365 days	11.1	9.8	0.8829	29.2	26.4	0.9044
> 365 days	12.4	11.4	0.9178	31.8	28.4	0.8917
	40.5	36.2	0.8933	69.9	62.5	0.8947
US dollar bought	US$ m	£m		US$ m	£m	
0-90 days	9.9	7.7	1.2936	8.8	6.5	1.3461
91-365 days	32.8	24.2	1.3554	3.9	2.8	1.4105
> 365 days	93.3	70.9	1.3157	12.5	8.5	1.4735
	136.0	102.8	1.3234	25.2	17.8	1.4169
Canadian dollar bought	CAD m	£m		CAD m	£m	
0-90 days	1.1	0.6	1.7571	0.5	0.3	1.7064
91-365 days	0.3	0.2	1.7460	0.4	0.2	1.7306
> 365 days	2.2	1.2	1.7790	0.8	0.5	1.7311
	3.6	2.0	1.7696	1.7	1.0	1.7232
Danish krone bought	DKK m	£m		£m	DKK m	
0-90 days	1.5	0.2	8.3502	1.4	0.2	8.4320
> 365 days	1.5	0.2	8.2456	2.9	0.4	8.2972
	3.0	0.4	8.2972	4.3	0.6	8.3410

At 31 March 2020, 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 £5.1m (2019: £0.6m 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.

Gains and losses on the ineffective portion of the cash flow hedges are recorded immediately in the income statement. For the year ended 31 March 2020, £2.1m gain was recorded in the income statement (2019: £nil).

In addition to the above, NERL has entered into average rate forward agreements with a fixing date after 31 March 2020 to sell euro anticipated to be received in June 2020 in respect of UK en route revenues, for this reason they are not included in the table above. The value of these cash flows is £52.4m (2019: £53.0m).

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 2020 (2019: none).

21. Financial instruments (continued)

Economic interest rate exposure

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

	2020						
	Cash			Short term deposits			
Currency	Amount £m	Economic interest rate %	Average maturity days	Amount £m	Economic interest rate %	Average maturity days	Total £m
Sterling	443.7	0.5	19	37.3	0.6	183	481.0
Euro	3.2	-	1	-	-	-	3.2
Canadian dollar	2.1	-	1	-	-	-	2.1
US dollar	2.0	-	1	-	-	-	2.0
	451.0			37.3			488.3

	2019						
	Cash			Short term deposits			
Currency	Amount £m	Economic interest rate %	Average maturity days	Amount £m	Economic interest rate %	Average maturity days	Total £m
Sterling	126.0	0.8	3	36.4	0.9	183	162.4
Euro	2.4	-	1	-	-	-	2.4
Canadian dollar	1.0	-	1	-	-	-	1.0
US dollar	0.3	-	1	-	-	-	0.3
	129.7			36.4			166.1

The economic interest rate reflects the true underlying cash rate that the company was paying on its borrowings or receiving on its deposits at 31 March.

The economic interest rate exposure of the company's loans is presented below with and without the effect of derivatives, as follows:

Excluding derivatives

	Total £m	Variable rate £m	Inflation rate £m	Fixed rate £m	Economic interest rate %	Weighted average time for which rate is fixed years
At 31 March 2020						
Sterling:						
5.25% guaranteed secured bonds	293.2	-	-	293.2	5.26%	3.7
Bank loans	395.0	395.0	-	-	1.10%	0.5
Lease liabilities	65.3	-	-	65.3	2.51%	10.8
Total	753.5	395.0	-	358.5		
At 31 March 2019						
Sterling:						
5.25% guaranteed secured bonds	336.2	-	-	336.2	5.26%	4.2
Obligations under finance leases	1.4	-	-	1.4	3.10%	3.4
Total	337.6	-	-	337.6		

21. Financial instruments (continued)

Including derivatives

	Total £m	Variable rate £m	Inflation rate £m	Fixed rate £m	Economic interest rate %	Weighted average time for which rate is fixed years
At 31 March 2020						
Sterling:						
5.25% guaranteed secured bonds	155.2	-	-	155.2	5.26%	3.7
5.25% guaranteed secured bonds	138.0	-	138.0	-	5.59%	0.5
Bank loans	395.0	395.0	-	-	1.10%	0.5
Lease liabilities	65.3	-	-	65.3	2.51%	10.8
Total	753.5	395.0	138.0	220.5		
At 31 March 2019						
Sterling:						
5.25% guaranteed secured bonds	178.2	-	-	178.2	5.27%	4.2
5.25% guaranteed secured bonds	158.0	-	158.0	-	5.41%	0.5
Obligations under finance leases	1.4	-	-	1.4	3.10%	3.4
Total	337.6	-	158.0	179.6		

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

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 and lease liabilities net of cash and short term investments, as distinct from the definition used for financial covenants purposes.

