NATS Holdings Limited

Annual Report and Accounts
Year ended 31 March 2020

Company Number: 04138218

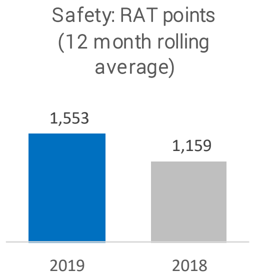
Highlights

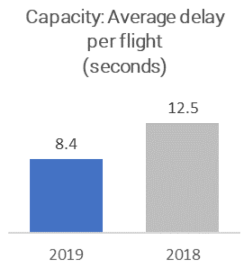
Financial highlights (year ended 31 March)

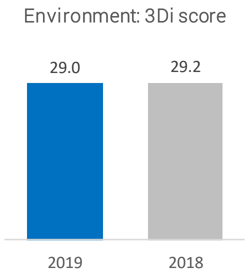
£m (unless specified)	2020	2019	Change (%)
Revenue	892.1	885.7	+0.7%
Profit before tax[a]	25.3	98.2	-74.2%
Capital expenditure	158.5	156.5	+1.3%
Net debt[b]	170.7	73.9	+131.0%
Gearing[c] (%)	29.0%	25.7%	+12.8%
Dividends	59.0	59.0	no change

[a] Profit before tax for the year ended 31 March 2020 is after a goodwill impairment charge of £49.0m (2019: nil)
[b] Excludes derivative financial instruments
[c] Ratio of NERL's net debt (as defined by its licence) to regulatory assets

Operational highlights







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.
- One risk-bearing airprox[1] was attributed to our operation during the financial year (2019 restated: one).
- 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 and the Aberdeen Glasgow and Southampton airports group extended its ATC contract to 2029.
- 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 148 of this report. Abbreviations used in this report are provided on page 147.

Contents

Who we are

NATS provides Air Traffic Control (ATC) services to aircraft flying in airspace over the UK and the eastern part of the North Atlantic, and at 13 UK airports. It also provides other ATC and related services to customers in the UK and overseas. Further information is provided in the description of our business model.

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

We generate income from ATC and related services mainly conducted through NERL and NATS Services.

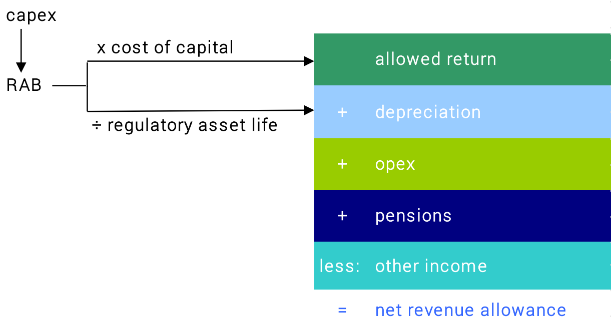
NERL

NERL is our core business and is the sole provider of ATC services for aircraft flying en route in UK airspace and the eastern part of the North Atlantic. It operates under a licence granted under the Transport Act 2000 and is economically regulated by the CAA and, until January 2021, the EC's Single European Sky (SES).

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

Figure 1: The economic regulatory framework



control period. This model is illustrated in Figure 1.

The CAA's price control also sets targets, and 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. It 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.

NATS Services

NATS Services operates in contestable markets and services UK and international customers. It earns c94% of its revenue in the UK and c73% from UK Airports.

The UK Airports service provides ATC to 13 major UK airports as well as engineering support and airport optimisation services. The company's strategy is to win and retain UK ATC service or engineering support contracts by developing price competitive and innovative solutions.

NSL provides ATC and related engineering services to the UK MOD mainly through the Project Marshall contract that is delivered in partnership with Thales by our Aquila joint venture. Other UK Business includes aeronautical information management, design and data services, consultancy and ATC training to airlines and airspace users.

Our International activities focus on providing the same range of services to the Asia Pacific and Middle East markets and is also targeted to specific international airports and ANSPs.

Our investments include: FerroNATS, which provides ATC services to airports in Spain; Searidge Technologies, a Canadian provider of digital tower technology; and a minority interest in Aireon which provides space-based air traffic surveillance.

Chairman’s statement

Covid-19

From late February 2020 it became clear that Covid-19 would have a very significant impact on commercial airlines and airport operators on which we depend for the majority of our income. The company has endured several demand shocks over the years: the 9/11 terrorist attacks; volcanic ash; the global financial crisis and Gulf wars, but none has posed such a significant threat and level of uncertainty to its business model. While the regulatory framework largely protects our revenue, the reduction in profit for the year to £25.3m (2019: £98.2m) in large part reflected our assessment of the likely impact of Covid-19 on the value of our assets and investments, and is explained in the Financial review.

Since the outbreak the Board’s primary focus has been to both challenge and support the Executive management in responding rapidly to protect the company’s staff, ensuring a continued safe operation, and securing additional funding to meet the immediate shortfall in cash receipts from reduced air travel and agreement by Eurocontrol to allow airlines an extended period to settle their earlier ATC charges. The latter was partially mitigated by funding advances Eurocontrol put in place to make some payment to air navigation service providers (ANSPs). The actions we took, which are explained later in this report, should ensure that the company is well placed financially and operationally to respond to and support a recovery in air traffic demand.

While the timing, rate and extent of that recovery remains uncertain, the Board is confident that the regulatory framework underpinned by government obligations within the Transport Act 2000 will continue to ensure that the company is able to finance its licensed activities. This confidence is reinforced by the support shown by our lenders in agreeing a new £380m bank facility in August 2020.

Reference Period 3 (2020-2024)

There have been a number of other key events which have influenced the Board agenda during the year, the most significant of which was the proposed regulatory settlement for RP3.

In 2018 we put forward to the CAA a business plan for RP3 which we believed met customer priorities for safety, service, technology change and airspace modernisation.

However, the CAA’s decision on the national performance plan for RP3 did not in our view provide for the necessary resources or overall balance of risk for us to deliver the service and essential airspace transformation required by our customers and the travelling public. The Board rejected the CAA’s decision leading to a referral to the CMA. The CMA’s findings upheld key elements of the company’s referral, while sustaining other aspects of the CAA’s proposals, although many of their findings have now been overtaken by the impact of Covid-19.

The practical effect of this is that the CMA’s final determination is for a three-year settlement for 2020 to 2022, whereby NERL’s charges will be set initially as if Covid-19 had not occurred but with the CAA taking a view subsequently as part of an RP3 reset on the appropriate recovery of revenue allowances. This provides both NERL and its customers with certainty until the impact on the industry and its recovery can be better understood.

The CAA intends to reset NERL’s RP3 price control before the end of 2022. This will clearly have to reflect changes in stakeholder priorities following Covid-19 including essential airspace modernisation which can only be delivered as a collaboration of ACOG, NATS, airlines, airports, the regulator and the UK government – many of which may have fundamentally different priorities as a result of the impact of Covid-19 on their activities.

Safety performance

Safety is always the Board's highest priority. During the financial year, the UK Airprox Board attributed two risk-bearing airprox events to NATS, one of which occurred in the 2018/19 financial year. These incidents are extremely rare and, as one would expect, a structured and thorough investigation process has been undertaken to identify causal factors and implement recommendations, reviewed by the Board and its Safety Review Committee. The Board also considered NATS' safety performance generally, its safety culture and emerging risks from new classes of airspace user, such as drones and commercial space operations.

Brexit

The UK Government has confirmed that the UK will no longer participate in the EC's Single European Sky or European Aviation Safety Agency (EASA) after the transition period ends in December 2020. This means that economic and safety regulatory decisions will be taken by the CAA in the future, including the revised price control for RP3. In practice we expect close European and global alignment and cooperation in aviation safety and air traffic management to continue. We are also planning on the basis that measures put forward by the UK and the EU will ensure that flights can continue in any Brexit scenario.

Dividends

The Board considers dividends in May and November each year and in the last financial year paid £59.0m (2019: £59.0m). The Board will not be paying a dividend while the new bank facility, which expires in July 2022, remains in place.

Governance, Board and employees

This year the Board adopted the new Corporate Governance Code which places greater emphasis on the relationship between the company, shareholders and stakeholders. Our stakeholders are very important to us and we remain committed to maintaining regular open dialogue and effective communication with them. On page 28 we set out our key stakeholders and how we have engaged with them to ensure that their views are being listened to by the Board.

During the year, our discussions around RP3 and the response to Covid-19 are examples of how the Board has had regard to section 172 of the Companies Act 2006. In these discussions we considered the broader implications of our decisions, not just for shareholders but for our employees and a wider group of stakeholders, together with the likely consequences of our decisions in the longer term.

Alistair Borthwick joined the company as Chief Financial Officer in August 2019 from energy business SSE, following Nigel Fotherby's retirement. Alistair was appointed to the Board in October 2019 and has been leading the company's financial response to Covid-19.

It has been a particularly challenging period for our employees and on behalf of the Board I would like to express my deepest thanks to all of them for their dedication and commitment.

Dr Paul Golby, CBE FREng

Chairman

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.

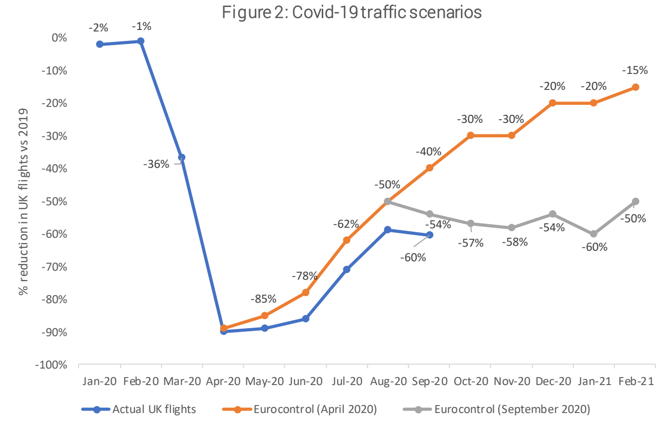
The UK's aviation sector was most affected from early March onwards as governments introduced measures to contain the virus and by the end of the month UK flight volumes fell to around 10% of the previous year and remained at this level through April and May 2020 (see Figure 2).

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.

Outlook for recovery in traffic

Figure 2: Covid-19 traffic scenarios



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 around 60% below 2019 levels this winter. We developed our own internal scenario for planning 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 the level of passenger demand and the trajectory of the recovery in flight volumes in the short term. We anticipate that traffic volumes will remain flat through the winter period.

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 group's workforce. At the outset we took protective measures to ensure operational staff attending our centres and airports 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. At the peak over 3,000 staff were furloughed.

We have also conducted regular wellbeing surveys to enables 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 ('000s)	2019 ('000s)	Change %
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 (by calendar year)	2019 Target	2019 Actual	2018 Target	2018 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)	24.0	15.8	26.0	17.0
C4: delay variability (score)	2,000.0	63.0	2,000.0	16.1
C3Di: 3Di metric (score)	26.3-29.1	29.0	26.7-29.5	29.2

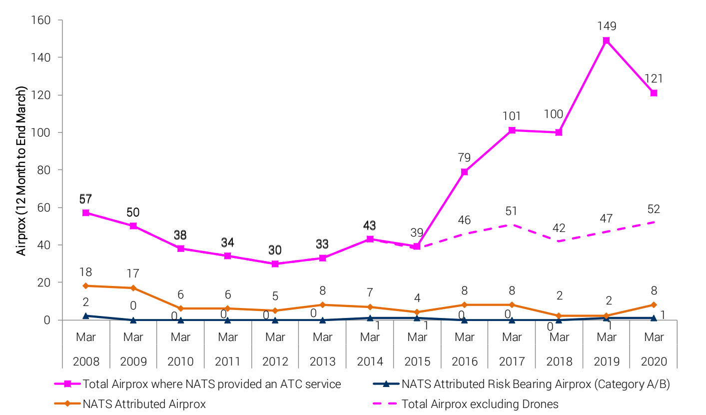
The C1 metric is a Functional Airspace Block (FAB) level target introduced for RP2.
C3 target is the C3 Upper target adjusted for traffic based CY 2019 actual traffic.

Our service performance improved on the prior year and we met the regulator's 2019 calendar year targets[3]. 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.

For RP2 we also set ourselves an ambitious internal target to achieve 1,119 RAT points (as a proxy measure for safety risk) to drive the appropriate safety culture across the business. For calendar year 2019 we were not able to meet this and recorded 1,553 points (calendar year 2018: 1,159 points) mainly from a higher volume of low severity safety events in the airspace and runway incursions at airports, 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 such a stretching target.

Figure 3: Airprox
Financial Years Ending 31 March



We also measure our safety performance over a financial year based on airprox incidents, which are assessed independently by the UK Airprox Board.

This year the UK Airprox Board considered that two risk-bearing Category B airprox[1] were attributable to NATS, one of which arose in the 2018/19 financial year but was only reviewed by the UK Airprox board in this financial year. The growth in traffic volumes during the period was a likely 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[6] 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 is planning to 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.

Our airports business was awarded a contract extension by the Aberdeen, Glasgow and Southampton airports group (AGS) to 2029. AGS has exciting plans for the future and we are very pleased to have been chosen to support them. We are also working with Toronto Pearson Airport and Amsterdam's Schiphol Airport to deploy our Intelligent Approach system, that dynamically separates arrivals by time instead of distance, thereby cutting headwind delays and improving airport punctuality.

Enhancements to our Demand Capacity Balancing tool were implemented at Heathrow, delivering an increased level of control over aircraft arriving into the airfield and a closer link between Heathrow and our Terminal Control at Swanwick when applying flow regulation.

One of our aims this year was developing the digital tower ATC service for London City Airport. We achieved site acceptance testing on the operational systems and we will evaluate the timing of the deployment as Covid-19 restrictions are lifted.

Financial review

Results overview

Group profit before tax at £25.3m (2019: £98.2m) was £72.9m lower than last year's result. This reflected the impact of Covid-19 on the carrying values of goodwill (see below) which was impaired by £49m, our investments in Aireon and Searidge being written down by £10.6m based on slower growth in new business alongside an increase in bad debt exposure of £17.5m 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 international operations and lower asset depreciation charges reflecting the timing of ATC system deployments.

	£m	£m
2019 profit before tax		98.2
Revenue changes		
Airspace	1.7	
Airports	(5.7)	
International	10.2	
Other service lines	0.2	
		6.4
Operating cost changes		
Staff costs (excluding pensions)	(8.1)	
Pension costs	(13.5)	
Expected credit losses	(17.5)	
Depreciation and impairment, net of grants	13.6	
Other	(0.8)	
		(26.3)
Goodwill impairment		(49.0)
Finance cost changes		
Fair value movement on financial instruments	5.1	
Fair value movement on Aireon investment	(3.4)	
Other net finance costs	(1.5)	
		0.2
Results of associates & joint ventures		
Searidge impairment	(5.2)	
Share of result of other investments	1.0	
		(4.2)
2020 profit before tax		25.3

After the tax charge, which is explained below, the group reported a loss of £1.3m (2019: profit of £82.3m).

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 than 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 for NERL 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, as explained in our Viability Statement 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 £75m.

New accounting standard

The adoption of IFRS 16: *Leases* during the year increased net debt at 31 March 2020 by £70.0m and required recognition of right of use assets of £61.3m (net of previously accrued lease incentives). The standard also resulted in lower operating rental costs for the year by £7.7m, offset by £7.2m of higher depreciation and £1.9m 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	703.7	702.0
Airports	129.0	134.7
Defence	26.0	26.5
Other UK business	10.0	9.3
International	23.4	13.2
Total	892.1	885.7

Overall, revenue at £892.1m (2019: £885.7m) 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.

Airports: our core airport contract income is indexed to inflation. This uplift was offset by a reduction in ad hoc engineering and project related activity.

Defence: our income reflects the performance of the Project Marshall[7] contract. Less revenue was recognised for the asset provision contract, reflecting the delivery schedule this year, while the scope of the service contracts was expanded.

Other UK business: overall revenue was in line with the prior year as we continued to support windfarm developers with services to mitigate their impacts on ATC systems.

International: revenue from the Asia Pacific region grew in the year reflecting continued good progress with the ATCO supply contract in Hong Kong and the Singapore digital tower prototype development. We also contracted to supply intelligent approach to Toronto International Airport and Amsterdam Airport Schiphol.

Operating costs

	2020	2019
	£m	£m
Staff costs	(468.0)	(446.4)
Non-staff costs	(192.3)	(183.9)
Depreciation and amortisation, net of grants	(134.6)	(141.1)
Profit on disposal of assets	1.0	2.1
Other operating income	4.4	6.1
Operating costs before goodwill impairment	(789.5)	(763.2)
Goodwill impairment charge	(49.0)	-
Total operating costs	(838.5)	(763.2)

Operating costs before goodwill impairment increased by £26.3m or 3.4% reflecting increases in staff and non-staff costs 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 4,726 (2019: 4,464) 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 was recognised by NERL this year (2019: nil) 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 £22.5m were £1.5m higher than last year (2019: £21.0m), including interest on lease liabilities following adoption of IFRS 16.

A net fair value charge of £3.2m (2019: £4.9m) was recognised this year. Of this amount, £5.3m (2019: £1.9m) was in respect of the equity investment in Aireon. This was based on an assessment of the company's plans and prospects, with slower growth assumed due to Covid-19, for the amount and timing of projected dividends.

Partly offsetting this was a fair value credit of £2.1m (2019: £3.0m charge) for 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.

Joint ventures, associates and other investments

The group recognised a net loss of £2.6m (2019: £1.6m profit) for the results of joint ventures and its associate. This mainly reflected a loss of £5.2m (2019: £0.1m profit) for Searidge Technologies as an impairment provision was recognised for an assumption of slower growth in new business due to Covid-19. The group's profit from other investments of £2.6m (2019: £1.5m) improved by £1.1m.

Taxation

The tax charge of £26.6m (2019: £15.9m) includes current tax of £2.3m (2019: £4.5m) and deferred tax of £24.3m (2019: £11.4m). Overall, the charge was at an effective rate of 105.1% (2019: 16.2%). 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. NATS' taxes generally arise in the UK, though it undertakes business in other countries. Wherever we operate we organise our operations to pay the correct and appropriate amount of tax at the right time, according to relevant national laws, and ensure compliance with the group's tax policies and guidelines. The group's UK corporation tax payments were reduced to nil (2019: refund of £0.8m) as the company claims R&D allowances for the capital investment to develop ATC systems.

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

Balance sheet

	2020	2019
	£m	£m
Goodwill	149.3	198.3
Tangible and intangible fixed assets	1,091.7	1,064.2
Right-of-use assets	61.3	-
Investments	48.1	50.9
Pension scheme surplus/(deficit)	232.0	(22.1)
Other non-current assets	38.9	54.8
Cash and short term deposits	585.5	261.0
Derivatives (net)	(104.7)	(119.8)
Borrowings	(686.2)	(334.9)
Lease liabilities	(70.0)	-
Deferred tax liability	(165.8)	(97.8)
Other net liabilities	(270.8)	(276.6)
Net assets	909.3	778.0

The increase in net assets in the year mainly reflects the change from a deficit to a surplus in the IAS 19 funding position of the defined benefit pension scheme, which reported a surplus of £232.0m (2019: deficit £22.1m - see below) and dividends paid in the year.

Capital investment

	2020	2019
	£m	£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	8.5	6.5
Capital investment	158.5	156.5

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

The group operates a final salary defined benefit pension scheme with 1,911 employee members at 31 March 2020 (2019: 1,990). 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 33 to the financial statements.

a. IAS 19 charge and funding position

The cost (including salary sacrifice and past service) of defined benefit pensions at £73.9m (2019: £66.3m) 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	(22.1)
Charge to income statement*	(73.9)
Actuarial gains/(losses):	
- on scheme assets	(181.4)
- on scheme liabilities	409.6
Employer contributions*	99.8
At 31 March 2020	232.0
Represented by:	
Scheme assets	4,672.1
Scheme liabilities	(4,440.1)
Surplus	232.0

* including salary sacrifice

At 31 March 2020, the scheme's assets exceeded its liabilities by £232.0m (2019: £22.1m 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 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. 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 which aims to repair the deficit by December 2026. During the year the company made deficit contributions of £37.7m (2019: £41.1m).

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. NATS Services will meet its share of NATS' obligations from its cash reserves.

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	261.0	(334.9)	(73.9)
Lease liabilities under IFRS 16	-	(75.3)	(75.3)
Cash flow	324.4	(344.3)	(19.9)
Non-cash movements	0.1	(1.7)	(1.6)
Balance at 31 March 2020	585.5	(756.2)	(170.7)

In order to provide liquidity to mitigate the anticipated reduction in en route revenue receipts following the outbreak of Covid-19, NERL drew down £395m of its £400m bank facilities. At 31 March 2020, the balance outstanding on NERL's amortising bond was £293.2m (2019: £336.2m). As a result, at 31 March 2020 the group had borrowings of £756.2m (2019: £334.9m), including IFRS 16 lease liabilities and held cash and short-term investments of £585.5m (2019: £261.0m). Net debt increased to £170.7m (2019: £73.9m), 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 19 to the financial statements.

The group generated £217.1m of cash (2019: £294.5m) 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 increase in operating expenditure payments. The prior year's investing activities included the purchase of an interest in Aireon for £51.1m while capital expenditure was broadly in line with the prior year. Dividends, which were paid in May 2019 and November 2019, were maintained at £59m.

Alistair Borthwick

Chief Financial Officer

Going concern

The group'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 22 the group'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 group had cash of £585.5m and access to undrawn committed bank facilities of £5m until July 2022. In August 2020 the group 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 group's cash flow forecasts, taking account of reasonably plausible downside scenarios, show that the group and 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 Secretary of State for Transport referred to in the Viability statement, there is no material uncertainty which may cast significant doubt on the group's ability to continue as a going concern. The directors consider the group and company have 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.

Viability statement

The directors have assessed the viability of the group based on its current position and future prospects, its business strategy and available financial resources. The directors have also assessed the potential financial and operational impacts in plausible downside scenarios of the principal risks and uncertainties facing the business, set out on page 20 and the effectiveness of currently available mitigating actions. In particular the directors assessed the solvency and liquidity risks arising from Covid-19, including a second wave alongside a combination of other risk factors materialising, which the Board considered represented a reasonable worst-case scenario, as well as a reverse stress test. On the basis of this assessment, the directors have a reasonable expectation that the group will be able to continue in operation and meet its liabilities falling due over the three-year period to October 2023.

This period of assessment reflects NERL's three-year price control to 31 December 2022 resulting from the CMA's review of the CAA's 2019 RP3 decision, which applies until the CAA re-determines the RP3 price control to take account of the impact of Covid-19 on air traffic volumes and NERL's operations.

Notwithstanding the significant estimation uncertainty as to the timing, rate and extent of recovery in air traffic volumes, the Board considers that there is greater certainty around forecasting assumptions over a three-year period than a longer period, taking into account the CAA's proposed consultation on the redetermination for RP3 which the Board expects will be undertaken in 2021.

Specific consideration has been given to:

- Covid-19: the consequences for the group's en route and airport ATC income of a second wave pandemic on the aviation sector and the reasonably possible mitigating actions available to the group to manage its financial resources;
- The pre-existing regulatory commitment to a traffic risk sharing mechanism and the redetermination of the RP3 price control, taking into account 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 its licenced activities;
- The term of NERL's bank facilities: the directors have a reasonable expectation that NERL will meet the conditions of its banking covenants, and be able to obtain additional waivers in the event of a severe and prolonged traffic downside, and to raise funds in the capital market or through government support measures to repay bank facilities expiring in July 2022;
- Defined benefit pensions: the trustee's formal valuation at 31 December 2020 and agreement to a new schedule of contributions. The directors consider that NERL's contributions will be recovered through prices in RP3 and future reference periods, including additional contributions arising from unforeseen changes in financial market conditions since the CAA's 2019 RP3 decision, while contributions from NATS Services will be met from operating cash flows.