	2020		2019	
	£m	%	£m	%
Fixed (net of bond discount and issue costs)	219.4	83.4	178.2	105.6
Index-linked	138.0	52.4	158.0	93.6
Floating (net of cash, short term investments and facility costs)	(94.2)	(35.8)	(167.4)	(99.2)
Net debt	263.2	100.0	168.8	100.0

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.

	2020 Impact £m	2019 Impact £m
Cash at bank and short term deposits (2020: £488.3m, 2019: £166.1m)	4.9	1.7
Borrowings (2020: £395.0m, 2019: £nil)	(4.0)	-
	0.9	1.7

Overall the company's sensitivity to interest rates is lower than in the prior year, reflecting net 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 2020 the notional principal had reduced to £138m. 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 value of the notional principal of the index-linked swap is also linked to movements in RPI.

21. Financial instruments (continued)

Inflation rate sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to inflation arising from the index-linked swap. 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 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 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 a fairly equal and opposite impact on profit and equity if breakeven inflation falls by 1%.

	2020 Impact £m	2019 Impact £m
Change in swap interest and mark to market value	(7.1)	(9.4)

The mark to market value of the index-linked swap is also sensitive to the discount rates that are used to determine the net present value of the cash flows under the swap agreement. The discount rate is determined by reference to market yields on interest rate swaps. The effect of a 1% increase in the discount rate would be to increase profit and equity by £3.9m (2019: £5.1m). There would be a fairly equal and opposite impact on profit and equity if discount rates decreased by 1%.

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 17. 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.

Investment limits for each institution are set with reference to their credit ratings.

The following table shows the distribution of the company's deposits at 31 March by credit rating (Standard & Poor's), which includes the impact of additional drawings on the companies bank facilities:

	2020			2019		
Rating (Standard & Poor's)	Number of institutions	£m	By credit rating %	Number of institutions	£m	By credit rating %
AAA & AAAm	6	244.6	50.1	7	116.3	70.0
AA-	1	20.0	4.1	1	20.0	12.1
A+	1	46.0	9.4	-	-	-
A	4	177.7	36.4	4	29.8	17.9
		488.3	100.0		166.1	100.0

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.

21. Financial instruments (continued)

The policy is to:

a. maintain free cash equal to between one and two months of UK en route services revenues (see below). Free cash is defined as cash and cash equivalents and short term investments, excluding a debt service reserve account of £37.3m used to fund interest, fees and bond amortisation payments scheduled in the next six months and a required liquidity reserve account of £21.3m held to provide liquidity in the event of certain pre-defined circumstances, particularly to ensure compliance with financial covenants;

b. ensure access to bank facilities sufficient to meet 110% of forecast requirements that are not otherwise covered by operating cash flows or other sources of finance through the period of the business plan. At 31 March 2020, NERL had access to bank facilities totalling £400m available until 31 July 2022, of which £395.0m was drawn at 31 March 2020 with the funds representing a large proportion of the £488.3m of cash and cash equivalents held on the balance sheet. The facilities comprise a £350m revolving term loan facility, a £45m revolving credit facility and a £5m overdraft facility. In August 2020 a further £380m bank facility expiring July 2022 was agreed;

c. ensure access to long term funding to finance its long term assets. This is achieved in the form of the fixed rate amortising sterling bonds with a final maturity date of 2026;

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

e. maintain a portfolio of debt diversified by source and maturity. This is achieved through the issuance of the fixed rate amortising bonds 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:

	2020 £m	2019 £m
Average monthly UK en route services income	49.6	49.8
Free cash at 31 March	429.7	108.4
Ratio of free cash to UK en route services income	8.7	2.2

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

	2020 £m	2019 £m
Bank borrowings	395.0	-
Gross borrowings (including lease liabilities)	753.5	337.6
Bank borrowings as a percentage of gross borrowings	52.4%	0.0%

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.

	2020				2019			
	Unsecured lease liabilities £m	Secured loans £m	Other liabilities £m	Total £m	Unsecured lease liabilities £m	Secured loans £m	Other liabilities £m	Total £m
Due within one year or less	7.4	61.8	163.1	232.3	0.2	60.8	182.8	243.8
Between one and two years	7.4	60.0	100.6	168.0	0.2	56.8	65.6	122.6
Due between two and five years	20.6	544.0	32.7	597.3	0.7	156.1	40.2	197.0
Due in more than five years	39.1	92.2	-	131.3	0.5	138.0	4.4	142.9
	74.5	758.0	296.4	1,128.9	1.6	411.7	293.0	706.3
Effect of interest, discount and unamortised bond issue and bank facility arrangement fees	(9.2)	(71.8)	-	(81.0)	(0.2)	(78.2)	-	(78.4)
	65.3	686.2	296.4	1,047.9	1.4	333.5	293.0	627.9

Other liabilities above include trade and other payables excluding deferred income of £21.5m (2019: £19.6m) and contract liabilities of £42.4m (2019: £73.5m).