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 group'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, as reported in later sections.

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 group focuses on mitigating these risks, although many remain outside of our control – for example changes in regulation, security threats, environmental factors and the impact of longevity and financial markets on pension funding.

These risks, including the impact of Covid-19 and risks to our finances, are reflected in and have been considered in assessing viability and going concern as explained on page 18. 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. A summary of internal control and risk management processes is on page 43.

Safety: the risk of an aircraft accident

A failure of NATS ATM controls that results in an accident in the air or on the ground would significantly impact NATS 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 NERL to take action as a result of the accident and NERL were unable or failed to comply then ultimately this could result in revocation of NERL's licence.

As a provider of a safety-critical service, safety is the company's highest priority. To further embed our existing safety culture across the organisation and to mitigate safety risk, NATS maintains a Strategy for the Future Safety of ATM to 2030 and an Implementation Plan. The group 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 Covid-19 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 legislative 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 group's ability to meet policy requirements. We seek to mitigate these risks by providing independent input to policy studies, lobbying for policy guidance and taking a leadership role where we believe this is required both domestically (such as UK airspace policy and airspace modernisation) and internationally 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

NERL'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, NERL 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 NERL's reputation and put it at risk of a breach of the licence.

In seeking to mitigate such regulatory risks, NATS maintains engagement with CAA at CEO and Board level on a regular basis. NERL'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. While a resilience plan is required by NERL's licence, this has been expanded to cover all NATS operations.

Resilience is considered for people, operational technical systems and facilities using NATS incident management processes to assess timely and effective responses. The NATS 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 NATS 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.

NATS 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 in NATS. 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 NATS operational ATC and business IT systems adversely impacting the provision of a safe and efficient ATC service and resulting in additional regulatory scrutiny.

NATS 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. NATS Services maintains adequate cash reserves to meet its share of pension contributions. The directors monitor the funding position of the scheme. The group'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 group to meet the contributions required.

Financial: other risks

In addition to the top risks set out above, the main financial risks of the group 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 22.

Responsible business

Our investors, customers, suppliers and other stakeholders are aware of the need for, and benefits of, NATS as a responsible business. Our commitment to the welfare of society, including our employees, and the natural world is an increasingly important measure of our overall performance. We recognise the growing expectations of the public and policymakers to transparent reporting on our outcomes.

Scope of non-financial information statement

This statement focuses on the most material employee and environmental matters which have an indirect financial impact on our business. Our gender pay report[8] and a slavery and human trafficking statement[9] are published on our website.

Governance

The NATS board is ultimately responsible for non-financial policy and performance. The Board has reviewed how it has applied the principles of the Code of Corporate Governance in each of the main areas of culture, workforce and stakeholders, remuneration and succession, and diversity. The Board receives regular updates throughout the year on these topics and formally reviews the approach annually. In addition to the Board, the Executive and various sub-groups monitor health and safety, employee relations and environment matters.

Strategy

We have adopted an industry-leading approach to being a responsible business, including how we manage and report our impacts. Specific measures include:

- Developing and implementing appropriate policies, codes and management systems, including a Responsible Business policy[10] and individual strategies within our 10-year business transformation programme, Destination 2030;
- Monitoring performance and practices across our business and our supply chain;
- Undertaking internal and external audits;
- Raising awareness of responsibilities among employees and developing training;
- Managing relevant risks and monitoring weak signals; and
- Transparently reporting non-financial performance information to our customers, key stakeholders and the public each year.

We maintain a range of certified ISO (or equivalent) management systems, which are externally assessed, including ISO 31000 (risk management) and ISO 14001 (environment management). The Audit Committee oversees all verification and assurance activity.

a. Employee policies and outcome

Our services are dependent 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. We operate a Just Safety culture, enabling employees to raise safety related matters without fear of reprisal. Through our Working Together partnership with trade unions we have an open dialogue with employee representatives which enables us to understand their concerns. This is supplemented with employee relations surveys, as part of an established employee relations improvement programme. We have developed polices to enhance workplace standards, for example, introducing a respect at work policy and new approaches to conflict resolution. In addition, we have an established employee engagement strategy across NATS with opinion surveys that touch the whole organisation.

Through membership of organisations such as Business in the Community and Women in Science, Technology and Engineering we have used benchmarking and other diagnostics to drive improvement initiatives. The Board takes account of the matters raised by employees. For example, in the year we focussed on improving workforce diversity and mental health and wellbeing. The latter has been a particular focus since the outbreak of Covid-19 which has required most staff to work from home. Through our work with the trade unions we have modernised a range of internal polices including management of performance, attendance and long-term absence and conflict resolution.

b. Environment policies and outcome

Concerns about sustainability (particularly climate change) have increasingly been driving societal and political action. The Covid-19 pandemic has further intensified pressure on the aviation sector as governments and the public have called into question economic support for carbon intense industries. Improving the sustainability of our business can also reduce costs as we consume fewer resources and work in more efficient ways. One of the material ways we can add value to our customers and society is to ensure our airspace is as efficient as possible to reduce aircraft fuel burn and emissions.

Our sustainability strategy encompasses initiatives on sustainable consumption and procurement, energy efficiency, reductions in greenhouse gas (GHG) emissions linked to a new net zero emissions commitment, climate change adaptation and biodiversity improvements across our business and estate. It also includes initiatives to improve airspace efficiency, minimise aircraft noise and to work with industry partners on a net zero emissions roadmap.

Annually we assess the effectiveness of our policies and actions in managing our environmental obligations.

Risk management: environment matters

Our approach to identifying, evaluating and managing risks is explained in Principal risks and uncertainties above. That also describes employee relations risk. Summarised below are risks relating to environmental matters.

We have a single environment risk which covers such matters as environmental compliance, pollution, climate change and noise and our actions to mitigate these to deliver our sustainability strategy, make environmental improvement and meet external expectations.

We take responsibility for reducing the environmental impact of our business on the ground and in the air, working closely with other aviation stakeholders on noise and CO_2 emissions. We also monitor the likely impact climate change will have on our business.

Air traffic control can influence aviation CO_2 and non-CO_2 emissions, noise and other environmental impacts. We seek to minimise this impact as much as possible both strategically and tactically, for example by using Intelligent Approach and cross border arrivals management at airports and space-based ADS-B to improve the efficiency of the Oceanic airspace we manage. Some of the innovative solutions we develop with our key suppliers can also develop into commercial opportunities which we offer to airlines, airports and others.

Metrics and targets

a. Employee matters

Gender pay reporting has established benchmarks against which we will monitor the impact of our actions to address gender imbalance over the longer term, accepting that this will require structural improvement in the number of females attracted to STEM-based careers and more widely to the aviation industry. When we are able to restart our early career programmes we will continue to focus particular attention on our processes for attracting and selecting candidates, to ensure these are gender neutral and consistent with a broader diversity strategy which supports progress on BAME and female representation at all levels of our workforce. Our objective is to bring the best diverse talent into our organisation and support individuals to reach their full potential.

b. Environment

Our environmental performance continues to improve, both on the ground and in airspace.

Airspace efficiency (3Di)

We are set annual targets by the CAA on airspace efficiency, measured by a three-dimensional inefficiency score metric (3Di). The target becomes more challenging each year. For the 2019 calendar year we remained within the regulator's target range. The CAA has set ambitious 3Di targets for RP3 and we are updating our plans to deliver against these, taking into account the outcome of the CMA process and the impact of Covid-19 on the industry.

Greenhouse gas emissions (GHG)

Airspace improvements made this year avoided 30,737 tonnes of CO_2 emissions. This also represented savings of £4.5m in fuel costs for airlines. In the period since 2008, we have reduced average CO_2 emissions per flight in UK airspace by 7.0% against our ambitious target of 10% by 2020. Our energy consumption remained steady in the year, reflecting the development of new ATC systems which are being run alongside the legacy systems these are replacing. However, as a result of investment in renewable energy, our total market-based emissions have continued to drop. For the second year running we were awarded a B rating by CDP[11] for our disclosure of GHG emission information, awareness and management of environmental risk.

We have adopted a net zero emissions target, aiming for a 35% reduction by 2030 and 100% by 2050 across each of our GHG emissions sources (excluding scope 3 category 11) as part of a wider sustainability strategy and we are working closely with others across the UK aviation industry to play our part in contributing to the UK's net zero commitment.

Aircraft noise

We continue to work closely with the Department for Transport, the CAA, the Independent Commission on Civil Aviation Noise and the industry to minimise the impact of aircraft noise on communities. We are supporting Manchester and Gatwick airports on new specific operational initiatives to trial in order to reduce noise, in addition to ongoing support for Heathrow airport.

Supporting information

The Responsible Business statement and the environment metrics reported below have been prepared in accordance with non-financial information reporting guidance from the Financial Reporting Council, the European Commission, the Climate Disclosure Standards Board (CDSB) and the Task Force on Climate-related Financial Disclosures. An operational control approach is taken to non-financial information using the same boundary as NATS Holding Limited.

Description	FY 2019/20 (or CY 2019)	FY 2018/19 (or CY 2018)
Service performance and resilience		
3Di (calendar year)	29.0	29.2
Environmental performance		
Scope 1 emissions (location-based tonnes CO_2e)	3,477	4,094
Scope 1 emissions (market-based tonnes CO_2e)	1,306	4,094
Scope 2 emissions (location-based tonnes CO_2e)	15,301	16,561
Scope 2 emissions (market-based tonnes CO_2e)	1,064	21,024
Total scope 1 + 2 emissions (location-based tonnes CO_2e)	18,779	20,654
Total scope 1 + 2 emissions (market-based tonnes CO_2e)	2,370	25,118
Total scope 1 + 2 intensity metric (location-based tonnes CO_2e per £m of revenue)	21.0	23.3
Total scope 1 + 2 intensity metric (market-based tonnes CO_2e per £m of revenue)	2.7	28.4
Progress against 10% enabled ATM-related CO_2 emissions reduction target	7.0%	6.9%
Scope 4 (Modelled enabled ATM-related CO_2 reduction in tonnes)	30,737	121,788^
Water consumption (m^3)	54,500	75,750^
Energy consumption (gas + electricity) MWh	71,686	71,262

^ restated due to inclusion of additional information, improvements to modelling accuracy and data quality.

Modelled enabled ATM-related CO_2 reductions represent the saving in CO_2 emissions from improvements to the ATM network, such as technical changes which enable us to provide more fuel-efficient flight profiles, based on projections of the volume of flights likely to take advantage of the improvements. The enabled reduction in emissions is reported in full in the year in which the improvement is made. This is modelled based on industry best practice and is outlined in detail in our GHG report, available at www.nats.aero/environment/cr.

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. When bidding for airport and other contracts we tender our cost effective and innovative solutions. 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 affect NATS, including airspace modernisation, and (subject to Brexit) the UK's input to the EC's SES performance scheme.
SHAREHOLDERS	Our shareholders provide equity investment which finances our activities and enables us to invest in our ATC service and infrastructure, for which they expect returns. An employee share trust owns 5% of the company which enables them to share in the company's long-term success.	The Board meets with shareholders twice a year, including the Annual General Meeting. The 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 ongoing 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 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 31 to 70. 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 the 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 facility.

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 proposal for deferring airline charges and advancing funds to 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:

R C-Col

Richard Churchill Coleman,

Secretary

Director's biographies

Chairman

Dr Paul Golby CBE FREng

Paul served as Chief Executive Officer of E.ON UK plc from 2002 to 2011 and is a Fellow of the Royal Academy of Engineering. He is Chair of Costain Group plc and a non-executive director of National Grid plc and ERA Foundation. Paul chairs the Nomination Committee. Paul also attends the Audit Committee, Remuneration Committee, Safety Review Committee and Transformation Review Committee by invitation.

Executive Directors

Martin Rolfe, Chief Executive Officer

Martin took up the post of Chief Executive in May 2015 having been Managing Director, Operations since 2012, with responsibility for NATS' economically regulated UK and North Atlantic services. An engineer by training, Martin holds a Master's degree in Aerospace Systems Engineering from the University of Southampton. He has 20 years of experience in the defence and aerospace industry, and prior to joining NATS was the Managing Director of Lockheed Martin's Civil Division with responsibility for worldwide ATM programmes as well as UK Government business. Martin has also worked for the European Space Agency and Logica plc.

Alistair Borthwick, Chief Financial Officer

Alistair joined NATS as CFO in August 2019. In addition to his responsibilities for finance Alistair leads NERL's regulatory affairs team.

Previously he worked for SSE plc, most recently as Group Finance Director for its Regulated Networks and Enterprise divisions, as well as being responsible for Group Reporting, Tax and Treasury. He also spent time as Acting Managing Director for the Enterprise division.

Having qualified as a Chartered Accountant with Deloitte, working in both audit and corporate finance, Alistair subsequently held a number of senior roles in practice and industry focused on transport and infrastructure, including positions with John Menzies plc and FirstGroup plc.

Non-Executive Directors

Maria Antoniou

Maria was Senior Vice President HR/Executive HR based in E.ON's headquarters in Germany.

Maria joined E.ON in 2008 as the UK HR Director. During her time in the UK the business was significantly restructured and emphasis given to becoming a customer focused organisation. Prior to joining E.ON, Maria spent two years in the public sector as Group HR Director for Transport for London and 20 years with Ford Motor Company. Before that Maria was global HR Director for Jaguar, Land Rover and Aston Martin. Maria is Chair of Trustees of Transport for London's Pension Fund. Maria chairs the Remuneration Committee and is a member of the Nomination Committee. She is also a director and chairs the NATS Employee Sharetrust. Maria is also the designated non-executive director for workforce engagement with the Board.

Dr Harry Bush CB

Harry spent most of his career in HM Treasury where he focused latterly on policies towards growth, science funding and privatisation and private finance. He was UK Director at the European Investment Bank from 2001 to 2002. Harry left HM Treasury in 2002 to join the CAA Board as Group Director Economic Regulation responsible for the economic regulation of the designated airports and NATS, as well as the CAA's economic analysis generally. He was a member of Eurocontrol's Performance Review Commission from 2005 to 2009 and of the UK's Commission for Integrated Transport from 2006 to 2010. Since leaving the CAA in 2011, Harry has been a consultant on economic regulation, undertaking assignments across a range of industries in the UK and overseas. He was vice chair of UCL Hospitals Foundation Trust for six years until August 2019. He is a Fellow of the Royal Aeronautical Society. Harry is a director of The Airline Group Limited (AG) and NATS Employee Sharetrust, and a member of the Audit Committee.

Mike Campbell

Mike has spent the last 11 years at easyJet initially as Group People Director and subsequently as Group Director Europe. During his time at easyJet he has also been Group Director, Transformation and has led on a series of strategic projects including the integration of GB Airways and the successful development of easyJet's presence in Europe.

Mike's early career has covered a range of sectors, from high end luxury goods to high volume, low margin electronics and he has direct experience across a number of disciplines. Mike has a Bachelor's degree in Mathematics and a Masters in Fluid Dynamics with a background in education and HR. He has operated in organisations across the world and has led businesses and change programmes across all of these. Mike is Chair of AG, Chair of the Transformation Review Committee and a member of the Nomination and Remuneration Committees.

Richard Keys

Richard is a non-executive director of Merrill Lynch International and the Department for Transport. He was previously a non-executive director of Wessex Water Services Limited, the Department for International Development and Sainsbury's Bank plc and a Council member of the University of Birmingham. He retired from PricewaterhouseCoopers in 2010 where he was a senior partner and Global Chief Accountant. Richard chairs the Audit Committee and is a member of the Nomination Committee and Transformation Review Committee.

Kathryn Leahy

Kathryn is currently Director of Operations at Heathrow Airport, where she holds functional responsibility for airside and airfield operations, as well as umbrella responsibility for the day-to-day management and operations of the Airport Operations Centre, resilience and emergency planning. Kathryn sits on the Sustainability Leadership Board and leads the Airspace Governance Board for Heathrow. She joined Heathrow Airport in 2010 as Risk and Safety Director and has held a number of senior operational roles.

Kathryn started her career in financial services working for AIG, and moved to the aviation industry in 1997. She spent 13 years at Virgin Atlantic Airways running their Risk and Safety Management team, as well as establishing the Internal Audit department and Board Audit Committee. She is a member of the Safety Review Committee.

Hugh McConnellogue

With over 30 years' experience in the airline industry, Hugh has held senior leadership roles across engineering and airline operations functions. He is currently Group Head of Network Operations for easyJet Airlines, responsible for the operational delivery and performance for all three of easyJet's air operator's certificates. Hugh started his career as an apprentice engineer for Britannia Airways moving on to work in freight and passenger operations with airlines across Europe. In his time with easyJet he has been responsible for line and hangar maintenance, maintenance operations control, deputy post holder for engineering for easyJet Switzerland, airline network operations and emergency response management. During this time he led the merger of airline operations through acquisitions, implementation of new technologies and systems as well as managing large teams of people. Hugh is a director of AG and a member of the Safety Review Committee.

Iain McNicoll CB CBE

Iain served 35 years in the Royal Air Force, retiring in 2010 as an Air Marshal. His military flight hours total over 4,300, the majority in fast-jet aircraft, but he also flew large multi-engine aircraft, light aircraft and helicopters. He commanded a Tornado squadron from 1992-1995, a Tornado station from 1998-2000, and was Air Officer Commanding No. 2 Group from 2005-2007. In his last appointment, Deputy Commander - Operations, he was responsible for generating and delivering all of the RAF's front line operational capability. He had RAF responsibility for all safety and environmental matters, and was the RAF's first Chief Information Officer. Since 2010, Iain has been an aerospace, defence and security consultant. He is a Fellow of the Royal Aeronautical Society. Iain chairs the Safety Review Committee and is a member of the Transformation Review Committee.

Gavin Merchant

Gavin joined Universities Superannuation Scheme (USS) in 2011 as Senior Investment Manager with responsibility for sourcing, evaluating and monitoring co-investments within the infrastructure portfolio. Gavin serves on a number of portfolio company boards for USS as well as a number of advisory boards for infrastructure funds. Gavin has worked in the infrastructure sector in the UK and Australia for 15 years. Prior to joining USS, Gavin was a Director at Equitix Limited. Gavin graduated with an honours degree in Law from the University of Edinburgh and is a member of the Institute of Chartered Accountants of Scotland. Gavin is a director of AG and a member of the Remuneration Committee.

Louise Street

Having completed a degree in Japanese and Business Management at Durham University, Louise joined British Airways on the graduate intake scheme in 1998. Her first 8 years were in the commercial organisation specifically in Sales and Revenue Management. She then moved to the operational side of the business and has undertaken a number of senior management roles in Customer Service and Operations which included implementing a significant change programme to modernise working practices amongst the front line team at Heathrow; introducing and leading a 500 strong team responsible for serving British Airways Premium customers and being accountable for the running of the British Airways Heathrow operation on the day. Moving to Engineering in 2017, Louise's current role as Head of Planning and Business Development has accountability for planning the British Airways maintenance programme along with the fleet embodiment programme to deliver the customer investment set out in the British Airways business plan as well as the future strategy for British Airways Engineering encompassing facilities, resourcing, infrastructure and maintenance. Louise has recently completed further studies in Business Studies at IMD, Lausanne. Louise is a director of AG and a member of the Audit Committee.

Officer

Richard Churchill-Coleman, Legal Director

Richard is Legal Director which includes the role of Company Secretary. He joined NATS in June 2007 from TUI Northern Europe Limited where he held the position of Group Legal Counsel. Richard has more than 30 years' experience in the aviation industry having begun his career as an undergraduate aerospace engineer with British Aerospace plc before qualifying as a solicitor with Norton Rose and subsequently as a Chartered Secretary. Richard has previously held positions at Thomsonfly, Virgin Atlantic Airways and DHL Worldwide Express and holds a private pilot's licence.

NATS governance framework

Introduction

NATS was formed as a PPP in July 2001. A key element in its 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 the 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.

The Board and Directors

Ultimate responsibility for the governance of NATS rests with the Board of NATS Holdings, 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 critical national infrastructure.

The Board plays an important leadership role in promoting the desired culture of the organisation. Through governance activities in the year it monitored and input to 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.

The boards of the subsidiary companies within the group are accountable to the NATS Holdings Board for all aspects of their business activities.

As at the date of approval of the accounts, the NATS Holdings Board comprised a non-executive Chair and 11 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

The roles of the Chair, Chief Executive and executive management

The Chair of the NATS group is responsible for the leadership of the Board and for its governance. He has no day-to-day involvement in the running of the group. Day-to-day management of the NATS group is the responsibility of the CEO, Martin Rolfe, supported by the NATS executive team. The NATS executive team is responsible for delivering NATS' overall strategy. The executive team is structured as follows:

- CEO;
- CFO;
- Operations Director;
- Safety Director;
- Commercial Director;
- HR Director;
- Technical Services Director;
- Communications Director; and
- Legal Director.

The responsibilities of the Board

The Board has adopted a schedule of matters reserved for its decision and has put in place arrangements for financial delegations to ensure that it retains overall control of the business. The Board also has oversight of key business drivers and risks. Matters reserved for the Board include the monitoring of NATS' safety performance, appointments to the NATS executive team, and issues with political, regulatory or public relations implications. In addition to the schedule of matters reserved to the Board, specific matters are reserved for Partnership directors, AG directors and the LHRA director, as follows:

Partnership and AG directors

- adoption of the business plan;
- entry into significant debts, charges or contingent liabilities;
- major agreements outside the ordinary course of business;
- significant litigation proceedings; and
- external investments, and acquisition and disposal of material assets.

LHRA director

- acquisition or disposal of any asset representing more than 10% of the total assets of the business;
- any aspects of the business plan which could adversely affect NERL's service to UK airports; and
- disposal of NATS Services shares by NATS.

Access to legal and professional advice

All directors have access to the advice and services of the Legal Director, Richard Churchill-Coleman, who acts as Secretary to the Board. If necessary, in furtherance of their duties, directors may take independent professional advice at the group's expense.

Board meetings

The 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. This year, the Board met seven times with each member (who served as a director during the year) as set out in the table on page 37. Ad hoc meetings have also taken place since the outbreak of Covid-19 to review the impact on the business and management's response.

The non-executive directors meet with the Chair, but without the executive directors present, before and after each Board meeting. 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 group's performance.

The group's performance is also reviewed monthly by the executive team. This includes reviewing performance against operational targets and financial targets.

The Board's performance

Board effectiveness review

The Board is committed to continuous improvement and a performance evaluation of the Board, its committees, and the Chair is conducted each year. This year, the Board Effectiveness Review was administered internally. The results were assessed by the Board at its 21st May 2020 meeting and appropriate actions agreed.

Director induction

Following their appointment, the Company Secretary consults with new directors on the scope of induction to NATS which they require and a personalised induction programme is developed. During the year, such a programme was undertaken for Alistair Borthwick.

The Board's Committees

The Board has established five standing committees which operate within approved terms of reference. These are the:

- Audit Committee;
- Nomination Committee;
- Remuneration Committee;
- Safety Review Committee; and
- Transformation Review Committee.

The number of meetings held by the principal Board committees, and attendance by executive directors and by non-executive director committee members, is provided in the table below together with attendance at Board meetings:

	Number of meetings attended / Number of eligible meetings					
	Board	Audit	Nomination	Remuneration	Safety Review	Transformation
Paul Golby	7/7		1/1			
Martin Rolfe	7/7	4/4	1/1	4/5	5/5	5/5
Nigel Fotherby	3/3	1/1				
Alistair Borthwick	4/4	3/3				
Maria Antoniou	7/7		1/1	5/5		
Harry Bush	7/7	4/4				
Mike Campbell	7/7		1/1	5/5		5/5
Richard Keys	7/7	4/4	1/1			5/5
Kathryn Leahy	6/7				4/4	
Gavin Merchant	5/7			3/5		
Hugh McConnellogue	6/7				4/4	
Iain McNicoll	7/7				4/4	5/5
Louise Street	7/7	4/4				

The terms of reference for the Board and its committees are available to all employees and shareholders and can be made available externally with the agreement of the Legal Director. Reports from each of the standing committees are set out on pages 40 to 67. However, in addition to the standing committees, from time to time the Board may form committees on an ad hoc basis to deal with specific business issues. During the year the Board continued with the RP3 sub-committee comprising the Chair, Alistair Borthwick (who replaced Nigel Fotherby from August 2019), Martin Rolfe, Harry Bush and Richard Keys, to consider the RP3 plan, the CMA review and the subsequent impact and response to Covid-19.