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.

21. Financial instruments (continued)

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
2020					
Net settled:					
Index-linked swap payable	(14.6)	(15.1)	(56.9)	(21.8)	(108.4)
Gross settled:					
Foreign exchange forward contract receivables	226.6	27.5	60.2	-	314.3
Foreign exchange forward contract payables	(226.9)	(26.9)	(56.9)	-	(310.7)
	(14.9)	(14.5)	(53.6)	(21.8)	(104.8)
2019					
Net settled:					
Index-linked swap payable	(12.2)	(14.9)	(54.0)	(45.3)	(126.4)
Gross settled:					
Foreign exchange forward contract receivables	239.8	48.7	7.0	-	295.5
Foreign exchange forward contract payables	(238.5)	(47.0)	(7.5)	-	(293.0)
	(10.9)	(13.2)	(54.5)	(45.3)	(123.9)

Forward exchange forward contract payables due within one year or less include estimates of the payables associated with average rate forward agreements that have fixing rates after 31 March 2020. At 31 March 2020, NERL had entered into such agreements to sell euro in June 2020 in exchange for £52.4m (2019: £53.0m).

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).

	2020				2019			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Financial assets								
Derivative financial instruments in designated hedge accounting relationships	-	5.9	-	5.9	-	4.2	-	4.2
Derivative financial instruments at fair value through profit and loss		2.1	-	2.1		-	-	-
	-	8.0	-	8.0	-	4.2	-	4.2
Financial liabilities								
Derivative financial instruments in designated hedge accounting relationships	-	(4.8)	-	(4.8)	-	(1.8)	-	(1.8)
Derivative financial instruments classified as held for trading	-	(107.9)	-	(107.9)	-	(122.1)	-	(122.1)
	-	(112.7)	-	(112.7)	-	(123.9)	-	(123.9)

There were no transfers between individual levels in the year.

21. Financial instruments (continued)

Valuation techniques and key inputs

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

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

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

- the fair value of the index-linked swap is provided by bank counterparties using proprietary financial models. This is validated using discounted cash flow modelling based on the latest published inflation index, observable forecasts of inflation and discount rates taken from the observable interest rate swap curve at the reporting date; and

- the fair value of the fixed rate bond has been derived from its externally quoted price.

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

	Carrying amount		Fair value	
	2020 £m	2019 £m	2020 £m	2019 £m
Financial liabilities				
£600m 5.25% Guaranteed Secured Amortising Bond	(293.2)	(336.2)	(335.5)	(388.9)

22. Financial and other liabilities

Trade and other payables

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

	2020 £m	2019 £m
Current		
Trade payables	65.1	82.0
Other payables	0.2	0.1
Amounts due to parent company	55.3	49.3
Contract liabilities	10.6	37.9
Accruals and deferred income	44.5	53.9
	175.7	223.2
Non-current		
Trade payables	131.0	102.9
Contract liabilities	31.8	35.6
Accruals and deferred income	21.8	24.4
	184.6	162.9
	360.3	386.1

From 1 April 2019, rent payments made in arrears, rent free periods and lease incentive liabilities are no longer shown within accruals and deferred income above. These amounts are now taken into consideration when calculating the right-of-use asset value under IFRS 16 (see note 19).

Trade payables and accruals principally comprise amounts outstanding for trade purchases and ongoing costs. The average credit period taken for trade purchases is 41 days (2019: 33 days). The directors consider that the carrying amount of the trade payables approximates to their fair value.

Trade payables that are non-current also include regulatory adjustments for calendar year 2019, the period January to March 2020 and previous regulatory control periods, which will be repaid after 31 March 2021 through 2021 and 2022 charges. Trade payables that are current include regulatory adjustments for calendar years 2018 and 2019 and previous regulatory control periods, which will be repaid by 31 March 2021 through 2020 and 2021 charges.

23. Provisions

	Total £m
At 1 April 2019	6.8
Additional provision in the year	2.2
Utilisation of provision	(0.2)
At 31 March 2020	8.8

	2020 £m	2019 £m
Amounts due for settlement within 12 months	2.0	0.8
Amounts due for settlement after 12 months	6.8	6.0
	8.8	6.8

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

24. 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 £m	Retirement benefits £m	Financial instruments £m	Other £m	Total £m
At 1 April 2018	106.3	14.2	(6.2)	(2.9)	111.4
Charge/(credit) to income	6.2	4.9	0.6	(1.1)	10.6
Credit to equity	-	(21.9)	(0.2)	-	(22.1)
At 31 March 2019	112.5	(2.8)	(5.8)	(4.0)	99.9
At 1 April 2019	112.5	(2.8)	(5.8)	(4.0)	99.9
Charge/(credit) to income	21.3	3.7	1.7	(3.1)	23.6
Charge to equity	-	32.0	0.9	-	32.9
At 31 March 2020	133.8	32.9	(3.2)	(7.1)	156.4

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:

	2020 £m	2019 £m
Deferred tax liabilities	166.7	112.5
Deferred tax assets	(10.3)	(12.6)
	156.4	99.9

25. Share capital

	Authorised		Called up, allotted and fully paid	
	Number of shares	£m	Number of shares	£m
Ordinary shares of £1 each				
At 31 March 2019 and 31 March 2020	10,000,000	10.0	10,000,000	10.0

26. Notes to the cash flow statement

	2020 £m	2019 £m
Operating profit from continuing operations	50.8	111.8
Adjustments for:		
Impairment of goodwill	49.0	-
Depreciation of property, plant and equipment	61.7	78.8
Amortisation of intangible assets	52.2	55.1
Depreciation of right-of-use assets	4.6	-
Impairment losses	7.2	4.1
Deferred grants released	(0.2)	(0.3)
Profit on disposal of property, plant and equipment	(0.2)	-
R&D expenditure above the line tax credits	(1.2)	(1.9)
Adjustment for pension funding	(19.9)	(25.6)
Operating cash flows before movements in working capital	204.0	222.0
Decrease in trade and other receivables	26.0	2.6
(Decrease)/ increase in trade, other payables and provisions	(18.4)	51.7
Cash generated from operations	211.6	276.3
Tax received	-	1.3
Net cash from operating activities	211.6	277.6

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.

Reconciliation of net financial liabilities

The table below analyses those net financial liabilities for which cash flows arise from financing activities in each of the periods presented.

	2020 £m	2019 £m
Cash and cash equivalents	451.0	129.7
Short term investments	37.3	36.4
Borrowings (2019 includes obligations under finance leases)	(686.2)	(334.9)
Lease liabilities	(65.3)	-
Net debt	(263.2)	(168.8)
Index-linked swap	(107.9)	(122.1)
Net financial liabilities	(371.1)	(290.9)
Cash and liquid investments	488.3	166.1
Gross debt - fixed interest rates (net of unamortised bond issue costs)	(357.4)	(336.2)
Gross debt - variable interest rates (net of unamortised bank facility arrangement fees)	(394.1)	1.3
Net debt	(263.2)	(168.8)
Index-linked swap	(107.9)	(122.1)
Net financial liabilities	(371.1)	(290.9)

26. Notes to the cash flow statement (continued)

The table below reconciles the movements in financial assets and financial liabilities arising from financing activities in the period.

	Assets		Liabilities from financing activities (excluding derivatives)				Net debt	Derivatives	Net financial liabilities
	Cash and cash equivalents £m	Short term investments £m	Inter-company loan £m	Lease liabilities £m	£600m 5.25% Guaranteed Secured Amortising Bonds £m	Bank loans (i) £m	Sub-total £m	Index-linked swaps £m	Total net financial liabilities £m
Net financial liabilities as at 1 April 2018	156.3	38.3	(22.5)	(1.6)	(379.5)	1.7	(207.3)	(129.2)	(336.5)
Cash flows	(26.6)	(1.9)	22.5	0.2	45.2	-	39.4	10.1	49.5
Fair value movements	-	-	-	-	-	-	-	(3.0)	(3.0)
Other non-cash movements (ii)	-	-	-	-	(0.5)	(0.4)	(0.9)	-	(0.9)
Net financial liabilities as at 31 March 2019	129.7	36.4	-	(1.4)	(334.8)	1.3	(168.8)	(122.1)	(290.9)
Adjustment on initial application of IFRS 16 (see notes 19 and 33)	-	-	-	(68.4)	-	-	(68.4)	-	(68.4)
Net financial liabilities as at 1 April 2019 (as restated for IFRS 16)	129.7	36.4	-	(69.8)	(334.8)	1.3	(237.2)	(122.1)	(359.3)
Cash flows	321.3	0.9	-	4.8	43.2	(395.0)	(24.8)	12.1	(12.7)
New leases in the year	-	-	-	(0.2)	-	-	(0.2)	-	(0.2)
Effect of modification to lease terms	-	-	-	(0.1)	-	-	(0.1)	-	(0.1)
Fair value movements	-	-	-	-	-	-	-	2.1	2.1
Other non-cash movements (ii)	-	-	-	-	(0.5)	(0.4)	(0.9)	-	(0.9)
Net financial liabilities as at 31 March 2020	451.0	37.3	-	(65.3)	(292.1)	(394.1)	(263.2)	(107.9)	(371.1)