Meetings with shareholders

A shareholders meeting is held once a year and provides the group with an opportunity to update the shareholders on the progress of the annual business plan and long term strategy. Meetings were held on 25 July 2019 and on 30 July 2020. Shareholders may also meet informally with the

Chair, CEO, CFO and other members of executive management upon request.

Compliance with the UK Corporate Governance Code

NATS is committed to maintaining the highest standards of corporate governance. The SPA requires the group and the 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. 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' ownership and the principal areas where NATS 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 NATS' 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 NATS' ability to comply with a number of the Code's provisions, including the requirement to appoint a senior independent director.

Provisions 17 and 32: Composition of the Nomination and Remuneration Committees

Details of the work of the Nomination and Remuneration Committees are set out below. However, the manner in which directors are appointed, as noted above, means that these committees' processes do not fully comply with the Code as regards independence.

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

As noted in the Remuneration Committee report, the AG nominee directors and Partnership directors do not have service contracts with NATS. 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 NATS, details of which are set out in the Remuneration Committee report.

Provision 18: Re-election of directors

The non-executive directors are appointed by the shareholding groups and are therefore subject to the relevant shareholding groups' 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	1/9/14	5 years 7 months
Maria Antoniou	1/8/16	3 years 8 months
Harry Bush	27/5/14	5 years 10 months
Mike Campbell	26/5/17	2 years 10 months
Richard Keys	1/9/13	6 years 7 months
Kathryn Leahy	31/5/18	1 year 10 months
Hugh McConnellogue	4/10/18	1 year 6 months
Iain McNicoll	1/9/13	6 years 7 months
Gavin Merchant	20/3/14	6 years
Louise Street	29/11/18	1 year 4 months

* Years of service to resignation, if earlier **Served until 4 October 2018

The group 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, 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 group, having taken account of the views of the shareholders. The Chair also has regular discussions with shareholders in addition to the formal meetings noted under the 'Meetings with shareholders' section above.

Audit Committee report

The role of the Audit Committee

The Committee has met six times since the publication of the 2019 Annual Report and Accounts. It is chaired by Richard Keys; Louise Street and Harry Bush are the remaining two members of the Committee. The Committee members all have wide-ranging commercial and management experience and Richard Keys, a former audit partner at PricewaterhouseCoopers LLP (PwC) has recent, relevant financial and audit experience. The Committee members maintain their competence in the sector and on company specific issues (such as pensions) through targeted training and briefing at Committee meetings.

The Chairman, CEO, CFO, Director Group Financial Control, Head of Internal Audit and the responsible partner from our co-source internal audit provider, NATS Risk Manager and the external auditors are invited to attend each meeting by standing invitation.

Part of each meeting is set aside as required for members of the Committee to hold discussions without executive management present, including holding separate discussions with the external and internal auditors.

The main duties of the Committee include:

- monitoring the integrity and compliance of the group's financial statements;
- reviewing the effectiveness of the external auditors and the Internal Audit department;
- reviewing the scope and results of internal and external audit work; and
- reviewing NATS' risk management and internal controls.

The Committee makes recommendations to the Board on matters relating to the appointment, independence and remuneration of the external auditors and, to ensure independence, monitors the extent of non-audit services provided by the external auditors (as explained below). The Committee also reviews whistleblowing arrangements under which employees and third parties dealing with NATS may confidentially report suspected wrongdoing in financial reporting or other matters with the objective of confirming that arrangements in place for their investigation and follow-up are appropriate. The Committee reviews its Terms of Reference annually and recommends any changes to the Board for approval.

Main activities of the Committee during the year

a. Financial reporting

The primary role of the Committee in relation to financial reporting is to review with both management and the external auditors the annual financial statements of the group and its subsidiaries and NERL's regulatory accounts, having regard as appropriate to:

- the suitability of accounting policies adopted by the group;
- the clarity of disclosures and compliance with Companies Act legislation and financial reporting standards, including the requirements of NERL's air traffic services licence; and
- whether significant estimates and judgements made by management are appropriate.

In addition, the Committee assists the Board in its assessment of whether the Annual Report and Accounts taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the group's position and performance, business model and strategy.

To aid its reviews the Committee considers reports from the CFO and reports from the external auditors on the outcome of the annual audit.

The Committee considered the following significant accounting judgements and sources of estimation uncertainty in the year:

Impact of Covid-19

The Committee considered the financial reporting implications of Covid-19 including the significant judgements, sources of estimation uncertainty and other assumptions made in the preparation of the financial statements and the adequacy of disclosures. In particular, the Committee considered: the carrying values of the group's investments, including Aireon and Searidge; the carrying value of goodwill (see below); the recoverability of other assets; and onerous contracts.

The Committee also reviewed the evidence supporting the assessments of going concern and viability, including the significant judgements and assumptions in the company's forecasts of the recovery in air traffic volumes and the timing and likelihood of mitigating actions in the form of cost savings, eligibility for government support measures and additional sources of credit. The committee was satisfied with the approach being taken and the reasonableness of the judgements made together with the relevant disclosures (see going concern and viability statements and note 3 to the financial statements).

The carrying value of goodwill

This is a focus for the Committee because of the materiality of the group's goodwill (£149.3m at 31 March 2020) and the inherent subjectivity of judgements made in impairment testing. The key judgements relate to: the assumptions underlying the calculation of value in use, including the extent to which cash flow projections are achievable taking account of the regulatory reference period reviews by the CAA and the CMA; and assessing fair value less costs of disposal, including the extent of any premium which may be realised in excess of the value of regulatory assets.

The Committee addressed these matters by having regard to the higher of value in use and fair value less costs of disposal and considering: NERL's revenue allowances from both the CAA's RP3 performance plan together with the CMA's review of CAA's performance plan and the cash flows implied by a Covid-19 traffic scenario; the cost of capital assumption used to discount value in use; and the value of NERL's regulatory assets, including the extent to which a premium to reflect the scope for out-performance of regulatory settlements and as implied by market transactions in regulated entities was appropriate given the impact of the Covid-19 pandemic. The Committee also considered the costs of a theoretical disposal of NERL's regulatory assets and appropriate sensitivities. The Committee was satisfied with management's analysis and the explanations and disclosures provided in notes 2, 3 and 13 to the accounts.

Retirement benefits

The pension funding position determined under international accounting standards requires a number of actuarial assumptions to be made, including judgements in relation to long term interest rates, inflation, longevity and salary growth. The Committee reviewed the basis for determining these assumptions. The Committee also considered the material uncertainty reported by the valuer of the pension scheme's property portfolio due to the impact of Covid-19 (see note 3 of the financial statements). The final calculations in respect of the defined benefit pension scheme are performed by a qualified actuary, independent of the scheme. Note 3 summarises critical judgements and key sources of estimation uncertainty and note 33 sets out the main actuarial assumptions used, including sensitivity analysis.

The Committee also considered the adequacy of the explanations for the different basis of valuation for the Trustees funding assessment and for the balance sheet position under international accounting standards.

Revenue recognition

The economic regulatory price control for UK en route services allows for the recovery (or reimbursement) of revenue allowances where actual traffic volumes or inflation are different to the regulator's forecasts made at the start of the reference period, where actual service performance is different to the regulator's annual targets and for adjustments brought forward from the previous charge control period. NATS' policy is to recognise these revenue adjustments in the year of service, based on traffic, inflation and service performance experienced. Where regulatory revenue adjustments for pension costs are assessed after the end of a reference period, their recoverability (or reimbursement) is dependent on the assessment of the economic regulator and recognised on this basis.

The Committee reviewed the nature, value and basis of the regulatory revenue adjustments, having regard to the reduction in air traffic volumes due to the impact of Covid-19, and considered the relevant EC Charging Regulations and the conditions of NERL's air traffic services licence for RP2 and the CAA's performance plan for RP3 in determining whether their recognition was appropriate. The committee also discussed the risk of recovery of revenue allowances in the event of changes to the regulatory framework in future to support the recovery in the aviation sector, and concluded that it was appropriate to rely on the existing framework and with the general duty placed on the CAA and the Secretary of State for Transport to secure that NERL will not find it unduly difficult to finance its licenced activities.

The recoverable and the reimbursable revenue allowances are reported in notes 18 and 23 respectively.

Other matters

The Committee also reviewed the method of first time adoption of IFRS 16: *Leases* and the additional disclosures provided in notes 20 and

37, and financial reports issued to shareholders under the terms of the SPA.

b. Internal audit

The group's internal audit department reviews the controls in place to mitigate NATS' business risks, which includes reviews of internal financial control and risk management. In order to access the specialist skills required to perform assessments across the wide range of areas in which NATS operates, the internal audit function is operated as a co-source arrangement, primarily with PwC but with other providers if required.

The results of internal audits and agreed actions are reported as appropriate to relevant directors, executives and managers. The Committee also oversees and monitors the actions taken by management to address internal audit findings and considers the ongoing independence of internal audit. The Committee oversees the performance of internal audit through the receipt of a report on its work presented to each Committee meeting and agrees the annual work plan in the context of the group's audit and assurance universe. Whilst mindful of achieving the longer-term overarching assurance objective, internal audit's work plan is reviewed at each Committee meeting to ensure that assurance work is directed in the most beneficial manner, for example in response to exceptional circumstances. This has been the case as a result of Covid-19, where internal audit have reviewed the unprecedented measures undertaken by the company in response to the pandemic.

c. External audit

BDO LLP was re-appointed as external auditor at the AGM on 25 July 2019. The Committee reviewed the performance and the continuing independence of BDO at its October 2020 meeting and recommended to the Board that BDO be re-appointed. Accordingly, a resolution recommending their re-appointment will be considered by shareholders.

d. Risk management

The Committee reviews the policies and processes for identifying, assessing and mitigating emerging and principal risks and assessing risk appetite, including the receipt of reports from management and the internal auditor on the effectiveness of systems for internal financial control, financial reporting and risk management.

During the last 12 months the committee has increased its oversight of risk by conducting a detailed review of top risks at each meeting as appropriate supplementing the pre-existing regular risk reporting. The Committee has also reviewed changes to the risk management process and its reporting.

In conjunction with the review of internal controls, commented on further below, the Committee reviews the processes in place to identify, assess, mitigate and manage risk, including strategic risk, in order to satisfy itself that they are appropriate and within the specified risk tolerance agreed by the Board or where that is not the case, to ensure that the Board is aware and that appropriate steps are in place to manage and mitigate the exposure.

On the basis of this work, the Committee is satisfied that the directors have carried out a robust assessment of the emerging and principal risks facing the business. The Committee also reviews the extent of warranties and guarantees entered into by the group, with particular focus on any unlimited liability indemnities entered into as part of commercial arrangements.

The Committee specifically considered the risk management and controls aspects arising as a result of the Covid-19 pandemic and the response to it with management and internal audit including those arising from changes in working practices and the widespread adoption of working from home.

To ensure adequate and timely risk-based decisions during the pandemic the Audit Committee endorsed an enhanced programme of board meetings and management reporting. These changes were implemented and continue to date.

e. Internal control

The Board is responsible for the group's system of internal control and risk management and for reviewing its effectiveness.

NATS' system of internal control is designed to ensure that the significant financial, operational, safety, legal, compliance and business risks faced by the group are identified, evaluated and managed to acceptable levels. This system was in place during the year and up to the date of approval of the Annual Report and Accounts. The Committee receives regular reports from internal audit concerning the results of their work and also agrees their annual programme of work.

During the year work was completed on a top down assessment of the Group Assurance Framework against the key areas of accountability of the CEO and the executive committee. This has and will assist in further informing the ongoing programme of internal audit work and assist in the review of the different sources of assurance in place and their effectiveness.

The Committee's reviews of internal audit work have covered reports on the effectiveness of controls which manage key risks including financial and information technology controls, key aspects of the technology investment programme, and commercial processes. The Committee also approved the scope and phasing of activity for the internal audit function for the first half of 2020/21 which is focussed on key aspects of NATS' response to the Covid-19 outbreak and the associated risks. The Committee continues to monitor the follow-up by internal audit of management actions taken to address the internal audit recommendations arising from their work.

In addition, to the work of internal audit, the Committee also reviews reports from the external auditors, reports of any attempted or actual frauds, reports from the management's Tax and Treasury Committees and considers the circumstances of whistleblowing reports.

However, as with all such systems, internal controls can only provide reasonable but not absolute assurance against misstatement or loss.

On the basis of the foregoing, the Committee believes that the directors review the effectiveness of internal controls on an ongoing basis during the year.

In overseeing NATS' whistleblowing procedures, the Committee reviewed progress since the appointment of an independent provider for NATS' whistleblowing hotline in 2017. The Committee was satisfied that the appointment of the independent provider and the associated whistleblowing procedures continue to meet best practice and are promulgated effectively throughout the company and to interested stakeholders and third parties. The Committee is satisfied that the company's response to whistleblowing reports received during the year has been appropriate and, if necessary, appropriate actions have been taken in line with the high standards of governance which the Board requires.

Richard Keys
Chairman of the Audit Committee

Nomination Committee report

The role of the Nomination Committee

The Nomination Committee is chaired by Paul Golby and, during the year, comprised three further non-executive directors, Mike Campbell, Richard Keys and Maria Antoniou. The Committee meets when considered necessary by its members and may invite executives and advisors to attend meetings as appropriate.

Appointments to the Board are made by the relevant sponsoring shareholder under the terms of the SPA. The Committee evaluates the balance of skills, knowledge and expertise required by the Board and makes recommendations to the shareholders with regard to Board appointments. It also reviews succession plans for executive directors and senior executives.

Main activities of the Committee during the year

During the year, the Committee met once in March 2020 and received a talent, succession and leadership update.
Following an extensive interview and assessment process, Alistair Borthwick was appointed as Chief Financial Officer on 5 August 2019 and appointed to the Board on 3 October 2019.
The Committee's terms of reference require it to give due regard to the benefits of diversity, including gender, on the Board. Currently there are three female directors on the Board, representing 25%. There is one female member of the Executive, representing 11%.

Paul Golby
Chair of the Nomination Committee

Remuneration Committee report

Dear Shareholders,

I am pleased to present the directors' remuneration report for the year ended 31 March 2020. A key priority for NATS is to deliver a safe, efficient and reliable service to our customers, every day, and that we reward the management team accordingly. In this context, we have incorporated safety overrides into our variable pay schemes to ensure that no additional reward is delivered to our executives if a safe and reliable service is not delivered.

Our remuneration policy's primary objective is to ensure we are able to attract, retain and motivate key executives to deliver strong sustainable business performance which is aligned with both the long-term success of the company and with the interests of our key stakeholders. This report highlights the remuneration decisions made by the Committee over the course of the year.

Response to Covid-19

In particular, the Remuneration Committee and the Board have had regard to the impacts of Covid-19 on the company and the wider aviation sector. Since the severity of the pandemic became clear, pay across the company has remained at 2019 levels. In addition, executive and non-executive directors volunteered for salary and fee reductions of 20% for April to June 2020, with executive directors contributing half of this to the NHS Covid relief fund (directors' pay reductions will be reflected in the emoluments table for year ending 31 March 2021). Other members of the executive team and many senior managers volunteered for salary reductions of 10% for the same period.

Given the current circumstances, Martin Rolfe (CEO) has asked the company to defer any long-term incentive payments due to him until a more appropriate time. The company has agreed this as a personal decision by the CEO.

Furthermore, the executive proposed to the Remuneration Committee that the Annual Management Performance Related Pay Scheme (AMPRPS) payments relating to 2019/20 that would have been paid in June 2020 be deferred. This deferral was proposed as part of a range of cash preservation measures despite a year of good financial and operational performance up to mid-March (prior to the financial impact of the Covid-19 pandemic). The Committee fully concurred with the executive's recommendation. Payments under this scheme will not be made until it is deemed appropriate by the Committee.

Key decisions made in 2019/20

Following a full review of NATS variable pay incentives during 2019, the Committee concluded at the time that the structure of both the Annual Management Performance Related Pay Scheme (AMPRPS) and the Long-Term Incentive Plan (LTIP) remained appropriate and aligned to the market.

Nigel Fotherby retired from his role as Finance Director in June 2019 and was replaced in August by Alistair Borthwick as Chief Financial Officer (CFO). Exit and joiner remuneration arrangements were reviewed and approved by the Committee during the year in line with the policy set out in this report. During 2019, executive directors were granted a cash-based award under the LTIP-RP2 which is designed to reward the achievement of group financial targets over the final two years of RP2 (i.e. calendar years 2018 and 2019), therefore no new grants have been made in the last 12 months. The Committee also agreed that a similar arrangement will be in place for RP3, and this cycle will be granted once the regulatory performance plan for NERL has been finalised. Award levels for this five-year period, and performance hurdles, have been deferred due to Covid-19 and will be reported in next year's report, once the performance plan for RP3 has been determined.

Reward for 2019/20

The Remuneration Committee assessed performance under the AMPRPS and determined that a number of key operational milestones were successfully delivered in the year. Group EBITDA and customer focussed targets were met in part and operational targets were met in full. Performance targets for LTIP cycle 7 were partly achieved (yielding 71.7% of the maximum): the NERL rate of return exceeded stretch value, NATS Services' EBITDA target was not met and strategic targets were met in part. The performance targets for the LTIP for RP2 were met in full. As for AMPRPS above, payments of LTIPs have been deferred.

Remuneration for 2020/21

For the 2020/21 financial year, in light of the Covid-19 pandemic, the Committee will operate the remuneration policy as set out over the following pages. The highlights include:

- No base salary increases for the CEO, CFO and wider Executive and management teams;
- Three month voluntary reductions in remuneration for all Board and Executive members during 2020
- Deferral of all incentive payments relating to the 2019/20 financial year;
- Deferral of the AMPRPS scheme for 2020/21;
- A suspension of the grant of an LTIP covering RP3 until such time that it is appropriate to make a grant.

Conclusion

Whilst we continue to ensure that our policy delivers a robust link between reward and performance, this year we are in extremely unusual circumstances and it is important that our reward strategy appropriately reflects the challenging external environment our customers are facing and the additional work the executive team is undertaking to deal with Covid-19.

Maria Antoniou,
Chair of Remuneration Committee

Purpose and responsibilities of the Committee

The Committee meets when necessary and is responsible for:

- considering and approving, on behalf of the Board, the arrangements for determining the remuneration, benefits in kind and other terms of employment for the Chairman and executive directors and the company's Personal Contract Group (around 415 senior managers);
- considering and approving company incentive targets for executive directors and other members of the wider executive team;
- considering and approving a statement of remuneration policy;
- confirming details of the remuneration of each executive director for inclusion in the Annual Report and Accounts;
- confirming reward arrangements for all executive team members; and
- considering exit arrangements for executive team members.

The terms of reference for the Committee require it to ensure the company's remuneration policy complies with the current Corporate Governance Code, as far as practicable under the SPA. No director is involved in decisions relating to his or her own remuneration.

Activities in the year

The Committee met five times in the year and its main activities were to:

- review and approve the annual performance related pay targets for executive directors, the executive team and Personal Contract Group;
- review and approve achievement of all active LTIP cycle targets and resulting payments;
- agree remuneration for new executive team members and termination payments for departing executive team members. This activity included reviewing and approving the remuneration package for the CFO role, based on market data from the committee advisors and in line with the remuneration policy set out in this report. Good leaver status was also agreed for the former Finance Director on termination, setting out the incentive payments that will remain due based on pro rata service to the point of leaving.

Membership

The Remuneration Committee of the Board is comprised entirely of non-executive directors. It is chaired by Maria Antoniou. Other members are Gavin Merchant and Mike Campbell. Paul Golby also attends the meeting (but is absent for discussion about his own remuneration).

Advisers and other attendees

As appropriate, the CEO and HR Director are invited to attend Committee meetings.

Wholly independent advice on executive remuneration is received from the Executive Compensation practice of Aon plc. Aon is a member of the Remuneration Consultants Group and is a signatory to its Code of Conduct. Aon has no other commercial relationship with the company. Fees charged by Aon for advice provided to the Committee for 2019/20 amounted to £35,740 (excluding VAT).

Directors' Remuneration Policy

It is the company's policy to establish and maintain competitive pay rates that 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 our customers and in line with the NATS values and behaviours. In fulfilling this policy, the company adheres where possible to the principles and provisions of the UK Corporate Code on directors' remuneration as outlined below.

The level of executive directors' remuneration takes into account competitive practice across comparator companies (as agreed with the Committee, companies from which NATS might seek to recruit employees or are considered similar to NATS) together with the need to attract and retain talent. Executive directors are rewarded based on responsibility, competence and contribution, and the average budgeted increase in salaries elsewhere in the group. Performance-related reward forms a substantial part of the total remuneration package and is designed to align the interests of directors with those of stakeholders and to promote the long-term success of the company.

Performance is measured against a portfolio of key business objectives and payment is determined based on performance beyond that expected of directors as part of their normal responsibilities. In implementing this strategy, the Committee adopts the principle that incentive scheme targets must be stretching and in line with the Board's agreed strategic growth and business plans.

The tables on pages 52 and 53 describe the key components of each element of the remuneration arrangements for the executive directors, and the company's policy in this respect. Earnings and benefits are set out in the table of directors' remuneration on page 60.

Discretions retained by the Committee in operating the variable pay schemes

The Committee operates the group's various incentive plans according to their respective rules and, where applicable, in accordance with relevant legislation and HMRC guidance. In order to ensure efficient administration of these plans, certain discretions are reserved to the Committee, these include:

- determining who may participate in the plan;
- determining the timing of grants of awards and/or payments under the plans;
- determining the quantum of awards and/or payments (within the limits set out in the remuneration policy table);
- determining the performance measures and targets applicable to an award (in accordance with the remuneration policy table);
- where a participant ceases to be employed by the Company, determining whether 'good leaver' status applies;
- determining the extent of vesting of an award based on assessment of the performance conditions, including discretion as to the basis on which performance is to be measured if an award vests in advance of normal timetable (on cessation of employment as a 'good leaver' or on the occurrence of corporate events);
- whether recovery and/or withholding shall be applied to any award and, if so, the extent to which they shall apply; and
- making appropriate adjustments to awards on account of certain events, such as major changes to the constitution of the company.

Approach to recruitment remuneration

In the event that the Company recruits a new executive director (either from within the organisation or externally), when determining appropriate remuneration arrangements, the Committee will take into consideration all relevant factors to ensure that arrangements are in the best interests for the Company and its shareholders. This will include the application of the policy described in the policy table. In exceptional circumstances for externally recruited directors, the Committee may offer additional cash awards to compensate an individual for remuneration forfeited on leaving a previous employer.

The awards would not exceed what is felt to be a fair estimate of the remuneration forfeited and would reflect (as far as possible) the nature and time horizons attached to that remuneration and the impact of any performance conditions.

For an internal appointment, any remuneration terms awarded in respect of the previous role may either continue on its original terms or be adjusted to reflect the new appointment.

When recruiting non-executive directors, the remuneration arrangements offered would normally be in line with those paid to existing non-executive directors, details of which are set out in the Annual Report on Remuneration.