(i) The amount shown under bank loans is net of unamortised bank facility arrangement fees.
(ii) Other non-cash flow movements include amortisation of bond issue costs and bank facility arrangement fees.

27. Financial commitments

	2020 £m	2019 £m
Amounts contracted but not provided for in the accounts	45.3	66.7

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.

28. 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 2020	No. employee shares outstanding at 31 March 2019
Date of share awards		
Free share awards		
21 September 2001	196,564	210,561
20 October 2003	184,680	198,680
10 September 2004	269,920	293,720
11 January 2008	212,228	233,548
18 September 2009	231,607	255,757
Partnership shares		
1 March 2011	210,588	235,956
26 September 2012	256,746	296,649
30 May 2014	224,348	307,460
31 October 2016	362,512	377,618
31 October 2018	479,189	494,886
Matching shares		
1 March 2011	210,935	235,419
26 September 2012	256,696	295,498
30 May 2014	224,664	307,535
31 October 2016	362,674	377,618
31 October 2018	479,189	494,886
	4,162,540	4,615,791
Dividend shares issued on 28 June 2005	23,535	25,203
Total employee shares in issue at 31 March	4,186,075	4,640,994

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

	Movement in the no. of shares during the year ended 31 March 2020	Movement in the no. of shares during the year ended 31 March 2019
Balance at 1 April	4,640,994	3,965,507
Granted during the year	-	1,008,434
Forfeited during the year	(6,026)	(8,918)
Exercised during the year	(436,448)	(337,078)
Staff transfers between group companies	(12,445)	13,049
Balance at 31 March	4,186,075	4,640,994

These shares are valued every six months by independent valuers using discounted cash flow and income multiple methods of valuation. Valuations are approved by HMRC for a period of six months unless a significant event arises which has a material impact on the share value. The outbreak of Covid-19 had a significant and material impact. The fair value of an employee share was estimated by reference to a comparable listed company at 31 March 2020 to be £2.85. The independent valuation at 30 June 2019 was £3.85. The liability for the employee shares at 31 March 2020 was £11.2m (2019: £15.3m) included in amounts due to parent company. The income statement includes a credit of £4.1m (2019: £2.4m charge). The payments made to employees for the shares they exercised during the year was £1.6m (2019: £1.2m).

29. 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 2020 employer contributions of £11.1m (2019: £8.1m), excluding salary sacrifice contributions of £6.0m (2019: £4.4m), represented 15.7% of pensionable salaries (2019: 15.2%).

The defined contribution scheme had 1,537 members at 31 March 2020 (2019: 1,287).

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 chair.

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.

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 2017 and used the projected unit credit method. The assumptions which have the most significant effect on the liabilities assessed at the valuation and hence the contribution requirement are those relating to the rate of return on investments, the rate of increase in salaries, the rate of increase in pensions and life expectancy.

The market value of the NATS' section's assets as at 31 December 2017 was £4,540.4m. 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 £270.4m, corresponding to a funding ratio of 94.4%.

The 2017 valuation showed that, based on long term financial assumptions, the contribution rate required to meet the future benefit accrual was 47.6% of pensionable pay (41.8% employers and 5.8% employees). The employer contribution includes an allowance to cover administration costs, including the Pension Protection Fund (PPF) levy.

Contributions to the pension scheme

Following the 2017 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 are paid at 41.7% payable from 1 January 2020 onwards. The NATS group paid deficit recovery contributions of £40.8m in 2018 calendar year and and £41.8m in 2019 calendar year. From 1 January 2020 to 31 December 2023, deficit recovery contributions will be paid at £25.4m in 2020 and increase annually by 2.37% for 2021 to 2023. No contributions will be paid in 2024. Further deficit recovery contributions will be paid in 2025 and 2026 of £2.3m per year. NERL's share of deficit recovery contributions is c. 76%.