Remuneration policy table

Component	Link to strategy	Operation	Maximum opportunity	Framework to assess performance	Recovery and withholding
Base salary	To provide fixed remuneration for each role which reflects the size and scope of executive directors' responsibilities and their individual skills and experience	Executive directors' salaries are normally reviewed annually and fixed for the 12 months commencing on 1 April. The Committee takes into consideration: • role, experience and performance of the individual; • internal and external relative positioning for total reward; and • the average budgeted increase in base salaries elsewhere in the group.		Not applicable	Not applicable
Benefits	To provide flexible, market aligned benefits on a cost-effective basis.	May include private health cover for the executive and their family, life insurance cover of up to eight times annual base salary, income protection and a car allowance. Relocation support and any associated costs or benefits may also be provided if considered by the Committee to be appropriate and reasonable to meet the requirements of the business. Other benefits may be offered from time to time broadly in line with market practice. Executive directors may participate in any all-employee share plan which may be operated by the company on the same terms as other employees.	The overall value of benefits will depend on the individual's circumstances and therefore there is no formal maximum. Participation in the all-employee share plan will be subject to the scheme's rules and in line with any relevant statutory limits.	Not applicable	Not applicable
Pensions	To provide cost-effective and competitive post-retirement benefits	Executive directors' pensions and life assurance are based on salary only, with performance-related incentive payments and other discretionary benefits excluded. The principal method of securing pensions for executive directors is auto-enrolment into the NATS Defined Contribution Pension Scheme (DC). NATS also offers a company-wide pension cash alternative in lieu of employer pension contributions for those with total pension savings close to the Lifetime Allowance, which is also available to eligible executive directors.	Maximum employer contributions are: • 18% for members of the DC; or • 15% of base salary as a pension cash alternative in lieu of employer contributions to the DC; or for legacy members of the defined benefit pension scheme (DB) who have transferred out of that scheme, 25% of base salary as a pension cash alternative in lieu of employer contributions to the DB.	Not applicable	Not applicable
Annual Incentive	To reward and incentivise the	An Annual Management Performance Related Pay Scheme (AMPRPS) is in place for the executive team and all	Maximum opportunity is capped at 70% of base salary.	Targets are set annually and are a mix of corporate and personal	The rules of the AMPRPS include a recovery provision

Component	Link to strategy	Operation	Maximum opportunity	Framework to assess performance	Recovery and withholding
	achievement of annual financial and strategic goals which are selected to align to the strategy of the business.	employees in the Personal Contract Group. AMPRPS is paid entirely in cash. As per the rules of the scheme, the Committee may determine that vesting should not be applied for any participant(s) should the Committee consider that individual performance or other circumstances makes this an appropriate outcome. This power would only be exercised in circumstances when the Committee decides that there has been or could be significant damage to the reputation of the company either during the performance years or as a result of the award. In these cases, the decision would be referred to the non-executive directors of the Board for ratification.	The AMPRPS starts accruing from threshold levels of performance. The current maximum potential for each executive director is set out in the annual report on remuneration.	performance. They are determined by the Remuneration Committee each year taking into account the group's key strategic priorities and the approved budget for the year and are set out in the Annual report on remuneration. The Committee may apply discretion as appropriate.	whereby individuals are liable to repay or forfeit some or all of their AMPRPS if there is a material misstatement of the results.
Long-term incentive	To incentivise executives to achieve the company's long-term strategy and enhance shareholder value.	Cash awards based on the achievement of financial targets over the relevant regulatory reference period. Transitional arrangements were in place for RP2. Subject to participants remaining eligible under scheme rules, vesting under RP2 translates into three distinct Payment Opportunities (PO): PO1: 20% at 1 June 2020; PO2: 30% at 1 June 2021; and PO3: 50% at 1 June 2022. The RP3 award shall have performance calculation dates of 1 April 2023 and 1 April 2025 and shall comprise up to four POs in 2023, 2024, 2025 and 2026 respectively.	110% of salary for each of the remaining two-years of RP2, covering the two calendar years 2018 and 2019. 110% of salary for each of the five years of Reference Period 3 (RP3: 2020 – 2024).	Awards vest based on both performance-measuring the weighted return performance of NERL and NATS Services over the applicable measurement and regulatory periods, and also based on the payment opportunity dates linked to approved share valuations.	The rules of the current LTIP include provisions for recovery and withholding to apply if the Committee concludes that: • the performance on variable pay awards, that have been made or vested, was materially misstated or should have been assessed materially differently; • the assessment of any performance condition was based on an error, or inaccurate or mis-leading information or assumptions; • the relevant individual has committed serious misconduct; or • there is a major safety or operational incident resulting in serious consequences for the organisation, its customers or air passengers. Recovery and withholding may be applied for up to the third anniversary of the end of the LTIP award's performance period.
Legacy arrangements: Long-term incentive (Cycles 5-7)	To incentivise executives to achieve the company's long-term strategy and enhance shareholder value.	Awards of notional shares are made annually with vesting dependent on the achievement of performance conditions over the three subsequent years. To the extent that performance conditions are met, awards will normally vest in three tranches: 50% in the third financial year, 25% in the fourth financial year and 25% in the fifth financial year. Transitional arrangements were in place for Cycle 5. Notional shares are linked to the NATS all-employee share ownership plan share price and, subject to remaining eligible under scheme rules, participants receive cash payments in relation to the value at the time of vesting and dividends paid in the period, representing a total shareholder return.	Maximum annual opportunity is capped at 110% of salary Outstanding awards are set out in the Annual report on remuneration	The LTIP is designed to reward the achievement of a set of financial and strategic targets for rolling three-year periods.	

Service contracts

Executive Directors

The employment contracts of the CEO and CFO provide for 12 months' notice in the event of termination by the company or 6 months' notice from the Executive Director.

Exit payment policy

The Committee is committed to ensuring that it does not pay more than is necessary when executives leave NATS. The table below sets out the key provisions for executive directors under their service contracts and the Incentive Plan rules.

For all leavers, the Committee may also determine to make a payment in reimbursement of a reasonable level of outplacement and legal fees in connection with a settlement agreement.

Non-Executive Directors

Charges for the services of non-executive directors are determined in agreement with the relevant sponsoring body: the DfT in the case of the Partnership directors and The AG in the case of AG appointed directors.

Partnership directors are normally engaged on three-year fixed-term contracts and have letters of appointment from the DfT. The Chairman’s contract was renewed on 1 September 2020 for a three-year term.

Consideration of employee remuneration arrangements elsewhere in the group

When setting the policy for directors' remuneration, the Committee takes into account the pay and employment conditions elsewhere in the group. The Committee is informed of salary increases for the general employee population and is kept informed of pay negotiations. It takes these into account

Exit payment policy table

Element	Termination policy
Base salary, benefits and pension	Payment will be made up to the termination date in line with relevant contractual notice periods and will not exceed contractual entitlements.
Annual incentive	Unless otherwise provided in the service contract, executives are not entitled to accrued AMPRPS payments unless the individual is determined by the Committee to be a good leaver. A good leaver is any individual who leaves due to death, agreed retirement or for any other reason if the Committee so decides.
Long-term incentive-RP2	Unvested payment opportunities will generally lapse at the time of exit. Unpaid vested payment opportunities will remain payable. For individuals determined by the Committee to be a good leaver (defined above), existing payment opportunities shall continue under the plan on existing terms save that the Committee may adjust down the size and/or life of such payment opportunities on such basis as it determines appropriate (for example, on account of assessment of performance conditions over curtailed periods and by reference to time elapsed into normal vesting periods) and retains discretion for early vesting.
Legacy arrangements: LTIP cycles 5 – 7	Unvested tranches will generally lapse at the time of exit. Vested tranches will remain exercisable for a period of one month following the date of cessation. For individuals determined by the Committee to be a good leaver (defined above), unvested tranches shall continue under the plan on existing terms save that the Committee may adjust down the size and/or life of such tranches on such basis as it determines appropriate (for example, on account of assessment of performance conditions over curtailed periods and by reference to time elapsed into performance periods) and retains discretion for early vesting.

when determining salary increases for executive directors.

Where relevant and appropriate, the Committee seeks to align the remuneration policy for executive directors with that of other senior managers, or exercise upward or downward discretion where appropriate. Selected employees are able to share in the success of the group through participation in the AMPRPS. Executive Directors and other members of the Executive management team are eligible for participation in the LTIP.

Consideration of the views of shareholders in setting the Remuneration Policy

The Committee is mindful of the views of the DfT and AG and the Regulator in determining the appropriate levels of remuneration and ensuring that shareholder, Regulator and director interests are aligned.

Annual Report on Remuneration

This part of the directors' remuneration report sets out how the remuneration policy will be applied for the financial year ending 31 March 2021 and summarises the emoluments of executive and non-executive directors for the 2020 financial year.

Implementation of the remuneration policy for the year ending 31 March 2021

Executive directors

Base salaries

	Annual salary with effect from 1 April			Effective annual salary after voluntary pay reduction from 1 April		
	2019	2020	% change	2019	2020	% change
Martin Rolfe	£463,500	£463,500	0%	£463,500	£440,325	-5.0%
Alistair Borthwick	£300,000*	£300,000	0%	£300,000	£285,000	-5.0%

* equivalent annual salary at date of joining the company in August 2019.

The effective salaries of both Martin Rolfe and Alistair Borthwick reflect their decision to elect for a 3-month voluntary 20% reduction in basic pay for the period April to June 2020 in response to the Covid-19 pandemic. Of this reduction, half was donated to the NHS Covid relief fund.

Pension and benefits

Martin Rolfe and Alistair Borthwick both receive a pension cash alternative of 15% of base salary in lieu of employer contributions to the DC scheme.

Annual incentive scheme

The AMPRPS scheme for 2020/21 has been suspended until such time that the global pandemic, and our industry shows signs of recovery.

Long-term incentive plan (LTIP)– RP3

The grant of the LTIP RP3 cycle has been deferred until the price control for this period is agreed.

Long-term incentive plan (LTIP) – CEO entitlement to payments

Given the current circumstances, Martin Rolfe (CEO) has asked the company to defer any long-term incentive payments due to him until a more appropriate time. The company has agreed this as a personal decision by the CEO.

Non-Executive Directors

The Company's approach to setting the fees of non-executive directors is by reference to those paid by similar companies. Fees are reviewed annually by the NATS CEO and HR Director. All non-executive directors elected for a three-month voluntary pay reduction of 20% for the period April to June 2020.

Chairman

The Chairman's contract was renewed on 1 September 2020. He has a three year contract specifying the remuneration he receives. This is £165,120 on an annualised basis, which represents no increase from his previous contract period. The Chairman's effective salary for 2020/21, reflecting his voluntary 20% reduction in pay is £156,864, equivalent to an annual pay reduction of 5%.

Partnership directors

Fees with effect from 1 April	2019	2020	% change
Base fee	£36,900	£36,900	0%
Effective base fee after voluntary pay reduction	£36,900	£35,055	-5.0%
Fee for chairs of Board sub-committees *	£8,200	£8,200	0%
Effective fee for chairs after voluntary pay reduction	£8,200	£7,790	-5.0%

*Remuneration Committee; Audit Committee; Safety Review Committee; Transformation Review Committee

Airline Group (AG) appointed directors

AG Directors receive no remuneration for their services to the NATS Board. Fees are reviewed on annual basis by the NATS CEO and HR Director. The Airline Group has elected to take a 20% reduction in fees to cover the period April to June 2020. As a result the annual fee for 2020/21 will be £206,416, which is a 5% reduction for the year (2019/20: £217,280).

LHR Airports (LHRA) appointed director

The LHRA Director is employed and remunerated by LHRA. LHRA does not charge NATS for the services of its director.

Directors' remuneration for the year ended 31 March 2020

Base salaries of executive and non-executive directors and AG fee for AG appointed directors (audited)

	Annual salary with effect from 1 April or date of appointment		
	2018	2019	% increase
Martin Rolfe	£450,000	£463,500	3%
Nigel Fotherby (retired June 2019)	£304,630	£313,769	3%
Alistair Borthwick (joined NATS in August 2019)	n/a	£300,000	n/a
Partnership directors: Base fee Fee for chairs of Board sub-committees	 £36,000 £8,000	 £36,900 £8,200	 2.5% 2.5%

AG Directors receive no remuneration for their services to the NATS Board. However, a payment of £217,280 for 2019/20 (2018/19: £204,000) was made to AG in lieu of remuneration for these directors. This sum is used to fund the activities of AG.

AMPRPS award for the year ended 31 March 2020 (audited)

The maximum potential award under the AMPRPS for 2019/20 for executive directors was unchanged from the prior year at 70% of salary for the CEO and 55% of salary for the CFO and former Finance Director. AMPRPS awards are determined based on company performance and personal performance. Company performance resulted in an AMPRPS of 63.4% out of an available 75.0% of the award (see table below). Personal performance is based on the NATS Personal Performance Rating System and this resulted in 22.5% of an available 25% for the 2019/20 performance year. As noted above, the Committee accepted the executive's recommendation to defer payment of the AMPRPS, which would otherwise have been settled in June 2020.

	Weighting	Outcome	Threshold	Stretch	% Payable
NATS Group EBITDA (£m - see below)	40%	250.0	224.5	280.7	33.4%
NERL C3 delay (impact score)	10%	15.8	24.0	16.0	10.0%
Minutes of staff and engineering delay at UK airports where NATS provides ATC	5%	21,886	15,540	14,060	0.0%
NERL Operational	15%	Fully achieved	Not applicable	Not applicable	15.0%
NSL Operational	5%	Fully achieved	Not applicable	Not applicable	5.0%
Total	75%				63.4%

EBITDA represents earnings before interest, tax, depreciation, amortisation and goodwill impairment. The measure was neutral to specified variances to budget including for: traffic volumes; IAS 19 pension costs; staff redundancy, relocation and share scheme costs; foreign exchange gains or losses; gains on the disposal of fixed asset; above the line tax credits and expected credit losses and impairment charges made for Covid-19.

Long term incentive payments

Long term incentive payment (LTIP) arrangements are established for executive directors and other members of the NATS Executive in order to incentivise long term performance and align performance with shareholder interests, and reward exceptional performance. Performance conditions are generally established for LTIPs for periods of three years (LTIP RP2 was for a two year period). Payments under LTIP arrangements are made according to a predetermined vesting schedule covering a period of three years following completion of each LTIP scheme. Payments are subject to eligibility criteria under scheme rules. These require participants to be employed at the vesting date or to be good leavers under the scheme rules.

Given the current circumstances, Martin Rolfe (CEO) has asked the company to defer any long-term incentive payments due to him until a more appropriate time. The company has agreed this as a personal decision by the CEO.

Outstanding LTIP Cycles (audited)

LTIP schemes (Cycles 5, 6 and 7) awarded up to April 2017 were based on awards of notional shares made annually with performance conditions measured over a period of three years. LTIP RP2 was based on performance conditions measured over a two year period, and was not based on notional shares. No further awards were granted to the executive directors during this regulatory reference period.

Performance conditions relating to Cycle 5 and Cycle 6 were determined in previous years and achieved 80.0% and 46.4% of target respectively. The Committee determined that performance against LTIP Cycle 7 targets achieved 71.7%.

Amounts paid under these LTIP Cycles 5, 6 and 7 is based on the value of notional shares at each vesting date, which is linked to the price of an employee share and the total shareholder return since the award date. The value of vesting payments under these LTIP cycles is determined at the vesting dates indicated in the table below and are reported in the directors' emoluments table when paid. The values of Cycle 6 and 7 tranches vesting from July 2020 onwards remain undetermined, being dependent on an HMRC approved employee share price at the vesting date. The Cycle 6 tranche vesting in July 2020 was deferred due to Covid-19 and additionally was not capable of being determined following suspension of the employee share scheme.

Director	Cycle	Date of award	% of salary awarded	Value of notional shares awarded	Share price at award (£)	Vesting schedule
Martin Rolfe	Cycle 5*	April 2016	110%	£440,000	£4.20	75% July 2018; 25% July 2019
	Cycle 6	April 2016	110%	£440,000	£4.20	50% July 2019; 25% July 2020; 25% July 2021
	Cycle 7	April 2017	110%	£473,000	£3.95	50% July 2020; 25% July 2021; 25% July 2022
Nigel Fotherby	Cycle 5*	April 2016	90%	£262,547	£4.20	75% July 2018; 25% July 2019
	Cycle 6	April 2016	90%	£262,547	£4.20	50% July 2019; 25% July 2020; 25% July 2021
	Cycle 7	April 2017	90%	£264,385	£3.95	50% July 2020; 25% July 2021; 25% July 2022

* Transitional arrangements were in place for the Cycle 5 award, which created a shorter performance window for this Cycle to allow for a delay in implementation while considering scheme design. As disclosed in last year's report the performance targets for Cycle 5 were partly achieved (80% of the maximum). 75% of this award vested and was settled following the share valuation in July 2018 based on a total shareholder return value of £4.57. Martin Rolfe received £287,257 and Nigel Fotherby received £171,405 for this tranche, which is reported within 2018/19 earnings from long term incentives in the table on page 60. 25% of Cycle 5 and 50% of Cycle 6 vested and was settled in July 2019 based on a total shareholder return value of £5.11. Martin Rolfe received £107,067 for Cycle 5 and £124,197 for Cycle 6 and Nigel Fotherby received £63,886 for Cycle 5 and £74,108 for Cycle 6. These amounts, together with the RP2 award, are reported within 2019/20 earnings from long term incentives in the table on page 60.

LTIP Cycle 7 (audited)

	Weighting	Outcome	Threshold (20% vests)	Stretch (100% vests)	% Payable
NERL rate of return (%)	40%	6.77	4.55	6.5	40.0%
NSL EBITDA (£m - defined above)	20%	11.0	19.8	22.6	0.0%
Strategic targets	40%	Partially	Not applicable	Not applicable	31.7%
Total	**100%**				**71.7%**

50% of this award will vest following the outcome of the next independent valuation of employee shares (which has been delayed due to the suspension of the share plan as a result of Covid-19), after which participants will be able to exercise this portion of the award, 25% will vest around a year later (originally anticipated in July 2021) and the remaining 25% will vest around a year later (originally anticipated in July 2022) after each respective share valuation.

LTIP RP2 (audited)

The CEO and the former Finance Director were both granted awards under the LTIP RP2 in April 2018. The performance period covered the remaining two years of RP2 to 31 December 2019 for NERL and the two financial years ended 31 March 2020 for NATS Services. The earning potential under this award was as follows:

Director	% of salary awarded per annum	Maximum award value per annum	Performance outturn	Total award value
Martin Rolfe	110%	£495,000	100%	£990,000
Nigel Fotherby	90%	£274,167	100%	£411,251*

*pro-rated to date of retirement

Subject to executive directors meeting the eligibility criteria under scheme rules, payments under the scheme are made at three distinct payment opportunities (PO) as follows:

- PO1: 20% at 1 June 2020 (payment suspended due to Covid-19);
- PO2: 30% at 1 June 2021; and
- PO3: 50% at 1 June 2022.

Estimated future payments under long-term incentive plans

Payments under LTIP schemes are made to executive directors who remain in service at the vesting date or who are considered good leavers under the scheme's rules. Estimated future payments to Martin Rolfe and Nigel Fotherby are set out below. The values for Cycle 6 and Cycle 7 are estimates only and remain undetermined. Final amounts are based on the value of an employee share and on a total shareholder return calculation since the award date, which can only be ascertained at the payment date.

Given the current circumstances, Martin Rolfe (CEO) has asked the company to defer any long-term incentive payments due to him until a more appropriate time. The company has agreed this as a personal decision by the CEO.

Director	Outstanding LTIP schemes	Financial year ending 31 March		
		2021[a] £'000	2022 £'000	2023 £'000
Martin Rolfe	Cycle 6[b]	48	48	-
	Cycle 7[b]	165	83	83
	RP2	198	297	495
	Total	**411**	**428**	**578**
Nigel Fotherby	Cycle 6[b]	29	29	-
	Cycle 7[b]	61	31	31
	RP2	82	123	206
	Total	**172**	**183**	**237**

[a] due to Covid-19, payments due July 2020 have been deferred [b] following suspension of the employee share scheme due to Covid-19, the values have been estimated based on total shareholder return values of £3.99 per share for Cycle 6 and £3.85 for Cycle 7.

Remuneration earned by directors for the year ended 31 March 2020 (audited)

The table sets out the emoluments of the Chairman and directors. It shows all of the remuneration earned by an individual during the year and reports a single total remuneration figure. Amounts actually paid to directors during a financial year will be different reflecting the timing of annual bonus payments and the vesting schedule of long-term incentive schemes explained above.

		Salary or fees*		Benefits*		Performance related payments*		Long term incentive plan*		Replacement award*		Pension Cash Alternative*		Total*	
		2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
	Notes	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Chairman															
Dr Paul Golby CBE	1	165	168	8	8	-	-	-	-	-	-	-	-	173	176
Executive directors															
Martin Rolfe	2, 3, 4, 5	464	450	13	15	279	283	1,221	287	-	-	70	68	2,047	1,103
Alistair Borthwick	4, 6	150	-	19	-	106	-	-	-	87	-	23	-	385	-
Non-executive directors															
Maria Antoniou		45	44	-	-	-	-	-	-	-	-	-	-	45	44
Richard Keys		45	44	-	-	-	-	-	-	-	-	-	-	45	44
Iain McNicoll CB CBE	1	45	44	1	1	-	-	-	-	-	-	-	-	46	45
Michael Campbell	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dr Harry Bush CB	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gavin Merchant	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hugh McConnellogue	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Louise Street	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kathryn Leahy	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Former director (at 31 March 2020)															
Nigel Fotherby	4, 7	107	305	4	17	34	148	549	171	-	-	18	69	712	710
		1,021	1,055	45	41	419	431	1,770	459	87	-	111	136	3,453	2,122

* For year, or from date of appointment or up to date of resignation.

Notes to the table of directors' emoluments:

1 Benefits paid to the Chairman and non-executive directors represent the reimbursement of travel costs.

2 The table sets out Martin Rolfe's earnings during the financial year and includes future long term incentive payments which are conditional, as explained in note 4 to this table below. Actual payments made to Martin Rolfe, including for long term incentives to which he was entitled in the financial year, amounted to £1,061,000 as shown on page 61.

3 Martin Rolfe is a member of the defined contribution pension scheme in order to make employee contributions only and sacrificed £10,000 (2019: £10,000) of his salary under the company's salary sacrifice arrangements. These contributions are reported in his salary above. The company did not make any employer contributions.

4 Martin Rolfe, Alistair Borthwick and Nigel Fotherby were eligible for the pension cash alternative payment scheme in lieu of employer pension contributions. Under the pension cash alternative payment scheme, Martin Rolfe received £69,525 for the year (2019: £67,500), Alistair Borthwick received £22,500 for the period since his appointment (2019: nil) and Nigel Fotherby received £17,881 for the period until his resignation (2019: £68,674).

5 Martin Rolfe participates in the Long Term Incentive Plan. The value for 2020 reflects amounts paid in the year following vesting of Cycle 5 and Cycle 6 tranches, together with the RP2 award which completed at 31 March 2020. Payments under the RP2 award, which are conditional on Martin being in service at the payment dates (or a good leaver under scheme rules), are intended as follows: 20% in June 2020 (deferred due to Covid-19), 30% in June 2021 and 50% in June 2022. The comparative value for 2019 reflects a vesting payment for a Cycle 5 tranche. Given the current circumstances, Martin Rolfe (CEO) has asked the company to defer any long-term incentive payments due to him until a more appropriate time. The company has agreed this as a personal decision by the CEO.

6 Alistair Borthwick was appointed an executive director on 3 October 2019 and his emoluments from this date are reported in the table above. The Committee agreed that he would be partially compensated for performance related remuneration that he forfeited on leaving his previous employer. His entitlement of £261,063 is payable in three equal annual instalments. The first of these contractual payments, which he has volunteered to defer receipt of given current challenges, is reported above as a replacement award.