NATS Limited, the immediate parent of the company, is the employer of, and seconds to the company, all personnel who undertake the company's business. In that capacity, NATS Limited participates in CAAPS 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 £76.4m (2019: £76.1m). This amount included £6.8m (2019: £6.8m) 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 58.6% (2019: 58.0%) 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 estimated contributions expected to be paid to the scheme during the financial year ending 31 March 2021 is £75.2m, including salary sacrifice contributions estimated at £6.7m.

29. Retirement benefit schemes (continued)

Company's accounting valuation under international accounting standards

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

This valuation differs from the Trustees' funding assessment explained above in a number of critical respects, including for example, differences in timing and frequency as well as in valuation assumptions. The Trustees' last funding assessment was prepared as at 31 December 2017, 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.

An actuarial valuation for IAS 19 purposes was carried out at 31 March 2020 (based on 31 December 2019 membership data). 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:

	2020	2019	2018
RPI Inflation	2.45%	3.10%	3.00%
CPI Inflation	1.85%	2.00%	1.90%
Increase in:			
- salaries	1.85%	2.00%	1.90%
- deferred pensions	2.45%	3.10%	3.00%
- pensions in payment	2.45%	3.10%	3.00%
Discount rate for net interest expense	2.30%	2.45%	2.65%

The mortality assumptions have been drawn from actuarial tables 97% S2PMA light and 102% S2PFA light (2019: 97% S2PMA light and 102% S2PFA light) with future improvements in line with CMI 2016 (2019: CMI 2016) projections for male/female members, subject to a long term improvement of 1.5% p.a. (2019: 1.5% p.a.) These tables assume that the life expectancy, from age 60, for a male pensioner is 29.1 years and a female pensioner is 29.7 years. Allowance is made for future improvements in longevity, such that based on the average age of the current active membership (47), when these members reach retirement, life expectancy from age 60 will have increased for males to 30.2 years and for females to 30.9 years.

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

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

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

c) inflation risk: the scheme's benefit obligations are linked to inflation, and higher inflation will lead to higher liabilities. As discussed further below, the Scheme has implemented a liability driven investment programme to partially protect the funding position from changes in inflation. Furthermore, some of the scheme's assets (such as equities) are real in nature and so provide some additional inflation protection, but overall, an increase in inflation will adversely impact on the funding position.

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

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

Assumption:	Change in assumption:	Impact on scheme liabilities:
Discount rate	Increase/decrease by 0.5%	Decrease by 9.9%/increase by 11.5%
Rate of inflation	Increase/decrease by 0.5%	Increase by 11.1%/decrease by 9.7%
Rate of pensionable salary growth	Increase/decrease by 0.5%	Increase by 2.5%/decrease by 2.4%
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.

The directors consider that the criteria for recognition of a pension surplus under IFRIC 14 are met.

29. Retirement benefit schemes (continued)

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

	2020 £m	2019 £m
Current service cost	(55.6)	(51.4)
Past service cost	-	(0.8)
Net interest credit	0.4	3.1
Administrative expenses	(1.3)	(1.4)
Components of defined benefit costs recognised within operating profit	(56.5)	(50.5)

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

	2020 £m	2019 £m
Return on plan assets (excluding amounts included in net interest expense)	(129.4)	87.6
Actuarial gains and losses arising from changes in financial assumptions	292.6	(191.3)
Actuarial gains and losses arising from changes in demographic assumptions	-	-
Actuarial gains and losses arising from experience adjustments	6.7	(21.9)
	169.9	(125.6)

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

	2020 £m	2019 £m
Present value of defined benefit obligations	(3,318.3)	(3,571.7)
Fair value of scheme assets	3,491.6	3,555.2
Surplus/(deficit) in scheme	173.3	(16.5)

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

	2020 £m	2019 £m
At 1 April	(3,571.7)	(3,305.6)
Current service cost	(55.6)	(51.4)
Past service cost	-	(0.8)
Interest expense on defined benefit scheme obligations	(86.4)	(86.5)
Actuarial gains and losses arising from changes in financial assumptions	292.6	(191.3)
Actuarial gains and losses arising from changes in demographic assumptions	-	-
Actuarial gains and losses arising from experience adjustments	6.7	(21.9)
Benefits paid	96.1	85.8
At 31 March	(3,318.3)	(3,571.7)

The average duration of the scheme's liabilities at the end of the year is 21.2 years (2019: 21.6 years). The present value of the defined benefit obligation can be analysed by member group as follows:

	2020 £m	2019 £m
Active members	(1,349.6)	(1,460.5)
Deferred members	(290.4)	(316.8)
Pensioners	(1,678.3)	(1,794.4)
	(3,318.3)	(3,571.7)