7 Nigel Fotherby retired on 30 June 2019 and was deemed a good leaver on retirement. His entitlement to annual performance related pay and earnings under the Long Term Incentive Plan for the 2020 financial year is included in the table above. The value for 2020 reflects amounts paid in the year following vesting of Cycle 5 and Cycle 6 tranches, together with the RP2 award which completed at 31 March 2020. Payments under the RP2 award are made under good leaver conditions and are intended as follows: 20% in June 2020 (deferred due to Covid-19), 30% in June 2021 and 50% in June 2022. The comparative value for 2019 reflects a vesting payment for a Cycle 5 tranche.

8 These directors are appointed by The Airline Group (AG) who charged NATS a total of £54,320 per quarter (2019: £54,320 per quarter) for the services of the directors. There were no resignations or appointments in the period to 31 March 2020.

9 Kathryn Leahy is appointed by LHRA and received no fees from NATS for her services.

Ratio of the Chief Executive's pay to UK employees

Although the requirement to disclose the pay ratio is not a statutory requirement for NATS, the Committee felt that it would be appropriate to include the relevant disclosures on an entirely voluntary basis as it helps to demonstrate the link between the Chief Executive's pay and the remuneration of the wider workforce. The ratio calculated at April 2019 remained unchanged from the previous year.

Date	Method of calculation adopted	25th percentile pay ratio (Chief Executive: UK employees)	Median pay ratio (Chief Executive: UK employees)	75th percentile pay ratio (Chief Executive: UK employees)
April 2019	Option B	18 : 1	13 : 1	9.5 :1

The median, 25th percentile and 75th percentile figures used to determine the above ratios were calculated by reference to option B, which uses the most recent pay information available from the NATS gender pay report data to allow us to make best estimates on the 25/50/75th centile pay data for comparison. The Committee selected this calculation methodology as it was felt to produce the most statistically accurate result. The Committee considers that the median pay ratio disclosed above is consistent with the pay, reward and progression policies for the Company's UK employees taken as a whole.

Five-year history of Chief Executive remuneration

The following table sets out a five-year history of the remuneration of the Chief Executive. It also details amounts actually paid in each financial year, reflecting the timing of annual bonus and long- term incentive payments.

Financial years ended 31 March	2016	2017	2018	2019	2020	
Earned for the year (£'000s)	748	944	1,179	1,103	2,047	
Paid in the year (£'000s)	586	836	956	1,098	1,061	
AMPRS (% of maximum entitlement)	91.6%	75.3%	92.5%	89.8%	86.0%	
LTIP (% of maximum entitlement)	Cycle 3 60.0%	Cycle 4 96.3%	Cycle 5 80.0%	Cycle 6 46.4%	Cycle 7* 71.7%	RP2* 100%

* Given the current circumstances, Martin Rolfe (CEO) has asked the company to defer any long-term incentive payments due to him until a more appropriate time. The company has agreed this as a personal decision by the CEO.

Statement of directors' interest in shares

Aggregate emoluments disclosed above do not include any amounts for the value of shares awarded under the company's all-employee share ownership plan. NATS' all-employee share ownership plan is designed to give every employee (including executive directors but not non-executive directors) an equal opportunity to acquire a stake in the future success of the company.

The share plan holds 5% of the shares in NATS and is administered by a special trustee company with three directors – one each appointed by HM Government, AG and the Trades Unions (collectively known as the Trustee). Maria Antoniou chairs the Trustee meetings.

Details of the shares held by directors during the year are set out in the table below. The value of Martin Rolfe's shareholding at 31 March 2020 is indicative only. For the purpose of this report this indicative value is based on market comparable benchmarks in the absence of an HMRC approved valuation since Covid-19 and the temporary suspension of the employee share scheme. Proceeds from the disposal of employee shares can only be realised and therefore ascertained based on an HMRC approved valuation.

Director during the year	Date from which exercisable			Exercised (returned to plan)	Holding (number of shares)	Indicative value at 31 March 2020 (estimated at £2.85 per share)	Value at 31 March 2019 (at £3.90 per share)
	Exercisable (brought forward)	30/10/2021 (brought forward)	30/10/2023 (brought forward)				
Martin Rolfe	662	162	200	-	1,024	2,918	3,994
Nigel Fotherby	3,139	162	200	(3,501)	-	-	13,654
	3,801	324	400	(3,501)	1,024	2,918	17,648

There were no awards of employee shares during the 2020 financial year. The executive directors received dividends in cash during the financial year based on their shareholdings at the distribution date. Under the rules of the employee share plan, Nigel Fotherby's shares are deemed to have vested when he was required to return them to the plan on retiring from NATS. He received £13,654 for his shares.

Maria Antoniou

Chair of the Remuneration Committee

Safety Review Committee report

The role of the Safety Review Committee

The Safety Review Committee (SRC) supports the Board in discharging its accountabilities for the safe provision of air traffic services and for security arrangements across NATS. It meets quarterly as a formal committee and receives separate in-depth briefings as required. Its remit includes the requirements to:

- monitor and review the effectiveness of the safety and security arrangements in place in the group;
- review the delivery of the group's safety objectives through its operations, structures and processes;
- review the group's safety performance;
- monitor the implementation of safety enhancement programmes; and

- make recommendations to the Board for improving the group's safety and security management systems.

The Committee is chaired by Iain McNicoll and there were two other non-executive director members in 2020: Kathryn Leahy and Hugh McConnellogue. In addition, the NATS Chair regularly attends the Committee.

During the year, the Committee took advice from the following special advisers, who attended each meeting by standing invitation:

- Dr George Bearfield, Director of Health and Safety, Rock Rail, and Professor of Railway System Safety at the University of Huddersfield; and
- Captain John Monks, Director of Safety and Security, British Airways.

At least two of the following four members of NATS Executive team are required to attend routine meetings: CEO, Safety Director, Operations Director and Technical Services Director.

Director Swanwick, Director Prestwick, Director Airports, Director Operations & Commercial Safety, and Director Safety & Assurance Technical Services are invited to attend routine meetings, but may not be required. Attendance is coordinated through the executive team.

The Head of Facilities Management formally reports to the Committee on the security arrangements in NATS twice per annum. In addition, FerroNATS and Aquila provide an update on their safety performance once per annum.

The CAA's Head of Airspace, ATM and Aerodromes has an annual invitation to meet and brief the Committee. These briefings provide the Committee and the regulator with the opportunity to review progress on joint areas of work and priorities. This year Brexit negotiations have been important to both organisations as it became clear that the UK would no longer be a member of EASA. The risk caused by airspace infringement also continues to be a shared topic of concern and NATS supports the progress being made towards the identification of all aircraft in UK airspace through the mandating of electronic conspicuity. Towards the end of the year the regulator's and NATS' focus was on the impact of the Covid-19 pandemic on the aviation industry and on managing the associated potential aviation safety risks.

As noted, in addition to the standing items on the Committee's quarterly agenda, this year the Committee received specific briefings on oceanic flight data systems, new tools to enhance the understanding of operational safety risk and how NATS can learn from other organisations' safety critical experiences.

- Safety Performance

The SRC carefully monitors the group's safety performance and progress towards its targets. The regulatory targets set for RP2 were met but NATS's own internal ambitious targets were not met, with higher severity incidents associated mainly with London Terminal Control. The Committee reviewed the factors contributing to this performance and the Swanwick Enhancement Plan developed to support long term sustained improvement, and which is now embedded in the 2020 Swanwick Unit Safety Plan. The Committee also considered the inevitable limit to continuous improvement which was possible ahead of essential technology and airspace change.

This year the UK Airprox Board (UKAB) concluded that NATS had either contributed to, or could have influenced better, the outcome for two risk-bearing Category B Airprox events. One of these events occurred at Stansted airport in February 2019. NATS immediately implemented its own safety improvement actions from these events and when the UKAB findings were formally published in December 2019 had already taken all the necessary actions.

I reported last year that, in preparation for RP3, internal measures of safety performance were being broadened. The safety performance scorecard received by the Committee now covers the KPIs for RP3 together with trend data on NATS' top safety risks with leading indicators on investment in safety, our safety processes and the effect activities have on our people. This drive to move from hindsight to foresight will continue in the year ahead.

The SRC reviewed the results of an investigation and recommendations following a technical engineering incident affecting LTC in July 2019, which resulted in a loss of separation. The report provided reassurance that a comprehensive programme of improvement activities was in place to support the current operation, while also encompassing future systems and the need to establish the appropriate balance between resilience and safety.

- Safety Risk Management

The risk of an accident involving aircraft under NATS control is NATS' top safety risk and the Committee regularly reviews an assessment of this risk. Information on safety occurrences together with models to estimate the probability of different accident scenarios, including runway incursions, controlled airspace infringements, aircraft leaving controlled airspace and drone encounters, provides the Committee with oversight of event types, trends and, importantly, associated safety improvement activities. For example, runway incursions, primarily low severity events reported at Heathrow, increased during the year as a result of better detection methods. The reporting of these events has allowed NATS to put focused improvement actions in place which will provide long term safety benefits.

While controlled airspace infringements remain high, there has been an encouraging downward trend observed in the number of events occurring towards the end of the year. Support for safety improvement initiatives which sustain this trend and reduce the risk of infringements, including the drive for mandating electronic conspicuity and work with the general aviation community, will continue.

NATS uses the Outside Controlled Airspace Tool (oCAT) at LTC to provide automated alerts on airspace excursions. The number of alerts detected by the system reduced during the year. Considering this improvement, it was disappointing that an event involving the descent of an aircraft outside of controlled airspace was attributed to NATS as a risk bearing B Airprox. This event and airspace excursions more generally has led to bespoke improvement activity at Swanwick.

Reversing the unwelcome trend reported in previous years, there was a reduction in the number of reported drone encounters in the year. This improvement reflects a combination of measures including new regulations and procedures, enforcement and education. Over the last 12 months, NATS received approximately 2,600 requests for airspace approval from drone users across our centres and airports. NATS continues to work with commercial drone operators to enable Beyond Visual Line of Sight (BVLOS) operations in our airspace, whilst at the same time encouraging a just culture and open reporting via tools such as CHIRP (Aviation and Maritime Confidential Incident Reporting).

- Board Safety Workshop

A safety workshop in June provided the Board and SRC members with an overview of how NATS' safety performance and safety culture compared to benchmark ANSPs from around the world. The workshop also explored some of the top current safety risks, with subject matter experts outlining the challenges being faced and the improvement actions taking place. In addition, moving from today's safety risks to managing the future risks caused by new entrants into the airspace, the Board was briefed on how NATS is preparing for the advances in commercial space operations.

- NATS Safety Strategy

Last year I reported on how the NATS Safety Strategy had been developed to connect directly to the business through a set of safety capabilities and associated capability outcomes. These capability outcomes capture how we want our business to evolve towards 2030. They cover a wide-ranging set of aspirations from our safety culture to our future safety management system. This year I am pleased to report progress on working towards these goals. A 'single point of truth' has been developed for entering, managing and reviewing all unit safety plans together with other programme and project activities. This is enabling the business to see how all the planned activities are contributing to achieving the outcomes and delivering the safety strategy.

- Physical Security

The SRC oversees the range of physical security risks and its focus in the past year has been:

External Threat and Incident Management: extensive work has been undertaken to support NATS' Incident Management efforts. The close links that already exist with the emergency services have been further strengthened with a number of joint training exercises, including a major multi-agency exercise at Prestwick.

Insider Threat Activities: work has continued to ensure that NATS takes all reasonable steps to mitigate the risk from potential insider threat activities, including establishing an Insider Threat Working Group assessing the company's personnel security maturity using a CPNI model and now developing risk assessments for all roles in NATS.

Overseas Support and Travel Security: a focus this year was Corporate Security support to teams overseas, including briefings and updates during the mass public demonstrations in Hong Kong and following theCovid-19 outbreak.

Security Vetting: work has continued to align the vetting service with the recruitment process in order to help provide a much better experience for those joining NATS.

Data Protection: GDPR is now well established within the organisation and a recent Internal Audit made no major observations.

Iain McNicoll, CB CBE,

Chair of the Safety Review Committee

Transformation Review Committee report

The role of the Committee

The Committee's objective is to provide the Board with oversight of NATS' transformation programmes and assurance on the quality of the strategy, planning and delivery of those programmes.

This includes the development of plans and the delivery of adequate and cost-effective technical systems and services to support NATS' operations, as well as the people and procedure changes required to realise the operational and commercial benefits.

The Committee is chaired by Mike Campbell with two other non-executive directors as members: Iain McNicoll and Richard Keys. The NATS Chair, Paul Golby, also attends. The following are invited to attend each meeting by standing invitation:

- CEO;
- Technical Services Director;
- Operations Director;
- Human Resources Director;
- Director Service Design and Transition;
- Director Service Strategy and Transformation;
- Director Strategic Assurance; and
- Chief Engineer.

Main activities of the Committee during the year

As part of its governance and oversight of the NATS operations, the Committee receives regular in-depth reports and briefings on the existing and planned investment programmes, and the technical and organisational risk profiles. The following issues have received significant focus by the Committee.

Deploying SESAR

SESAR is the European wide standard for future systems, designed to produce a step change in safety, performance and efficiency. The main challenge in the years ahead is the introduction of SESAR compliant systems which NATS will achieve through its Deploying SESAR Programme. Each of the main programme components represents a significant change to the operation and its systems. The size and complexity of the composite programme brings an additional scale of risk to the business as a whole, which the Committee is committed to review on a continuing basis, in order to provide the necessary levels of reassurance to the Board.

At the heart of the programme is iTEC. This is the new generation of core flight data processing systems which will underpin all NATS future operations and will operate on a common modern architecture to support all of UK airspace.

During the last year the TRC maintained oversight of all aspects of this programme including investment governance, programme delivery and lessons learned.

Several challenges have arisen during the year including delays by a key supplier and identification of a safety risk in a planned interim solution which was not considered acceptable to deploy. The TRC provided oversight and scrutiny of these challenges, reviewing the options and analysis brought forward in order to make recommendations to the Board as to the preferred way forward.

As well as receiving regular updates on the overall status of the programmes and the challenges faced, the committee has focused this year on oversight of key elements of the transformation programme including:

- Core infrastructure
- Voice communications and
- Surveillance strategy

Additionally, during the last year the Committee has increased its focus on the business transformation approach that will be implemented with the system changes to ensure that the benefits of the programme can be fully realised. This included improved approaches to transition and training to assist implementation, new methods of working that will be in place once the transformation is complete and the approach being taken to assurance throughout the programme to ensure the effectiveness of the solutions created.

Lessons learned activities this year included review of the Slaughter & May report into issues surrounding TSB's migration onto a new IT platform in April 2018 in order to provide assurance that NATS had appropriate controls in place to avoid similar challenges during technology deployments.

People

In recognition of the wider transformation remit of the TRC, an increased focus was placed on the people and organisational aspects of the programme this year. In the operations area, the TRC has reviewed the controller supply chain - specifically the recruitment and training as well receiving a briefing on the plans to deliver unified processes and procedures across our centres. The TRC also provided oversight of NATS' evolution from an asset - based to a service-based organisation including a new training approach for engineers.

Cyber Security

The TRC plays a key role in providing Board oversight of cyber security and receives updates from the Chief Information Security Officer (CISO) on all aspects of cyber security assurance, including technical compliance, monitoring and reporting on events as well as people and cultural aspects designed to improve awareness and reduce risk.

Resilience

Resilience of operational systems results from a combination of reliability and powers of recovery. Over many years NATS has been successful in implementing highly resilient systems, necessary to the fulfilment of its mission. The Committee regularly reviews the approach taken to deliver and maintain resilience with the objective to balance the levels of investment against realistic expectations of resilience in a complex systems environment. This year the Committee reviewed NERL's incident management approach to understand how the business operates through key stages of response to an event, including initiation, escalation and recovery.

Covid-19

The effects of Covid-19 were beginning to be felt across the business at the very end of the financial year and the TRC received an initial briefing on the immediate impact of this on the investment programme. During the summer, the TRC received further updates which have informed consultation with customers on priorities for capital investment since Covid-19, recognising that it will be some time before demand returns to pre-pandemic levels. More detailed reviews will take place in 2020/21 as the business continues to develop revised transformation and investment plans.

Mike Campbell, Chair of the Transformation Review Committee

Report of the directors

The directors present their annual report on the affairs of the group, 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 31 to 79 and forms part of this report. A review of the group's key business developments in the year and an indication of likely future developments are included within the Strategic report.

Information about the use of financial instruments by the group is given in note 22 to the financial statements.

Dividends

The company paid interim dividends of £30.0m (20.97 pence per share) in May 2019 and £29.0m (20.27 pence per share) in November 2019. The Board recommends a final dividend for the year of £nil (2019: £nil).

Directors and their interests

The directors of the company at the date of this report are set out on pages 31 to 34. Details of changes in the Board during the year and to the date of this report are set out in the Governance report on page 35.

The interests of the directors in the share capital of the parent company, through their participation in the All-Employee Share Ownership Plan, are set out on page 58.

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

Employee engagement

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. 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.

The group pay policy is explained in the Remuneration Committee's report. The group 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 group is also committed to improving employment opportunities for disabled people. The group 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 group 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 28 to 30 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, viability statement and subsequent events

The directors' assessment of going concern and their viability statement are set out on page 18. Subsequent events are disclosed in note 38 to the financial statements.

Directors' responsibilities

The directors are responsible for preparing the annual report and 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 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 group and of the parent company, and of the profit or loss of the group and the parent 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 group'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 group’s transactions and disclose with reasonable accuracy at any time the financial position of the group 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 group 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 group’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 group’s auditors are aware of that information.

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

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the 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 group;
- the Strategic report includes a fair review of the development and performance of the business and the position of the group, together with a description of the principal risks and uncertainties that it faces; and
- the annual report and financial statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the group’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 No. 04138218

Opinion	We have audited the financial statements of NATS Holdings Limited (the 'parent company') and its subsidiaries (the 'group') for the year ended 31 March 2020 which comprise the consolidated income statement, the consolidated statement of comprehensive income, the consolidated and company balance sheets, the consolidated and company statement of changes in equity, the consolidated 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 and, as regards the parent company financial statements, as applied in accordance with the provisions of the Companies Act 2006. In our opinion: • the financial statements give a true and fair view of the state of the group's and of the parent company's affairs as at 31 March 2020 and of the group's loss for the year then ended; • the group financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union; • the parent company financial statements have been properly prepared in accordance with IFRSs as adopted by the European Union and as applied in accordance with the provisions of the Companies Act 2006; and • the financial statements 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 consolidated financial statements, the group, in addition to preparing consolidated 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 group financial statements give a true and fair view of the consolidated financial position of the group as at 31 March 2020 and of its consolidated financial performance and consolidated 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 group and the parent 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, 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 principal risks, going concern and viability statement	We have nothing to report in respect of the following information in the annual report, in relation to which the ISAs (UK) require us to report to you whether we have anything material to add or draw attention to: • The directors' confirmation set out on page 20 to 23 in the annual report that they have carried out a robust assessment of the group's emerging and principal risks and the disclosures in the annual report that describe the principal risks and the procedures in place to identify emerging risks and explain how they are being managed or mitigated;

- the directors' statement set out on page 69 in the financial statements about whether the directors considered it appropriate to adopt the going concern basis of accounting in preparing the financial statements and the directors' identification of any material uncertainties to the group and the parent company's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements;
- whether the directors' statement relating to going concern is materially inconsistent with our knowledge obtained in the audit; or
- the directors' explanation set out on pages 18 and 19 in the annual report and accounts as to how they have assessed the prospects of the group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

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.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter	How we addressed the key audit matter in the audit
Carrying value of goodwill In accordance with the group'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 110 and 111, 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 observations We consider the disclosures in the financial statements relating to goodwill, including the critical judgements and estimates, are in line with accounting standards.

Key audit matter	How we addressed the key audit matter in the audit
Going concern The Covid-19 pandemic has had a significant impact on air traffic and the group'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 group's air traffic control services. Refer to the directors' Going Concern statement on page 18 and 19 and the judgement arising from COVID-19 in note 3 on page 98 of the financial statements. The group'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 group 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 group 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 principal risks, going concern and viability statement section of our audit report.
Pension scheme actuarial valuation The NATS Holdings Limited group operates a defined benefit pension scheme, which is accounted for in accordance with IAS 19 'Employee Benefits' which requires complex calculations and disclosures. As detailed on page 100 and in note 33 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 consolidated income statement and the consolidated statement of comprehensive income.	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.

Key audit matter	How we addressed the key audit matter in the audit
The scheme assets included £242.2m of property assets 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 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 33 to the financial statements to ensure these are in line with IAS 19. We considered the adequacy of the disclosures made in note 3 – *Critical judgements and key sources of estimation uncertainty*. 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 consolidated balance sheet and disclosures made in the financial statements are appropriate. 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 pages 100 and 101, 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 the NERL revenue, corroborating each of the underlying revenue streams to supporting contract documentation, to ensure that the revenue is recognised in line with the group policy. In the case of airspace revenue, we ensure 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.

Key audit matter	How we addressed the key audit matter in the audit
	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.
Long term contracts As detailed on page 101 the group has significant long-term contracts that include material assumptions on margin and percentage completion.	We have audited all material contracts by recalculating core service charges; challenging and understanding estimated pass through costs against actual costs; and understood key variances in revenue from the prior year. We have obtained management calculations and tested a sample against contract documentation, performance to-date and any subsequently agreed modifications. This included the margin assumptions on significant long-term projects and contract accounting judgements in relation to percentage of completion and margin. Key observations We consider the assumptions made by management in respect of the margin and percentage completion of long-term contracts to be appropriate.
Capital investment programme: As detailed on pages 98 and 99 and in notes 14 and 15 the group 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 group 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 group 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.

Key audit matter	How we addressed the key audit matter in the audit
	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 group 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 group's financial performance used by shareholders. The materiality we applied to the parent company equates to 2% of total assets (2019: 2% of total assets). This was considered the most appropriate benchmark as the parent company does not trade. Whilst materiality for the financial statements as a whole was £3.7 million (2019: £4.7 million), each significant component of the group was audited to a lower materiality of between £0.8 million and £4.2 million. Audits of the four components noted below were performed at a materiality level calculated by reference to a proportion of group materiality appropriate to the relative scale of the business concerned. Performance materiality is set at a level lower than materiality, which was 75% of group materiality totalling £2.8m. 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 £74,000 (2019: £94,000). 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 group audit was scoped by obtaining an understanding of the group and its environment, including the group's system of internal control, and assessing the risks of material misstatement in the financial statements at the group level. We carried out full scope audits on all significant components, being NATS Holdings Limited, NATS Limited, NATS (En route) plc, NATS (Services) Limited, which covered 99% of the group's revenue and 99% of the group's profit before tax. We performed both analytical review procedures and limited procedures on the remaining components. Together with the parent company, which was also subject to a full scope audit, these represent the four significant components of the group.

There has been no significant change in the group'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 audits of the four components were 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. Each of the audits was conducted by the BDO LLP group audit team using a team with experience of auditing the business previously and large corporate entities.

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 group and the industry in which it operates, and considered the risk of acts by the group that were contrary to applicable laws and regulations, including fraud. We designed audit procedures at group and significant component level 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 the other information, we are required to report that fact.

We have nothing to report in this regard.

In this context, we also have nothing to report in regard to our responsibility to specifically address the following items in the other information and to report as uncorrected material misstatements of the other information where we conclude that those items meet the following conditions:

- Fair, balanced and understandable set out on page 70 – the statement given by the directors that they consider the annual report and accounts taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the group's position, performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- Audit committee reporting set out on page 40 – the section describing the work of the audit committee does not appropriately address matters communicated by us to the audit committee; or
- Directors' statement of compliance with the UK Corporate Governance Code set out on page 38 – the parts of the directors' statement relating to the company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor as if the company was a fully listed company do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

Opinion on other matters

In our opinion the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006 that would apply if the company was a fully listed company.

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 group and parent 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 by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company 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 group’s and the parent 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 group or the parent 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 group or the parent company and we remain independent of the group and the parent 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 parent 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 parent 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 parent company and the parent 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).

Consolidated income statement
for the year ended 31 March

	Notes	2020 £m	2019 £m
Revenue	4	892.1	885.7
Staff costs	7	(468.0)	(446.4)
Services and materials		(67.0)	(71.3)
Repairs and maintenance		(44.1)	(48.5)
Depreciation, amortisation and impairment of property, plant, equipment, intangible and right-of-use assets	6	(135.2)	(141.7)
Goodwill impairment	3, 6, 13	(49.0)	-
Change in expected credit losses	18	(17.5)	-
Other operating charges		(63.7)	(64.1)
Other operating income		4.4	6.1
Profit on disposal of non-current assets		1.0	2.1
Deferred grants released	6	0.6	0.6
Net operating costs		(838.5)	(763.2)
Operating profit	6	53.6	122.5
Share of results of associate and joint ventures	35	(2.6)	1.6
Investment income	8	4.1	4.4
Fair value movements on financial instruments	9	(3.2)	(4.9)
Finance costs	10	(26.6)	(25.4)
Profit before tax		25.3	98.2
Tax	11	(26.6)	(15.9)
(Loss)/profit for the year attributable to equity shareholders		(1.3)	82.3

Consolidated statement of comprehensive income
for the year ended 31 March

	Notes	2020 £m	2019 £m
(Loss)/profit for the year after tax		(1.3)	82.3
Items that will not be reclassified subsequently to profit and loss:			
Actuarial gain/(loss) on defined benefit pension scheme	33	228.2	(166.4)
Deferred tax relating to actuarial gain/(loss) on defined benefit pension scheme	25	(42.9)	28.9
Items that may be reclassified subsequently to profit and loss:			
Change in fair value of hedging derivatives		0.9	0.4
Transfer to income statement on cash flow hedges		3.4	(1.3)
Exchange differences arising on translation of foreign operations		2.5	1.8
Currency translation differences arising on consolidation of equity accounted foreign operations	35	0.3	(0.1)
Deferred tax relating to items that may be reclassified subsequently	25	(0.8)	0.2
Other comprehensive income/(loss) for the year, net of tax		191.6	(136.5)
Total comprehensive income/(loss) for the year attributable to equity shareholders		190.3	(54.2)

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 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 37.

Consolidated balance sheet
at 31 March

	Notes	2020 £m	2019 £m
Assets			
Non-current assets			
Goodwill	13	149.3	198.3
Other intangible assets	14	612.6	567.2
Property, plant and equipment	15	479.1	497.0
Right-of-use assets	16	61.3	-
Investment	17	48.1	50.9
Interests in associate and joint ventures	35	6.2	9.4
Loans to joint ventures	35	16.8	21.1
Retirement benefit asset	33	232.0	-
Trade and other receivables	18	15.9	24.3
Derivative financial instruments	21	3.9	1.7
		1,625.2	1,369.9
Current assets			
Loans to joint ventures	35	1.6	1.4
Trade and other receivables	18	155.0	176.2
Current tax assets		2.6	-
Short term investments	22	47.3	46.4
Cash and cash equivalents	22	538.2	214.6
Derivative financial instruments	21	4.2	2.7
		748.9	441.3
Total assets		2,374.1	1,811.2
Current liabilities			
Trade and other payables	23	(198.4)	(260.5)
Current tax liabilities		-	(0.7)
Borrowings	19	(40.9)	(42.7)
Lease liabilities	20	(7.5)	-
Provisions	24	(5.2)	(3.8)
Derivative financial instruments	21	(19.2)	(13.9)
		(271.2)	(321.6)
Net current assets		477.7	119.7
Non-current liabilities			
Trade and other payables	23	(216.9)	(181.8)
Borrowings	19	(645.3)	(292.2)
Lease liabilities	20	(62.5)	-
Retirement benefit obligations	33	-	(22.1)
Deferred tax liability	25	(165.8)	(97.8)
Provisions	24	(9.5)	(7.4)
Derivative financial instruments	21	(93.6)	(110.3)
		(1,193.6)	(711.6)
Total liabilities		(1,464.8)	(1,033.2)
Net assets		909.3	778.0
Equity			
Called up share capital	26	140.6	140.6
Share premium account	27	0.4	0.4
Other reserves	28	(27.0)	(33.3)
Retained earnings		795.2	670.2
Equity attributable to the shareholders		909.2	777.9
Non-controlling interest	29	0.1	0.1
Total equity		909.3	778.0

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 37.

The financial statements (Company No. 04138218) were approved by the Board of directors and authorised for issue on 22 October 2020 and signed on its behalf by:

Paul Golby
Chairman

Alistair Borthwick
Chief Financial Officer

Consolidated statement of changes in equity

for the year ended 31 March

	Equity attributable to equity holders of the group						
	Share capital £m	Share premium account £m	Other reserves (note 28) £m	Retained earnings £m	Sub-total £m	Non-controlling interest £m	Total equity £m
At 1 April 2018	140.6	0.4	(34.3)	784.4	891.1	0.1	891.2
Profit for the year	-	-	-	82.3	82.3	-	82.3
Other comprehensive income/(loss) for the year	-	-	1.0	(137.5)	(136.5)	-	(136.5)
Total comprehensive income/(loss) for the year	-	-	1.0	(55.2)	(54.2)	-	(54.2)
Dividends paid	-	-	-	(59.0)	(59.0)	-	(59.0)
At 31 March 2019	140.6	0.4	(33.3)	670.2	777.9	0.1	778.0
At 1 April 2019	140.6	0.4	(33.3)	670.2	777.9	0.1	778.0
Loss for the year	-	-	-	(1.3)	(1.3)	-	(1.3)
Other comprehensive income for the year	-	-	6.3	185.3	191.6	-	191.6
Total comprehensive income for the year	-	-	6.3	184.0	190.3	-	190.3
Dividends paid	-	-	-	(59.0)	(59.0)	-	(59.0)
At 31 March 2020	140.6	0.4	(27.0)	795.2	909.2	0.1	909.3

Consolidated cash flow statement
for the year ended 31 March

	Notes	2020 £m	2019 £m
Net cash from operating activities	30	217.1	294.5
Cash flows from investing activities			
Interest received on short term investments		1.9	1.9
Purchase of property, plant and equipment and other intangible assets		(155.5)	(156.7)
Proceeds of disposal of property, plant and equipment		2.6	0.1
Investment in Aireon		-	(51.1)
Changes in short term investments		(0.9)	(8.1)
Dividends received from joint venture and associate		0.9	1.2
Loans to joint ventures		(16.7)	(5.3)
Repayments of loans to joint ventures		21.9	3.6
Net cash outflow from investing activities		(145.8)	(214.4)
Cash flows from financing activities			
Interest paid		(18.6)	(20.6)
Interest paid on derivative financial instruments		(0.5)	(0.2)
Repayment of bond principal		(43.2)	(45.2)
Bank loan drawdown		395.0	-
Repayments of obligations under finance leases		-	(0.2)
Principal paid on lease liabilities		(7.5)	-
Interest paid on lease liabilities		(1.9)	-
Index-linked swap repayments		(12.1)	(10.1)
Dividends paid		(59.0)	(59.0)
Net cash inflow/(outflow) from financing activities		252.2	(135.3)
Increase/(decrease) in cash and cash equivalents during the year		323.5	(55.2)
Cash and cash equivalents at 1 April		214.6	269.6
Exchange gain on cash and cash equivalents		0.1	0.2
Cash and cash equivalents at 31 March		538.2	214.6
Net debt (representing borrowings and lease liabilities, net of cash and short term investments (see notes 22 and 30))		(170.7)	(73.9)

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 37.

1. General information

NATS Holdings Limited is a private limited company incorporated in England and Wales and domiciled in the United Kingdom and acting under the Companies Act 2006. The address of the registered office is on page 70. The nature of the group's operations and its principal activities are set out in the Report of the directors and in the Strategic report.

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

2. Basis of preparation and accounting policies

Going concern

The group'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 22 the group'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 group had cash of £585.5m and access to undrawn committed bank facilities of £5m until July 2022. In August 2020 the group 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 group's cash flow forecasts, taking account of reasonably plausible downside scenarios, show that the group and 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 Secretary of State for Transport referred to in the Viability statement, there is no material uncertainty which may cast significant doubt on the group's ability to continue as a going concern. The directors consider the group and company have 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 group 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 group 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 group 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 20 and 37. The revised accounting policy for leases is set out below.

IFRIC 23 provides guidance on the accounting for current and deferred tax liabilities and assets in circumstances in which there is uncertainty over income tax treatments. The Interpretation requires:

- The group to determine whether uncertain tax treatments should be considered separately, or together as a group, based on which approach provides better predictions of the resolution;
- The group to determine if it is probable that the tax authorities will accept the uncertain tax treatment; and
- If it is not probable that the uncertain tax treatment will be accepted, measure the tax uncertainty based on the most likely amount or expected value, depending on whichever method better predicts the resolution of the uncertainty. This measurement is required to be based on the assumption that each of the tax authorities will examine amounts they have a right to examine and have full knowledge of all related information when making those examinations.

The adoption of IFRIC 23 has had no material impact on the consolidated or company financial statements.

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

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 group 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.

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

Basis of consolidation

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

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

Revenue recognition

Revenue is recognised from the transfer of goods or services at an amount that the group 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 NATS (En Route) plc'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 group as the group 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 group's service performance results in bonuses or penalties.

The group 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 group 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 group 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.

UK airports

The group provides ATC, engineering support and airport optimisation services to UK airport customers. Each of these services represents a distinct performance obligation, but with a consistent pattern of delivery over the life of the contract. Revenue for these services is recognised on a time lapse basis using the work output approach.

Variable consideration for traffic volume risk sharing and service performance incentives is recognised in the financial year in which the service is provided.

Defence services

The group provides ATC, asset provision and engineering maintenance services under the MOD's Project Marshall contract to the Aquila joint venture. These are separate contracts priced on a standalone basis, using a cost plus a margin approach. The ATC and engineering maintenance services represent distinct performance obligations. The asset provision contract contains two performance obligations. In each case, revenue is recognised over time.

Other UK business

The group provides other services to UK customers including consultancy, training and information. These contracts can contain multiple deliverables that are considered distinct. The transaction price is allocated to each performance obligation based on stand-alone selling prices. Where the transaction price is not directly observable, the prices are estimated based on a cost plus margin. Revenue is recognised in line with costs incurred or labour hours expended for work performed to date, as a proportion of the estimated total contract costs.

International

The group provides ATC and related services (including consultancy, engineering, training and information services) to overseas customers. Revenue is recognised as for similar services described above.

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 notes 4 and 5.

Operating profit

Operating profit is stated after charging restructuring costs but before the group's share of results of joint ventures and associates, investment income, 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 NATS assesses the carrying value of goodwill against the recoverable amount of the cash generating unit to which goodwill has been allocated. Where the recoverable amount is less than the carrying value, the impairment loss is allocated to goodwill.

Recoverable amount is the higher of fair value less costs of disposal and value in use. Fair value less costs of disposal is assessed by reference to the 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 NATS, 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 NATS, the percentage rate for interest capitalisation is calculated as a proportion of the interest costs to the average level of borrowings in the period that relate to qualifying capital expenditure. All qualifying capital expenditure is then inflated by this percentage which has the effect of capitalising related interest costs.

Government grants and other grants

Government grants relating to property, plant and equipment are treated as deferred income and released to the income statement by equal annual instalments over the expected useful economic lives of the related assets. Grants of a revenue nature are credited to income in the period to which they relate (and are reported on the face of the income statement).

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.

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 group 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 group 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 group 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 group at their fair value or, if lower, at the present value of the minimum lease payments, each determined at the inception of the lease. The corresponding liability to the lessor 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 group'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.

Investments in associates and joint ventures

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

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

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

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

Internally-generated intangible assets – research and development expenditure

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

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

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

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

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

At each balance sheet date, the group 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 group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

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

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

Where an impairment loss on an intangible or tangible asset 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 group has applied the requirements of IFRS 2: *Share-Based Payments*.

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

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

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

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

Taxation

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

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

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

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

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

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

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

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

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

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

Retirement benefit costs

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

Since 2009, the group and Trustees have introduced a number of pension reforms, as explained in note 33. These include: closing the defined benefit scheme to new entrants with effect from 1 April 2009, and establishing a defined contribution scheme for new entrants from 1 April 2009, limiting the rate of increase in pensionable pay and changing the indexation reference rate for future service.

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

Provisions

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

Financial instruments

Financial assets and financial liabilities are recognised in the group balance sheet when the group 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 group's business model for managing the financial asset and its cash flow characteristics. The group has financial assets in the categories of fair value through the profit or loss and at amortised cost. The group does not have financial assets at fair value through other comprehensive income. Detailed disclosures are set out in notes 17 to 23.

Financial assets:

Fair value through profit or loss

The group does not have any assets held for trading. The group holds an equity investment in Aireon at fair value through profit or loss. This is carried in the statement of financial position at fair value with changes in fair value recognised in the consolidated income statement in the fair value movement in financial instruments line item.

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

Equity instruments are assessed at each reporting date to determine whether there was objective evidence of impairment. Impairment losses are recognised in the income statement.

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 group after deducting all of its liabilities.

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

Reserves

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

- Other reserves, which arose on the completion of the PPP transaction in July 2001;

- Non-controlling interest, which represents the share of equity attributable to the minority investor in NATS Services LLC.

Derivative financial instruments and hedging activities

The group's activities expose it primarily to the financial risks of changes in interest rates, inflation and foreign currency exchange rates. The group uses interest rate and index-linked swap contracts and forward foreign exchange contracts to hedge these exposures. These are disclosed in notes 21 and 22 to the accounts.

As permitted under IFRS 9, the group 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 group's policies approved by the Board of directors, which provides written principles on the use of financial derivatives. The group documents at the inception of the transaction the relationship between hedging instruments and the hedged items, as well as its risk management objectives and strategy for undertaking various hedge transactions. The group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Changes in the fair value of derivative financial instruments that are designated and effective as hedges of future cash flows are recognised directly in equity (in the Hedge reserve) and the ineffective portion is recognised immediately in the income statement. If a hedge of a forecast transaction subsequently results in the recognition of a financial asset or a financial liability, the associated gains or losses that were recognised directly in equity are reclassified into the income statement in the same period or periods during which the asset acquired or liability assumed affects profit or loss. For hedges that do not result in the recognition of an asset or a liability, amounts deferred in equity are recycled to the income statement in the same period in which the hedged item affects the income statement.

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

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

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

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 the demand for air travel, and therefore the demand for the group's air traffic control services.

Given the current uncertainty and the variety of outcomes still possible related to the course of the pandemic, the group 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, NERL'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 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, AG (the Strategic Partner) and 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 group'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 group'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 group accounts for its defined benefit pension scheme such that the net pension scheme position is reported on the balance sheet with actuarial gains and losses being recognised directly in equity through the statement of comprehensive income. At 31 March 2020 the funding position of the scheme reported in the financial statements was a surplus of £232.0m. 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 £242.2m, representing 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 £2.4m.

A number of key assumptions have been made in calculating the fair value of the group's defined benefit pension scheme which affect the balance sheet position and the group's reserves and income statement. Refer to note 33 of the notes to the consolidated accounts for a summary of the main assumptions and sensitivities. Actual outcomes may differ materially from the assumptions used and may result in volatility in the net pension scheme position.

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

Long term contracts

The group is fulfilling a number of long term contracts, including providing support to its Aquila joint venture which is undertaking Project Marshall. In assessing the amount of revenue to be recognised in respect of these contracts, judgements are made on the extent of contract completion and the proportion that costs incurred to date bear to the estimated total costs of the contract. Such judgements are reviewed regularly and may change over the course of a contract, impacting operating results in future periods should a reassessment of contract completion and costs to complete be made.

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.
- Airport equipment leases have primary, secondary and tertiary periods. The lease term assumed is the period for which the group is reasonably certain to exercise the option to extend, being the

period the lessee expects to use the asset in delivery of air navigation services.

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 group has recognised the following revenue in the income statement:

	2020 £m	2019 £m
Revenue from contracts with customers	852.3	872.2
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	3.6	3.8
Total revenue	892.1	885.7
Other operating income	4.4	6.1
Investment income (see note 8)	4.1	4.4
	900.6	896.2

a) Revenue disaggregated by operating segment

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

The performance of operating segments is assessed based on service line revenue and contribution. Service line contribution represents the revenue and costs which are directly attributed to a service line. Costs which are not directly attributed to a service line include: costs managed outside of service lines, depreciation and amortisation (net of government grants), goodwill impairment, profit/(loss) on disposal of non-current assets, employee share scheme (costs)/credits, redundancy and relocation costs and 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 group'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 (MOD) for their en route operations and European projects in conjunction with other air traffic organisations.
UK Airports	The provision of air traffic control, engineering support and airport optimisation services to UK airport customers.
Defence Services	The provision of air traffic control, engineering support and other services to the UK MOD and to our joint venture for the UK MOD's Marshall contract.
Other UK Business	Other services provided to UK customers including: consultancy, offering airspace development, capacity improvement and training; and information, providing data to enable future efficiency and flight optimisation.
International	The provision of air traffic control and related services (including consultancy, engineering, training and information services) to overseas customers.

4. Revenue (continued)

Segment information about these activities is presented below.

	2020			2019		
	Total group revenue £m	Intra-group revenue £m	Revenue £m	Total group revenue £m	Intra-group revenue £m	Revenue £m
Revenue from contracts with customers						
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)	-
Airspace	690.3	(26.0)	664.3	714.7	(25.5)	689.2
UK Airports	141.8	(12.9)	128.9	147.0	(12.8)	134.2
Defence Services	27.4	(1.4)	26.0	27.1	(0.6)	26.5
Other UK Business	14.6	(4.9)	9.7	14.5	(5.4)	9.1
International	23.5	(0.1)	23.4	13.2	-	13.2
	897.6	(45.3)	852.3	916.5	(44.3)	872.2
Other revenue: EU funding passed to UK en route customers						
Airspace	36.2	-	36.2	9.7	-	9.7
Revenue from other sources						
Airspace	4.2	(1.0)	3.2	4.2	(1.1)	3.1
UK Airports	0.1	-	0.1	0.5	-	0.5
Other UK Business	0.3	-	0.3	0.2	-	0.2
	4.6	(1.0)	3.6	4.9	(1.1)	3.8
Total revenue	938.4	(46.3)	892.1	931.1	(45.4)	885.7

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 group's revenues from UK en route services reflect the regulatory revenue allowances for which it is entitled for the services provided in the year.

b) Revenue disaggregated based on economic regulation

	2020			2019		
	Total group revenue £m	Intra-group revenue £m	Revenue £m	Total group revenue £m	Intra-group 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	295.2	(45.3)	249.9	287.8	(44.3)	243.5
Revenue from other sources	4.6	(1.0)	3.6	4.9	(1.1)	3.8
Total non-regulated income	299.8	(46.3)	253.5	292.7	(45.4)	247.3
	938.4	(46.3)	892.1	931.1	(45.4)	885.7

4. Revenue (continued)

c) Revenue disaggregated by timing of recognition

	2020			2019		
	Total group revenue £m	Intra-group revenue £m	Revenue £m	Total group revenue £m	Intra-group revenue £m	Revenue £m
Over time						
Revenue from contracts with customers	894.0	(45.3)	848.7	915.2	(44.3)	870.9
Other revenue: EU funding passed to UK en route customers	36.2	-	36.2	9.7	-	9.7
Revenue from other sources	4.6	(1.0)	3.6	4.9	(1.1)	3.8
	934.8	(46.3)	888.5	929.8	(45.4)	884.4
At a point in time						
Revenue from contracts with customers	3.6	-	3.6	1.3	-	1.3
	3.6	-	3.6	1.3	-	1.3
	938.4	(46.3)	892.1	931.1	(45.4)	885.7

d) Revenue disaggregated by geographical area

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

	2020			2019		
	Total group revenue £m	Intra-group revenue £m	Revenue £m	Total group revenue £m	Intra-group revenue £m	Revenue £m
Revenue from contracts with customers, including Other revenue: EU funding passed to UK en route customers						
United Kingdom	473.4	(45.3)	428.1	484.1	(44.3)	439.8
Other European countries	134.4	-	134.4	130.0	-	130.0
United States of America	90.7	-	90.7	86.1	-	86.1
Republic of Ireland	85.5	-	85.5	88.3	-	88.3
Countries in Asia	69.7	-	69.7	58.4	-	58.4
Germany	47.5	-	47.5	46.1	-	46.1
Other North American countries	26.5	-	26.5	22.3	-	22.3
Countries in Africa	3.5	-	3.5	9.2	-	9.2
Countries in Oceania	1.9	-	1.9	1.2	-	1.2
Countries in South America	0.7	-	0.7	0.5	-	0.5
	933.8	(45.3)	888.5	926.2	(44.3)	881.9
Revenue from other sources						
United Kingdom	4.1	(1.0)	3.1	4.4	(1.1)	3.3
Other European countries	0.5	-	0.5	0.5	-	0.5
	4.6	(1.0)	3.6	4.9	(1.1)	3.8
	938.4	(46.3)	892.1	931.1	(45.4)	885.7

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 18 and 23. 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	23.8	20.3	(93.6)	(35.9)
Opening contract assets transferred to trade and other receivables	(19.6)	(15.9)	-	-
Cumulative catch-up adjustments	(0.7)	-	(0.6)	
Additional contract asset balances recognised at the balance sheet date	22.3	19.4	-	-
Opening contract liabilities which have now been recognised as revenue	-	-	48.4	11.5
Increases due to cash received, excluding amounts recognised as revenue during the year	-	-	(16.8)	(69.2)
At 31 March	25.8	23.8	(62.6)	(93.6)

Contract assets and contract liabilities are included within "trade and other receivables" and "trade and other payables" respectively on the face of the balance sheet. The majority of contracts in the Airspace and UK Airports service lines 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.

4. Revenue (continued)

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).

g) Remaining performance obligations

For the majority of contracts, the group has a right to consideration from the customer in an amount that corresponds directly to the value to the customer of the group'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
UK Airports	7.5	6.8	7.9	8.3	30.5
Defence Services	1.9	-	-	-	1.9
Other UK Business	0.9	0.4	1.1	3.5	5.9
International	6.3	1.8	-	-	8.1
	28.8	19.2	37.2	11.8	97.0

	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
UK Airports	14.8	0.9	-	-	15.7
Defence Services	0.4	-	-	-	0.4
Other UK Business	0.9	0.5	-	-	1.4
International	6.8	1.8	-	-	8.6
	30.5	5.7	1.0	-	37.2

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 group's revenue from the provision of services denominated in foreign currencies is cash flow hedged. Included in revenue is the recycling of the effective amount of foreign currency derivatives that are used to hedge foreign currency revenue. The amount included in revenue is a £5.6m loss (2019: £1.0m 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	299.6	313.8
UK Airports	25.9	27.5
Defence Services	2.2	1.6
Other UK Business	7.9	6.8
International	(1.8)	0.8
Service line contribution	333.8	350.5
Costs not directly attributed to service lines:		
Depreciation and amortisation (net of deferred grants released)	(134.6)	(141.1)
Impairment of goodwill	(49.0)	-
Profit on disposal of non-current assets	1.0	2.1
Employee share scheme credits/(costs)	4.8	(2.9)
Redundancy and relocation costs	(2.5)	(1.7)
Foreign exchange gain	-	1.9
Other costs not directly attributed to service lines	(103.7)	(86.6)
R&D expenditure above the line tax credits	1.2	1.9
Less: share of results of associate and joint ventures	2.6	(1.6)
Operating profit	53.6	122.5

The performances of Airspace and Defence Services include the group share of the results of European Satellite Services Provider SAS (ESSP SAS) and Aquila Air Traffic Management Services Limited respectively. The performance of International includes the group share of the results of FerroNATS Air Traffic Services SA and Searidge Technologies Inc (see note 35). Other costs not directly attributed to service lines include corporate costs providing central support functions.