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

	2020 £m	2019 £m
At 1 April	3,555.2	3,389.1
Interest income on scheme assets	86.8	89.6
Return on plan assets (excluding amounts included in net interest expense)	(129.4)	87.6
Contributions from company	76.4	76.1
Benefits paid	(96.1)	(85.8)
Administrative expenses	(1.3)	(1.4)
At 31 March	3,491.6	3,555.2

29. Retirement benefit schemes (continued)

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

	2020 £m	2019 £m
Cash and cash equivalents	30.6	23.5
Equity instruments		
- Emerging markets	82.0	108.4
- Global	580.0	606.7
	662.0	715.1
Bonds		
- Fixed income	1,368.0	1,217.7
- Index-linked gilts over 5 years	992.6	1,156.1
	2,360.6	2,373.8
Other investments		
- Property	181.0	184.2
- Hedge funds	163.9	168.1
- Private equity funds	97.9	93.8
	442.8	446.1
Derivatives		
- Futures contracts	(4.4)	(3.3)
	3,491.6	3,555.2

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. As explained in Note 3, the asset manager reported a material valuation uncertainty in relation to the scheme's property assets.

NATS and Trustees implemented a liability driven investment (LDI) programme in 2012 in order to hedge the impact of changes in inflation and interest rates on the value of the scheme's obligations, which are sensitive to inflation and movements in yields in the gilt market. The strategy includes establishing trigger levels which define the rates of interest and inflation rates at which hedging transactions will be executed. In addition, and as an acceleration of the existing strategy, NATS and Trustees agreed during 2014 to increase the level of hedging of interest rates and inflation to 50%, as measured on the Trustee funding basis. During 2018 it was agreed to further increase the level of hedging of interest rates and inflation to 65%, 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.

During 2018, NATS and the Trustees also agreed changes to the asset allocation to make the portfolio more efficient by reducing the overall level of risk whilst continuing to support the valuation assumptions agreed for the 2017 funding valuation and therefore having no impact on the level of contributions payable. This included a reduction in the allocation to equities in favour of a more diversified portfolio with a higher allocation to liquid debts.

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 2020 was a loss of £42.6m (2019: £177.2m gain).

30. Related party transactions

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

AG is a consortium of British Airways plc, Deutsche Lufthansa AG, easyJet Airline Company Limited, The Pension Protection Fund, Thomas Cook Airlines Limited (in liquidation), TUI 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.

30. Related party transactions (continued)

Trading transactions

	Sales		Purchases	
	Year ended 31 March 2020	Year ended 31 March 2019	Year ended 31 March 2020	Year ended 31 March 2019
	£m	£m	£m	£m
LHR Airports Limited	0.1	-	0.1	-
Ministry of Defence (MOD)	52.0	50.3	2.8	4.0
Department for Transport (DfT)	0.4	0.9	-	-
Meteorological Office	0.4	0.3	0.9	0.8
Aquila Air Traffic Management Services Limited	1.1	1.0	-	-

	Amounts owed by related parties		Amounts owed to related parties	
	Year ended 31 March 2020	Year ended 31 March 2019	Year ended 31 March 2020	Year ended 31 March 2019
	£m	£m	£m	£m
LHR Airports Limited	-	-	-	-
Ministry of Defence (MOD)	-	5.7	36.5	28.4
Department for Transport (DfT)	-	0.1	-	-
Meteorological Office	-	-	0.1	-
Aquila Air Traffic Management Services Limited	-	0.1	-	-

The company also entered into transactions with its parent and fellow subsidiary undertakings. Sales and purchases to these related parties are disclosed in note 4 and 6 respectively. Amounts owed from/to these related parties are shown in note 17 and 22.

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 (2019: £nil) have been made for doubtful debts in respect of amounts owed by related parties.

Directors' remuneration

The total remuneration earned by the directors of the company in the year was £3,144,000 (2019: £1,813,000). The number of directors paid by the company during the year was three (2019: two). The highest paid director (see below) is a member of the defined contribution pension scheme in order to make employee contributions only and sacrificed £10,000 (2019: £10,000) of salary under the company's salary sacrifice arrangements. The company did not make any employer contributions. Neither of the remaining two directors participated in a company pension scheme.

Remuneration earned by the highest paid director of the company in the year was £2,047,000 (2019: £1,013,000). Contributions paid to a defined contribution pension scheme via salary sacrifice have been deducted from this remuneration figure.

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.

	2020	2019
	£m	£m
Short term employee benefits	7.0	6.4
Post-employment benefits	0.2	0.1
Other long term benefits	1.2	2.8
	8.4	9.3

31. 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.

32. Change in accounting policy

The company adopted IFRS 16 from 1 April 2019 using the modified retrospective approach and accordingly, has not restated comparatives. The reclassifications and transitional adjustments arising from initial application are recognised in the opening balance sheet on 1 April 2019. On adoption the company recognised right-of-use assets and lease liabilities, rent free periods and capital contributions in relation to property, plant, equipment and vehicles. The right-of-use assets were measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments. The liabilities were measured at the present value of the remaining lease payments, discounted using the incremental borrowing rate of the lessee, based on the duration and the nature of the lease, and the jurisdiction in which the lessee is based, at 1 April 2019. The company's weighted average incremental borrowing rate on 1 April 2019 was 2.50%.

Practical expedients applied on transition

In applying the modified retrospective approach, the company has taken advantage of the following practical expedients:
- A single discount rate has been applied to portfolios of leases with reasonably similar characteristics;
- Reliance on previous assessments on whether leases are onerous instead of performing an impairment review; and
- The use of hindsight, such as in determining the lease term if the contract contains options to extend or terminate the lease.

On transition the company reassessed its lease portfolio and whether a contract is or contains a lease at the date of initial application. The impact of this reassessment is shown in the reconciliation of operating lease commitments shown below.

The aggregate lease liability recognised in the balance sheet at 1 April 2019 and the company's operating lease commitment at 31 March 2019 can be reconciled as follows:

	1 April 2019 £m
Operating lease commitment at 31 March 2019	71.4
Agreements determined as not giving rise to a right-of-use asset under IFRS 16[1]	(1.4)
Effect of discounting lease commitments within the scope of IFRS 16 at the date of initial application[2]	(10.8)
Effect of applying a different treatment of extension and termination options for leasehold land and buildings[3]	9.9
Effect of changes in indices or market rents affecting variable payments[4]	(0.7)
Lease liabilities due to initial application of IFRS 16 at 1 April 2019	68.4
Lease liabilities from finance leases (recognised under IAS 17) at 1 April 2019	1.4
Total lease liabilities at 1 April 2019	69.8

[1] The company has reviewed each of its operating leases and other contracts to determine whether these agreements give rise to the recognition of a right-of-use asset under IFRS16. As a result of that review certain categories of assets have been determined as not giving rise to a right-of-use asset:
- Property agreements which provide only access rights and impose restrictions or licences where no exclusive use of the property is granted; and
- Leases for cars provided as an employee benefit under IAS 19.

[2] The previously disclosed lease operating commitments were undiscounted, while the IFRS 16 obligations have been discounted based on the incremental borrowing rate.

[3] Extension and termination options assumed under IAS 17 for the operating lease commitments disclosure used assumptions determined for the company's business planning process. Under IFRS 16, lease extensions and terminations were reassessed and the liability reflects the company's judgements as to whether it is reasonably certain that the options will be exercised.

[4] The disclosure of operating lease commitments at 31 March 2019 assumed estimated indices and future market rents for leases subject to variable payments. As required under IFRS 16 future liabilities are based on current rents.

For leases previously classified as finance leases the entity recognised the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application. The measurement principles of IFRS 16 are only applied after that date. The company had one finance lease prior to 1 April 2019. No remeasurements to the right-of-use asset or to the lease liability were required after the date of initial application.

Adjustments recognised in the balance sheet on 1 April 2019

The change in accounting policy resulted in adjustments to the following items in the balance sheet at 1 April 2019:

	1 April 2019 £m
Transfer from property, plant and equipment (finance leases under IAS 17) to right-of-use assets	(1.7)
Recognition of right-of-use assets (net of depreciation of £0.9m)	61.8
Decrease in prepayments and accrued income	(1.3)
Decrease in accruals and deferred income	9.6
Transfer of finance leases from borrowings to lease liabilities	1.4
Recognition of lease liabilities	(69.8)
Impact on retained earnings	-

33. Events after the reporting period

In August 2020 NERL agreed a further £380m bank facility (see note 18).

In September 2020 the company's parent, which seconds staff to NERL, entered into a voluntary redundancy programme to reduce its cost base to reflect the reduction in demand for air travel across the aviation sector as a result of Covid-19.

1 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.
Airprox events are classified A to D on the basis only of actual risk, not potential risk. An event classified as category B - safety not assured, is an aircraft proximity in which the safety of the aircraft may have been compromised.

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

3 Impact score is a measure of delay placing greater weight on long delays and departures in the morning and the evening peaks. Variability score is a daily excess delay score based on weighted delays exceeding pre-determined thresholds on a daily basis.

4 3Di score measures airspace efficiency with reference to the deviation from the preferred profile to the actual radar track of each flight in UK airspace.

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