Non-current assets additions

Additions to non-current assets (including additions to right-of-use assets for 2020) are presented by service line below:

	2020 £m	2019 £m
Airspace	150.1	149.9
UK Airports	3.8	2.0
Defence Services	2.7	2.5
Other UK Business	1.1	2.1
International	0.8	-
	158.5	156.5

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	1,305.9	1,269.8
United States of America	48.6	51.5
Canada	0.2	5.3
Other European countries	5.9	4.5
Countries in Asia	0.7	0.1
	1,361.3	1,331.2

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 in respect of NERL's air traffic services licence	5.5	5.3
The CAA regulatory charges for safety regulation at airports	0.1	0.1
Impairment of goodwill (note 13)	49.0	-
Amortisation of intangible assets (note 14)	52.5	55.7
Impairment of intangible assets (note 14)	7.3	3.1
Depreciation of property, plant and equipment (note 15)	64.1	81.0
Impairment of property, plant and equipment (note 15)	4.1	1.9
Depreciation of right-of-use assets (note 16)	7.0	-
Impairment of right-of-use assets (note 16)	0.2	-
Deferred grants released	(0.6)	(0.6)
Redundancy costs	2.2	1.5
Staff relocation costs (net of credits for revisions to estimates) following site closure	0.3	0.2
Research and development costs	4.0	8.8
R&D expenditure above the line tax credits	(1.2)	(1.9)
Auditor's remuneration for audit services (see below)	0.2	0.2

A portion of the group'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 £2.2m gain (2019: £0.3m gain).

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

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

The analysis of auditor's remuneration is as follows:

	2020 £m	2019 £m
Fees payable to the company's auditor for the audit of the company's annual accounts	0.1	0.1
Fees payable to the company's auditor and their associates for other services to the group		
- The audit of the company's subsidiaries	0.1	0.1
Total audit fees	0.2	0.2

Total non-audit fees of £23,750 (2019: £64,320) include agreed upon procedures in relation to the NERL regulatory accounts of £10,700 (2019: £10,500), grant claims of £nil (2019: £40,000) and other agreed upon procedures of £13,050 (2019: £13,820).

7. Staff costs

a. Staff costs

	2020 £m	2019 £m
Salaries and staff costs, including directors' remuneration, were as follows:		
Wages and salaries	373.8	362.1
Social security costs	45.0	43.5
Pension costs (note 7b)	97.4	83.9
	516.2	489.5
Less: amounts capitalised	(48.2)	(43.1)
	468.0	446.4

Wages and salaries include redundancy costs of £2.1m (2019: £1.4m), share-based payment credits or 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 (note 33)

	2020 £m	2019 £m
Defined benefit pension scheme costs	73.9	66.3
Defined contribution pension scheme costs	23.5	17.6
	97.4	83.9

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.

7. Staff costs (continued)

c. Staff numbers

	2020 No.	2019 No.
The monthly average number of employees (including executive directors) was:		
Air traffic controllers	1,887	1,782
Air traffic service assistants	689	657
Engineers	923	892
Others	1,227	1,133
	4,726	4,464

8. Investment income

	2020 £m	2019 £m
Interest on bank deposits	1.7	1.9
Other loans and receivables	2.4	2.5
	4.1	4.4

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

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

9. Fair value movement on financial instruments

	2020 £m	2019 £m
Credit/(charge) arising from change in the fair value of derivatives not qualifying for hedge accounting	2.1	(3.0)
Change in the fair value of equity investment in Aireon designated as fair value through profit and loss (see note 17)	(5.3)	(1.9)
	(3.2)	(4.9)

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 20)	1.9	-
Other finance costs	4.9	3.5
	26.6	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	3.9	7.2
Adjustments in respect of prior year	(2.3)	(2.7)
Foreign taxation	0.7	-
	2.3	4.5
Deferred tax (see note 25)		
Origination and reversal of temporary timing differences	9.6	10.2
Adjustments in respect of prior year	2.3	1.2
Effects of tax rate change on opening balance	12.4	-
	24.3	11.4
	26.6	15.9

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

11. Tax (continued)

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

	2020		2019	
	£m		£m	
Profit on ordinary activities before tax	25.3		98.2	
Tax on profit on ordinary activities at standard rate in the UK of 19% (2019: 19%)	4.8	19.0%	18.7	19.0%
Tax effect of change in corporation tax from 17% to 19% (2019: 19% to 17%) (see	12.4	49.0%	(0.2)	(0.2%)
Tax effect of prior year adjustments: current tax	(2.3)	(9.1%)	(2.7)	(2.7%)
Tax effect of prior year adjustments: deferred tax	2.3	9.1%	1.2	1.2%
Patent box	(1.6)	(6.3%)	(1.6)	(1.6%)
Employee share scheme	0.3	1.2%	0.1	0.1%
Goodwill impairment	9.3	36.8%	-	-
Change in fair value of equity investment	1.0	3.9%	-	-
Foreign permanent establishment exemption	(0.1)	(0.4%)	-	-
Joint ventures and associate	0.8	3.1%	(0.1)	(0.1%)
Unrecognised deferred tax assets on overseas subsidiaries	(0.1)	(0.4%)	0.4	0.4%
R&D expenditure increased deductions	(0.1)	(0.4%)	(0.1)	(0.1%)
Other permanent differences	(0.1)	(0.4%)	0.2	0.2%
Tax charge for year at an effective tax rate of 105.1% (2019: 16.2%)	26.6	105.1%	15.9	16.2%
Deferred tax charge/(credit) taken directly to equity (see note 25)	43.7		(29.1)	

The Finance Bill 2020 was substantially 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	2019
	£m	£m
Amounts recognised as dividends to equity shareholders in the year:		
First interim dividend of 20.97 pence per share (2019: 20.62 pence per share)	30.0	29.5
Second interim dividend of 20.27 pence per share (2019: 20.62 pence per share)	29.0	29.5
	59.0	59.0

13. Goodwill

	£m
Cost	
At 31 March 2020 and 31 March 2019	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

13. Goodwill (continued)

The group 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 £m	Airspace and resectorisation £m	Assets in course of £m	Total £m
Cost					
At 1 April 2018	486.0	94.0	49.4	241.5	870.9
Additions internally generated	3.0	1.2	1.2	24.6	30.0
Additions externally acquired	2.6	2.4	0.2	18.0	23.2
Disposals during the year	(0.5)	(2.1)	-	-	(2.6)
Other transfers during the year	6.0	10.1	1.4	(16.1)	1.4
At 31 March 2019	497.1	105.6	52.2	268.0	922.9
Additions internally generated	3.3	-	2.0	30.3	35.6
Additions externally acquired	2.7	0.2	-	67.8	70.7
Disposals during the year	(13.3)	-	-	-	(13.3)
Other transfers during the year	7.4	1.3	1.9	(11.7)	(1.1)
At 31 March 2020	497.2	107.1	56.1	354.4	1,014.8
Accumulated amortisation and impairment					
At 1 April 2018	199.4	71.5	27.6	0.9	299.4
Charge for the year	42.0	9.5	4.2	-	55.7
Impairment provision recognised in income statement	-	-	-	3.1	3.1
Transfer of impairment provision	0.5	1.2	-	(1.7)	-
Disposals during the year	(0.5)	(2.0)	-	-	(2.5)
At 31 March 2019	241.4	80.2	31.8	2.3	355.7
Charge for the year	41.1	7.4	4.0	-	52.5
Impairment provision recognised in income statement	-	-	-	7.3	7.3
Disposals during the year	(13.3)	-	-	-	(13.3)
At 31 March 2020	269.2	87.6	35.8	9.6	402.2
Carrying amount					
At 31 March 2020	228.0	19.5	20.3	344.8	612.6
At 31 March 2019	255.7	25.4	20.4	265.7	567.2
At 1 April 2018	286.6	22.5	21.8	240.6	571.5

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 £7.3m (2019: £3.1m) were made in respect of Airspace 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	246.0	46.0	1,414.0	25.5	95.4	1,826.9
Additions during the year	0.3	0.7	10.4	0.1	91.8	103.3
Disposals during the year	-	-	(1.9)	-	-	(1.9)
Other transfers during the year	0.5	-	15.7	-	(17.6)	(1.4)
At 31 March 2019	246.8	46.7	1,438.2	25.6	169.6	1,926.9
Adjustment on initial application of IFRS 16 (see note below)	-	(1.1)	(2.0)	-	-	(3.1)
At 1 April 2019 (as restated for IFRS 16)	246.8	45.6	1,436.2	25.6	169.6	1,923.8
Additions during the year	0.1	-	7.8	0.5	42.5	50.9
Disposals during the year	-	-	(66.0)	(0.1)	-	(66.1)
Other transfers during the year	0.1	-	9.3	0.1	(8.4)	1.1
At 31 March 2020	247.0	45.6	1,387.3	26.1	203.7	1,909.7
Accumulated depreciation and impairment						
At 1 April 2018	137.2	38.4	1,153.8	18.9	0.6	1,348.9
Provided during the year	7.8	1.3	70.6	1.3	-	81.0
Impairment provision recognised in income statement	-	-	0.1	-	1.8	1.9
Transfer of impairment provision	-	-	0.3	-	(0.3)	-
Disposals during the year	-	-	(1.9)	-	-	(1.9)
At 31 March 2019	145.0	39.7	1,222.9	20.2	2.1	1,429.9
Adjustment on initial application of IFRS 16 (see note below)	-	(0.8)	(0.6)	-	-	(1.4)
At 1 April 2019 (as restated for IFRS 16)	145.0	38.9	1,222.3	20.2	2.1	1,428.5
Provided during the year	7.8	1.2	53.9	1.2	-	64.1
Impairment provision recognised in income statement	-	-	-	-	4.1	4.1
Transfer of impairment provision	-	-	0.2	-	(0.2)	-
Disposals during the year	-	-	(66.0)	(0.1)	-	(66.1)
At 31 March 2020	152.8	40.1	1,210.4	21.3	6.0	1,430.6
Carrying amount						
At 31 March 2020	94.2	5.5	176.9	4.8	197.7	479.1
At 1 April 2019 (as restated for IFRS 16)	101.8	6.7	213.9	5.4	167.5	495.3
At 31 March 2019	101.8	7.0	215.3	5.4	167.5	497.0
At 1 April 2018	108.8	7.6	260.2	6.6	94.8	478.0

The group conducts annual reviews of the carrying values of its property, plant and equipment where there is an indicator of impairment. During the year, the group incurred impairment charges of £4.1m relating to the reduction in value in use of UK Airports assets in the course of construction and installation (2019: £1.9m 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 group 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 group 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 group 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 these leased assets are reported within right-of-use assets on the balance sheet, see notes 16 and 20. Refer to note 37 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)	62.9	5.9	1.0	69.8
Additions during the year	0.6	0.3	0.4	1.3
Effect of modification to lease terms	0.1	(0.1)	-	-
Price changes - market value	0.1	-	-	0.1
Terminations during the year	(0.2)	(0.4)	(0.1)	(0.7)
At 31 March 2020	63.5	5.7	1.3	70.5
Accumulated depreciation and impairment				
At 1 April 2018 and 31 March 2019	-	-	-	-
At 1 April 2019 (as restated for IFRS 16)	0.8	0.6	-	1.4
Charge during the year	4.9	1.6	0.5	7.0
Charge capitalised in the year	1.0	-	-	1.0
Impairment provision recognised in income statement	-	0.2	-	0.2
Terminations during the year	(0.1)	(0.2)	(0.1)	(0.4)
At 31 March 2020	6.6	2.2	0.4	9.2
Carrying amount				
At 31 March 2020	56.9	3.5	0.9	61.3
At 1 April 2019 (as restated for IFRS 16)	62.1	5.3	1.0	68.4
At 31 March 2019	-	-	-	-
At 1 April 2018	-	-	-	-

Leasehold land and buildings contains right-of-use assets (2019: Cost £1.1m, Accumulated depreciation and impairment £0.8m) 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).

The group conducts annual reviews of the carrying values of its right-of-use assets where there is an indicator of impairment. During the year, impairment charges of £0.2m (2019: £nil) were made in respect of air traffic control systems, plant and equipment reflecting a reassessment of certain assets.

17. Investment in Aireon LLC

In May 2018, NATS paid £51.0m (US$68.75m) to acquire a minority interest in Aireon LLC (Aireon) (subsequently Aireon Holdings LLC upon transfer of shareholding), a limited liability company incorporated in Delaware USA, which provides a space-based air traffic surveillance system for air navigation service providers (ANSPs) through Automatic Dependent Surveillance-Broadcast (ADS-B) receivers on the Iridium NEXT satellite constellation. Aireon is an unquoted company. NATS' investment was made by NATS (USA) Inc, a wholly owned subsidiary. Other investors are Iridium and four other ANSPs: NAV CANADA (Canada), ENAV (Italy), the Irish Aviation Authority (Ireland) and Naviair (Denmark).

The investment in Aireon is in convertible redeemable cumulative 5% preference interests with voting rights of 9.1%. The investment is intended to result in fully diluted common interests (equivalent to ordinary shares) with voting rights of 11.1%. NATS is entitled to appoint one of the eleven Board members.

The interests carry a right of conversion to common equity interests until 2 January 2022 or are otherwise mandatorily redeemed in three annual instalments from that date. The dividend is payable on or after 1 January 2021 and accrues from the date of issuance of preference interests until 1 January 2021.

The investment in Aireon meets the definition of a financial asset under international accounting standards. The conversion option and the mandatory redemption characteristics of the investment requires its measurement at fair value through profit or loss.

17. Investment in Aireon LLC (continued)

The valuation technique used to determine fair value is the income approach. The fair value of the investment reflects the present value of dividend projections based on Aireon's most recent long term operating plan (December 2019), performance since that plan and NATS' assessment of underlying plan assumptions. The discount rate assumed for this purpose is 14.3% (2019: 14.3%). The fixed cost nature of Aireon's business makes its plan sensitive to the achievement of management's revenue growth assumptions, which is reflected in the discount rate assumption. A 1% increase in the discount rate would result in a c£4.6m decrease in fair value and a 1% reduction in the discount rate would result in a c£5.3m increase in fair value. A 10% increase in revenue assumed from unsigned sales contracts would result in an increase in fair value of £3.6m and a 10% reduction in revenue assumed from unsigned sales contracts would result in a decrease in fair value of £3.6m. The investment is classified within Level 3 of the fair value hierarchy.

	£m
Fair value at 1 April 2019	50.9
Change in fair value in the period, reported in 'Fair value movements' (see note 9)	(5.3)
Effect of foreign exchange, reported in Other comprehensive income	2.5
Fair value at 31 March 2020	48.1

The effect of changes in the rate of foreign exchange arises on consolidation of NATS (USA) Inc, which reports its results in US dollars.

18. Financial and other assets

The group 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)	11.0	15.7
Other debtors	0.2	0.2
Prepayments	4.7	8.4
	15.9	24.3
Current		
Receivable from customers gross	123.3	127.0
Less: provision for impairment	(21.0)	(4.0)
	102.3	123.0
Amounts recoverable under contracts	2.9	1.6
Contract spare parts	0.5	0.5
Contract assets	25.8	23.8
Other debtors	7.2	7.0
Prepayments	16.3	20.3
	155.0	176.2

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 20).

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 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. To provide financial support to the aviation sector, members of Eurocontrol agreed to extend the settlement period for en route charges for services provided in February to May 2020. Invoices relating to flights for February and March 2020 are due for settlement in November 2020 and February 2021 respectively. 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.

18. Financial and other assets (continued)

Movement in the impairment provision

	2020 £m	2019 £m
Balance at the beginning of the year	4.0	4.8
Increase in allowance recognised in the income statement	17.5	-
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	21.0	4.0

The group 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. Based on this, trade receivables and contract assets have been grouped into sub-groups as they are considered to have different credit risk characteristics and for each of these sub-groups seperate provisions matrices 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 group 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 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 administration	Total £m
NERL expected credit loss rate (%)	8.0%	13.7%	72.6%	36.2%	54.3%	62.1%	84.7%	100.0%	
NERL gross carrying amount (£m)	52.0	42.6	3.4	0.3	0.2	0.1	0.6	6.9	106.1
NERL lifetime expected credit loss (£m)	4.2	5.9	2.4	0.1	0.1	0.1	0.5	6.9	20.2
Other subsidiaries expected credit loss rate (%)	0.0%	1.4%	1.3%	0.3%	0.0%	0.0%	100.0%	100.0%	
Other subsidiaries gross carrying amount (£m)	4.1	48.0	0.7	1.0	0.1	-	0.1	-	54.0
Other subsidiaries expected credit losses (£m)	-	0.7	-	-	-	-	0.1	-	0.8
Total expected credit losses (£m)	**4.2**	**6.6**	**2.4**	**0.1**	**0.1**	**0.1**	**0.6**	**6.9**	**21.0**

2019		Receivables - months past due							
	Unbilled income	Current	1 month	2-3 months	4-6 months	7-12 months	>12 months	In administration	Total £m
NERL expected credit loss rate (%)	0.2%	0.2%	6.1%	20.0%	48.6%	63.1%	81.4%	100.0%	
NERL gross carrying amount (£m)	64.7	43.8	0.4	0.2	0.2	0.1	0.5	3.1	113.0
NERL lifetime expected credit loss (£m)	0.1	0.1	-	-	0.1	0.1	0.4	3.1	3.9
Other subsidiaries expected credit loss rate (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	
Other subsidiaries gross carrying amount (£m)	-	50.2	2.6	0.3	0.3	-	0.1	-	53.5
Other subsidiaries expected credit losses (£m)	-	-	-	-	-	-	0.1	-	0.1
Total expected credit losses (£m)	**0.1**	**0.1**	**-**	**-**	**0.1**	**0.1**	**0.5**	**3.1**	**4.0**

18. Financial and other assets (continued)

Non-current 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.

The group has assessed the carrying values of the loans to joint ventures at the balance sheet date and concluded that there should be no provision recorded under the expected credit loss methodology. The group monitors the performance of its joint ventures and their ability to meet loan obligations as they fall due. Expected credit losses have been assessed with the benefit of this visibility and past loan performance.

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

Overall, the maximum credit risk for the items discussed above and loans to joint ventures, excluding prepayments, VAT receivables and contract spare parts, would be £751.6m (2019: £454.8m).

19. Borrowings

	2020 £m	2019 £m
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	-
	688.2	336.2
Unsecured loans at amortised cost		
Obligations under finance leases (see below)	-	1.4
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. Any 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 group 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 20. Refer to note 37 for details about the change in accounting policy.

Undrawn committed facilities

Undrawn committed facilities expire as follows:	2020 £m	2019 £m
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.

NATS Services has an uncommitted overdraft facility of £1.0m that was undrawn as at 31 March 2020 and 31 March 2019 and is not included in the table above.

20. Leases

As indicated in note 2 above, the group has adopted IFRS 16: *Leases* which has resulted in changes in accounting policies and to the amounts recognised in the financial statements. The group 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	56.9	62.1
Air traffic control systems, plant and equipment	3.5	5.3
Vehicle, furniture and fittings	0.9	1.0
	61.3	68.4
Lease liabilities	(70.0)	(76.7)

Additions to the right-of-use assets during the year ended 31 March 2020 were £1.3m.

(a) In the previous year, the group 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 group's borrowings. For adjustments recognised on adoption of IFRS 16 on 1 April 2019, please refer to notes 15, 16 and 37.

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

	31 March 2020 £m	1 April 2019 £m
Due within one year or less	9.2	9.3
Due between one and two years	8.5	8.9
Due between two and five years	22.5	23.4
Due in more than five years	39.4	46.5
	79.6	88.1
Less: future finance charges	(9.6)	(11.4)
	70.0	76.7

Analysed as:

	31 March 2020 £m	1 April 2019 £m
Current	7.5	7.4
Non-current	62.5	69.3
	70.0	76.7

The consolidated income statement shows the following amounts relating to leases:

	2020 £m	2019[(b)] £m
Depreciation and impairment charge for right-of-use assets		
Leasehold land and buildings	4.9	-
Air traffic control systems, plant and equipment	1.8	-
Vehicle, furniture and fittings	0.5	-
	7.2	-
Interest on lease liabilities (see note 10)	1.9	-
Short term lease expense	0.1	-
Expense relating to leases for cars provided as an employee benefit under IAS19	0.2	-

(b) The group 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 £0.2m (2019: £8.7m).

20. Leases (continued)

Nature of leasing activities

The group 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 group 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

Year ended 31 March 2020	Lease contracts No.	Fixed payments %(c)	Variable payments %(c)	Sensitivity £m
Property leases with payments linked to inflation	51	n/a	22.6%	0.8
Property leases with periodic uplifts to market rentals	48	n/a	70.0%	2.5
Property leases with fixed payments	6	1.3%	n/a	n/a
Leases of plant and equipment	21	5.4%	n/a	n/a
Vehicle leases	78	0.7%	n/a	n/a
	204	7.4%	92.6%	3.3

(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 group's total lease liability outstanding at that date.

The group sometimes negotiates break clauses in its property leases. On a case-by-case basis, the group will consider whether the absence of a break clause would exposes the group 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 group.

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 group 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 group is reasonably certain that options to extend the leases will be exercised. The remaining lease payments on all these leases is £26.0m, of which £13.2m is potentially avoidable if the leases were not extended and a further £8.2m is potentially avoidable were the group to exercise break clauses at the earliest opportunity.

The group builds certain airport engineering assets used to satisfy its obligations under its Airport ATC contracts. Dependent on the agreement with individual airports those assets are either sold directly to the airports or the group enters into a sale and leaseback arrangement and recharges the monthly lease cost to the airport on a cost plus administrative fee basis. The leases have primary lease periods of between 5 and 7 years and are extendable to secondary and tertiary periods. In the event that an Airport ATC contract is not renewed the assets will be sold by the lease company directly to the Airport and the leases disposed of in the group financial statements. The outstanding discounted liability for these leases at 31 March was £2.2m.

Sale and leaseback transactions entered into before 1 April 2019, are not reassessed to determine whether the transfer of the underlying asset satisfies the requirements in IFRS 15 to be accounted for as a sale. The group entered into two new sale and leaseback arrangements in the year to 31 March 2020, additions to right-of-use assets are £0.3m (note 16) and lease liabilities £0.3m. The amount for leases not yet commenced to which the group is committed at 31 March 2020 is £0.9m.

21. 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)	2.9	2.7
Derivative financial instruments at fair value through profit and loss		
Forward foreign exchange contracts (cash flow hedges)	1.3	-
	4.2	2.7

21. Derivative financial instruments (continued)

Current liabilities		
Derivative financial instruments in designated hedge accounting relationships		
Forward foreign exchange contracts (cash flow hedges)	(4.6)	(1.7)
Derivative financial instruments classified as held for trading		
Index-linked swap	(14.6)	(12.2)
	(19.2)	(13.9)
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 22. 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.

22. Financial instruments

Capital risk management

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

The capital structure of the group consists of debt as disclosed in note 19, cash and cash equivalents and short term investments, as shown in this note, and equity attributable to shareholders as disclosed in the consolidated statement of changes in equity.

External capital requirements

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

As at 31 March 2020, NERL 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

The group does not seek to maintain a target gearing level at group level but rather sets a gearing target for NERL, the economically regulated subsidiary, based on a ratio of net debt to its regulatory asset base (RAB). In addition, the CAA has set NERL a gearing target of 60% and a cap of 65% of net debt to RAB with a requirement for NERL to remedy the position if this cap is exceeded. NERL's gearing ratio at 31 March 2020 was 29.0% (2019: 25.7%).

22. Financial instruments (continued)

Categories of financial instrument

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

	2020 £m	2019 £m
Financial assets		
Financial assets at fair value through profit or loss		
Equity investment (see note 17)	48.1	50.9
Financial assets at amortised cost		
Trade and other receivables	147.7	171.3
Loans to joint ventures	18.4	22.5
Cash and cash equivalents and short term investments	585.5	261.0
	751.6	454.8
Derivative financial instruments		
In designated hedge accounting relationships	6.0	4.4
At fair value through profit and loss	2.1	-
	807.8	510.1
Financial liabilities		
Financial liabilities at amortised cost		
Trade and other payables	(315.8)	(313.7)
Borrowings	(688.2)	(337.6)
Lease liabilities	(70.0)	-
	(1,074.0)	(651.3)
Derivative financial instruments		
In designated hedge accounting relationships	(4.9)	(2.1)
Held for trading at fair value through profit or loss	(107.9)	(122.1)
	(112.8)	(124.2)
	(1,186.8)	(775.5)

Financial assets at amortised cost includes balances for trade and other receivables (excluding prepayments of £21.0m (2019: £28.7m), VAT of £1.7m (2019: £nil) and contract spare parts of £0.5m (2019: £0.5m)), loans to joint ventures, cash and cash equivalents and short term investments.

Financial liabilities at amortised cost includes balances for trade and other payables (excluding contract liabilities of £62.6m (2019: £93.6m), deferred income of £23.0m (2019: £21.2m), taxes and social security liabilities of £13.9m (2019: £13.4m) and VAT of £nil (2019: £0.4m)) 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 as 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 group's Treasury function is mandated by the Board to manage financial risks that arise in relation to underlying business needs. The function provides services to the business, co-ordinates access to financial markets and monitors and manages financial risks relating to the operations of the group. The function has clear policies and operating parameters. The Treasury Committee provides oversight and meets 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 group's activities include market risk (including currency risk, interest rate risk and inflation risk), credit risk and liquidity risk. The principal financial risk in these entities is credit risk. Specific policies on interest rate and liquidity risk management apply principally to NERL.

Market risk

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

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

Foreign currency risk management

The group's principal exposure to foreign currency transaction risk is in relation to UK en route services revenue, accounting for 67% of the group's turnover (2019: 67%). Charges for this service are set in sterling, but are billed and collected in euro by applying a conversion rate determined monthly by Eurocontrol, who administer the UK en route revenue collection. The conversion factor used is the average of the daily closing rates for the month prior to the billing period. To mitigate the risk that exchange rates move between the date of billing and the date on which the funds are remitted to NERL, forward foreign currency contracts are entered into. NERL seeks to hedge 95% of the UK en route income that is forecast to arise by entering into forward foreign exchange contracts on a monthly basis.

The group's international activities account for 2.6% of external revenue (2019: 1.5%). The group trades with and provides finance to its overseas joint ventures and subsidiaries. Where appropriate the transactions are conducted in sterling. The group benefits from natural hedges of its exposure to fluctuations on the translation of its foreign operations into sterling as a result of holding cash reserves in foreign currencies.

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

22. Financial instruments (continued)

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

	Assets		Liabilities	
	2020	2019	2020	2019
Currency	£m	£m	£m	£m
Euro	80.6	99.8	(16.0)	(15.1)
US dollar	51.0	54.7	(3.7)	(1.4)
Hong Kong dollar	7.3	4.2	(1.0)	-
Canadian dollar	3.6	2.7	(2.4)	(2.1)
Singapore dollar	2.8	4.6	(0.7)	(0.5)
UAE dirham	1.6	1.7	(0.5)	(0.4)
Qatari riyal	1.2	1.1	-	-
Thai baht	0.8	4.0	-	(0.1)
Omani rial	0.4	0.3	-	-
Philippine peso	0.4	0.4	-	-
Kuwaiti dinar	0.3	0.4	-	-
Swedish krona	0.3	0.3	-	(0.3)
Norwegian krone	0.3	-	(0.1)	-
Australian dollar	0.1	-	-	-
	150.7	174.2	(24.4)	(19.9)

Foreign currency sensitivity analysis

The group has assets and liabilities denominated in foreign currencies including: the equity investment in Aireon, loans to joint ventures and cash balances of £19.8m at 31 March 2020 (2019: £12.5m) in euro, Hong Kong dollars, US dollars, Canadian dollars, Singapore dollars, Qatari riyal, Thai baht, UAE dirham, Kuwaiti dinar, Norwegian krone, Omani rial, Swedish krona, and Danish krone. Furthermore, the group has entered into forward foreign currency contracts to hedge exchange risk relating to customer receipts and supplier costs which will arise in future periods.

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

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

	2020	2019
	Impact	Impact
Currency	£m	£m
Euro	6.5	0.7
US dollar	(15.1)	(7.2)
Hong Kong dollar	(0.6)	(0.4)
Canadian dollar	(0.5)	(0.2)
Thai baht	(0.1)	(0.4)
Singapore dollar	-	(0.2)
Philippine peso	(0.1)	(0.1)
Qatari riyal	(0.1)	(0.1)
UAE dirham	(0.1)	(0.1)
Omani rial	(0.1)	-
Danish krone	-	(0.1)
	(10.2)	(8.1)

The group'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 group'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. NATS believes that this sensitivity analysis accurately reflects its inherent foreign exchange risk.

22. Financial instruments (continued)

Forward foreign exchange contracts

The group entered into forward foreign exchange contracts to sell euro forecast to be received from Eurocontrol in respect of UK en route revenues. In addition, the group entered into various forward foreign exchange contracts to fund capital purchases and services. The group 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	5.8	6.6	0.8853
> 365 days	-	-	-	18.0	19.6	0.9160
	166.3	191.3	0.8695	167.3	190.4	0.8791
Euro bought	€m	£m		€m	£m	
0-90 days	17.2	15.1	0.8821	14.9	13.0	0.8696
91-365 days	11.2	9.9	0.8829	37.8	34.1	0.9009
> 365 days	12.4	11.4	0.9178	31.8	28.4	0.8917
	40.8	36.4	0.8932	84.5	75.5	0.8919
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	33.9	25.1	1.3537	5.1	3.6	1.4007
> 365 days	93.3	70.9	1.3157	12.5	8.5	1.4735
	137.1	103.7	1.3232	26.4	18.6	1.4147
Canadian dollar bought	C$m	£m		C$m	£m	
0-90 days	1.7	1.0	1.7601	0.5	0.3	1.7064
91-365 days	0.8	0.5	1.7050	0.8	0.4	1.8539
> 365 days	3.8	2.2	1.7780	0.8	0.5	1.7311
	6.3	3.7	1.7638	2.1	1.2	1.7660
Danish krone bought	DKKm	£m		DKKm	£m	
0-90 days	1.5	0.2	8.3502	1.4	0.2	8.4320
91-365 days	-	-	-	-	-	-
> 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
Norwegian krone bought	NOKm	£m		NOKm	£m	
0-90 days	-	-	-	1.1	0.1	11.0369
Singapore dollar sold	£m	SGDm		£m	SGDm	
0-90 days	2.3	4.2	1.8125	1.2	2.1	1.7840
91-365 days	-	-	-	1.1	2.1	1.8428
	2.3	4.2	1.8125	2.3	4.2	1.8129
Swedish krona bought	SEKm	£m		SEKm	£m	
0-90 days	-	-	-	1.3	0.1	11.1058
91-365 days	-	-	-	3.3	0.3	11.0590
	-	-	-	4.6	0.4	11.0723

At 31 March 2020, the aggregate amount of the unrealised gain under forward foreign exchange contracts deferred in the hedge reserve relating to the exposure on these future transactions was £5.0m (2019: £0.8m). 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).

22. Financial instruments (continued)

Interest rate risk management

The group is exposed to interest rate risk to the extent that it holds borrowings at fixed, floating and index-linked interest rates. Its interest rate risk management policies, which are kept under continuous review, are specific to NERL. Except for NERL, no other entity within the NATS group had borrowings at 31 March 2020 (2019: none).

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

The group's exposure to interest rates on financial assets and financial liabilities is detailed in the liquidity risk management section of this note. The group held no interest rate swaps at 31 March 2020 (2019: none).

Economic interest rate exposure

The group'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	518.4	0.5	18	47.3	0.6	171	565.7
Euro	8.0	-	1	-	-	-	8.0
Hong Kong dollar	3.1	-	1	-	-	-	3.1
US dollar	2.6	-	1	-	-	-	2.6
Canadian dollar	2.3	-	1	-	-	-	2.3
Singapore dollar	0.8	-	1	-	-	-	0.8
Qatari riyal	0.6	-	1	-	-	-	0.6
Thai baht	0.6	-	1	-	-	-	0.6
UAE dirham	0.5	-	1	-	-	-	0.5
Kuwaiti dinar	0.3	-	1	-	-	-	0.3
Norwegian krone	0.3	-	1	-	-	-	0.3
Omani rial	0.3	-	1	-	-	-	0.3
Swedish krona	0.3	-	1	-	-	-	0.3
Danish krone	0.1	-	1	-	-	-	0.1
	538.2			47.3			585.5

	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	202.1	0.8	16	46.4	0.9	171	248.5
Euro	3.8	-	1	-	-	-	3.8
US dollar	1.9	-	1	-	-	-	1.9
Canadian dollar	1.3	-	1	-	-	-	1.3
Hong Kong dollar	1.3	-	1	-	-	-	1.3
Singapore dollar	1.2	-	1	-	-	-	1.2
Thai baht	0.9	-	1	-	-	-	0.9
UAE dirham	0.7	-	1	-	-	-	0.7
Qatari riyal	0.5	-	1	-	-	-	0.5
Kuwaiti dinar	0.3	-	1	-	-	-	0.3
Swedish krona	0.3	-	1	-	-	-	0.3
Omani rial	0.3	-	1	-	-	-	0.3
	214.6			46.4			261.0

22. Financial instruments (continued)

The economic interest rate reflects the true underlying cash rate that the group was paying on its borrowings or receiving on its deposits at 31 March. The economic interest rate exposure of the group'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 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	70.0	-	-	70.0	2.59%	10.4
Total	758.2	395.0	-	363.2		
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		

Including derivatives

	Total £m	Variable rate £m	Inflation rate £m	Fixed rate £m	Economic interest rate %	Weighted average time 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	70.0	-	-	70.0	2.59%	10.4
Total	758.2	395.0	138.0	225.2		
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 RPI.

The following table shows the percentage of fixed, index-linked and floating rate debt as a percentage of group net debt. Net debt is defined for this purpose as borrowings 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)	224.1	131.3	178.2	241.1
Index-linked	138.0	80.8	158.0	213.8
Floating (net of cash, short term investments and facility costs)	(191.4)	(112.1)	(262.3)	(354.9)
Net debt	170.7	100.0	73.9	100.0

At 31 March 2020, NERL had net debt of £263.2m (2019: net debt £168.8m), NATS Limited had cash of £6.0m (2019: £6.1m), NATS Services had cash of £79.4m (2019: £83.0m), NATSNav had cash of £1.5m (2019: £1.1m), NATS (USA) Inc had cash of £0.5m (2019: £0.4m), NATS Services DMCC had cash of £0.2m (2019: £0.2m), NATS Services (Asia Pacific) had cash of £7.3m (2019: £3.5m), NATS Services (Hong Kong) had cash of £2.0m (2019: £0.3m) and NATS Services LLC had cash of £0.3m (2019: £0.3m). Net debt includes lease liabilities of £65.3m (2019: £nil) in NERL and £4.7m (2019: £nil) in other group entities.

22. Financial instruments (continued)

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

	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 group's cash and floating rate bank loans on profit for the year and on equity. A positive number represents an increase in profit and equity and a negative number a decrease in profit and equity.

	2020 Impact £m	2019 Impact £m
Cash at bank and short term deposits (2020: £585.5m, 2019: £261.0m)	5.9	2.6
Bank loans (2020: £395.0m, 2019: £nil)	(4.0)	-
	1.9	2.6

Overall the group'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 NERL's UK en route and North Atlantic services determines a revenue allowance for financing charges that is linked to inflation (now CPI but previously RPI). To achieve an economic hedge of part of this income, in August 2003 coincident with the issue of its £600.0m 5.25% fixed rate bond, NERL entered into an amortising index-linked swap with a notional principal of £200.0m for the period up to March 2017 reducing semi-annually thereafter and expiring in March 2026. As at 31 March 2020 the notional principal had reduced to £138.0m. Under the terms of this swap, NERL receives fixed interest at 5.25% and pays interest at a rate of 3.43% adjusted for the movement in RPI.

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

Inflation rate sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to 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 NERL is required to make under the swap contract and so impacts its mark to market value.

The following table shows the effect of a 1% increase in 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%.

22. Financial instruments (continued)

Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the group. The group's exposure to credit risk arises from the risk of default by customers on settlement of trade receivables and from the risk of a failure of a financial institution in which funds are invested for return or held for trading purposes or with whom derivative contracts are entered into. The risk of loss from default by customers and the mitigations against this risk are explained in note 18. With regard to funds or contracts held with financial institutions, the group's policy is to transact with counterparties that hold a minimum credit rating as supplied by independent rating agencies: Standard & Poor's, Moody's and Fitch Ratings.

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

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

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

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

	2020			2019		
Rating (Standard & Poor's)	Number of institutions	£m	By credit rating %	Number of institutions	£m	By credit rating %
AAAm	7	284.1	48.5	7	159.6	61.1
AA-	2	51.2	8.7	3	56.8	21.8
A+	1	61.0	10.4	-	-	-
A	5	177.7	30.4	4	29.7	11.4
A-	1	11.5	2.0	1	7.5	2.9
BBB+	-	-	-	1	7.4	2.8
		585.5	100.0		261.0	100.0

The deposits of £nil (2019: £7.4m) with a BBB+ rated institution were held in various current accounts that are not subject to the above investment limits.

Liquidity risk management

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

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

a. maintain free cash equal to between one and two months of UK en route services revenues (see below). Free cash is defined as cash and cash equivalents and short term investments, excluding a debt service reserve account of £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 £585.5m 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.

22. Financial instruments (continued)

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

	2020 £m	2019 £m
Average monthly UK en route services income	49.6	48.9
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 group's bank borrowings to its gross borrowings at 31 March:

	2020 £m	2019 £m
Bank borrowings	395.0	-
Gross borrowings (including lease liabilities)	758.2	337.6
Bank borrowings as a percentage of gross borrowings	52%	0%

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

Maturity of borrowings

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

	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	9.2	61.8	161.1	232.1	0.2	60.8	198.3	259.3
Between one and two years	8.5	60.0	117.8	186.3	0.2	56.8	67.9	124.9
Due between two and five years	22.5	544.0	36.4	602.9	0.7	156.1	42.6	199.4
Due in more than five years	39.4	92.2	0.5	132.1	0.5	138.0	4.9	143.4
	79.6	758.0	315.8	1,153.4	1.6	411.7	313.7	727.0
Effect of interest, discount and unamortised bond issue and bank facility arrangement fees	(9.6)	(71.8)	-	(81.4)	(0.2)	(78.2)	-	(78.4)
	70.0	686.2	315.8	1,072.0	1.4	333.5	313.7	648.6

Other liabilities above include trade and other payables excluding deferred income of £23.0m (2019: £21.2m), contract liabilities of £62.6m (2019: £93.6m), taxes and social security liabilities of £13.9m (2019: £13.4m) and VAT of £nil (2019: £0.4m).

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

22. Financial instruments (continued)

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

	Due within one year or less £m	Due between one and two years £m	Due between two and five years £m	Due in more than five years £m	Total £m
2020					
Net settled:					
Index-linked swap payable	(14.6)	(15.1)	(56.9)	(21.8)	(108.4)
Gross settled:					
Foreign exchange forward contract receivables	230.7	27.8	60.8	-	319.3
Foreign exchange forward contract payables	(231.0)	(27.2)	(57.5)	-	(315.7)
	(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	262.1	48.7	7.0	-	317.8
Foreign exchange forward contract payables	(260.9)	(47.0)	(7.5)	-	(315.4)
	(11.0)	(13.2)	(54.5)	(45.3)	(124.0)

Foreign 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

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

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

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Fair value measurements recognised on the balance sheet

	2020				2019			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets								
Equity investment	-	-	48.1	48.1	-	-	50.9	50.9
Derivative financial instruments in designated hedge accounting relationships	-	6.0	-	6.0	-	4.4	-	4.4
Derivative financial instruments at fair value through profit and loss	-	2.1	-	2.1	-	-	-	-
	-	8.1	48.1	56.2	-	4.4	50.9	55.3
Financial liabilities								
Derivative financial instruments in designated hedge accounting relationships	-	(4.9)	-	(4.9)	-	(2.1)	-	(2.1)
Derivative financial instruments classified as held for trading	-	(107.9)	-	(107.9)	-	(122.1)	-	(122.1)
	-	(112.8)	-	(112.8)	-	(124.2)	-	(124.2)

There were no transfers between individual levels in the year.

22. 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;

- the valuation technique used to determine the fair value of the equity investment in Level 3 of the hierarchy is explained in note 17; 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)

23. Financial and other liabilities

Trade and other payables

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

	2020 £m	2019 £m
Current		
Trade payables	68.5	85.3
Other payables	9.5	1.8
Tax and social security	13.9	13.4
Contract liabilities	20.7	45.4
Accruals and deferred income	85.8	114.6
	198.4	260.5
Non-current		
Trade payables	131.0	102.9
Other payables	0.1	0.1
Contract liabilities	41.9	48.2
Accruals and deferred income	43.9	30.6
	216.9	181.8
	415.3	442.3

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 20).

Trade payables and accruals principally comprise amounts outstanding for trade purchases and ongoing costs. The average credit period taken for trade purchases is 40 days (2019: 31 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.

24. Provisions

	Property £m	Redundancy £m	Relocation £m	Other £m	Total £m
At 1 April 2019	7.2	1.8	0.8	1.4	11.2
Additional provision in the year	1.4	2.3	0.4	1.9	6.0
Transfer of provision in the year	-	(0.1)	-	0.1	-
Release of provision in the year	-	-	(0.1)	-	(0.1)
Utilisation of provision	(0.4)	(1.5)	(0.3)	(0.2)	(2.4)
At 31 March 2020	8.2	2.5	0.8	3.2	14.7

	2020 £m	2019 £m
Amounts due for settlement within 12 months	5.2	3.8
Amounts due for settlement after 12 months	9.5	7.4
	14.7	11.2

The property provision represents the best estimate of dismantlement, removal or restoration costs arising from property leases and other property-related costs. The ageing of the provision reflects the expected timing of the settlement of these costs.

The redundancy provision represents the best estimate of the future cost of redundancy payments to employees that have committed to the redundancy terms at 31 March 2020. The ageing of the provision reflects the expected timing of employees leaving the group.

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

The other provisions represent the best estimate of other liabilities. The ageing of the provision reflects the best estimate of when these potential liabilities will fall due.

25. Deferred tax

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

	Accelerated tax depreciation £m	Retirement benefits £m	Financial instruments £m	Other £m	Total £m
At 1 April 2018	106.1	18.8	(6.3)	(3.1)	115.5
Charge/(credit) to income	5.8	6.3	0.6	(1.3)	11.4
Credit to equity	-	(28.9)	(0.2)	-	(29.1)
At 31 March 2019	111.9	(3.8)	(5.9)	(4.4)	97.8
At 1 April 2019	111.9	(3.8)	(5.9)	(4.4)	97.8
Charge/(credit) to income	21.1	5.0	1.7	(3.5)	24.3
Charge to equity	-	42.9	0.8	-	43.7
At 31 March 2020	133.0	44.1	(3.4)	(7.9)	165.8

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	177.1	111.9
Deferred tax assets	(11.3)	(14.1)
	165.8	97.8

26. 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 2020 and 31 March 2019	144,100,007	144.1	131,000,007	131.0
Ordinary A shares of 80 pence each				
At 31 March 2020 and 31 March 2019	54,272,594	43.4	12,048,193	9.6
		187.5		140.6

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

Special share

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

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

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

27. Share premium account

	£m
Balance as at 31 March 2020 and 31 March 2019	0.4

28. Other reserves

The following table shows a breakdown of the balance sheet line item 'other reserves' and the movements in these reserves during the year. A description of the nature and purpose of each reserve is provided in note 2.

	AESOP reserve £m	Hedge reserve £m	Translation reserve £m	Other reserves[1] £m	Total £m
At 1 April 2018	(0.3)	1.3	(0.6)	(34.7)	(34.3)
Other comprehensive (loss)/income for the year	-	(0.7)	1.7	-	1.0
At 31 March 2019	(0.3)	0.6	1.1	(34.7)	(33.3)
At 1 April 2019	(0.3)	0.6	1.1	(34.7)	(33.3)
Other comprehensive income for the year	-	3.5	2.8	-	6.3
At 31 March 2020	(0.3)	4.1	3.9	(34.7)	(27.0)

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

29. Non-controlling interest

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

As at 31 March 2020, a loan to the non-controlling interest amounted to £0.1m (Omani rial 0.1m) and is included in other debtors (see note 18).

30. Notes to the cash flow statement

	2020 £m	2019 £m
Operating profit from continuing operations	53.6	122.5
Adjustments for:		
Impairment of goodwill	49.0	-
Depreciation of property, plant and equipment	64.1	81.0
Amortisation of intangible assets	52.5	55.7
Depreciation of right-of-use assets	7.0	-
Impairment losses	11.6	5.0
Deferred grants released	(0.6)	(0.6)
Profit on disposal of property, plant and equipment	(1.0)	(2.1)
R&D expenditure above the line tax credits	(1.2)	(1.9)
Adjustment for pension funding	(25.9)	(33.7)
Operating cash flows before movements in working capital	209.1	225.9
Increase in contract work in progress	(1.3)	-
Decrease in trade and other receivables	27.1	5.5
(Decrease)/ increase in trade, other payables and provisions	(17.7)	62.3
Cash generated from operations	217.2	293.7
Tax (paid)/received	(0.1)	0.8
Net cash from operating activities	217.1	294.5

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	538.2	214.6
Short term investments	47.3	46.4
Borrowings (2019 includes obligations under finance leases)	(686.2)	(334.9)
Lease liabilities	(70.0)	-
Net debt	(170.7)	(73.9)
Index-linked swap	(107.9)	(122.1)
Net financial liabilities	(278.6)	(196.0)
Cash and liquid investments	585.5	261.0
Gross debt - fixed interest rates (net of unamortised bond issue costs)	(362.1)	(336.2)
Gross debt - variable interest rates (net of unamortised bank facility arrangement fees)	(394.1)	1.3
Net debt	(170.7)	(73.9)
Index-linked swap	(107.9)	(122.1)
Net financial liabilities	(278.6)	(196.0)

30. Notes to the cash flow statement (continued)

Reconciliation of net financial liabilities (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	Lease liabilities £m	£600m 5.25% Guaranteed Secured Amortising Bonds £m	Bank loans (i) £m	Sub-total £m	Index-linked swap £m	Total net financial liabilities £m
Net financial liabilities as at 1 April 2018	269.6	38.3	(1.6)	(379.5)	1.7	(71.5)	(129.2)	(200.7)
Cash flows	(55.2)	8.1	0.2	45.2	-	(1.7)	10.1	8.4
Bank facility arrangement fees	-	-	-	-	-	-	-	-
Foreign exchange adjustments	0.2	-	-	-	-	0.2	-	0.2
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	214.6	46.4	(1.4)	(334.8)	1.3	(73.9)	(122.1)	(196.0)
Adjustment on initial application of IFRS 16 (see notes 20 and 37)	-	-	(75.3)	-	-	(75.3)	-	(75.3)
Net financial liabilities as at 1 April 2019 (as restated for IFRS 16)	214.6	46.4	(76.7)	(334.8)	1.3	(149.2)	(122.1)	(271.3)
Cash flows	323.5	0.9	7.5	43.2	(395.0)	(19.9)	12.1	(7.8)
New leases in the year	-	-	(1.0)	-	-	(1.0)	-	(1.0)
Lease terminations	-	-	0.2	-	-	0.2	-	0.2
Foreign exchange adjustments	0.1	-	-	-	-	0.1	-	0.1
Fair value movements on index-linked swap	-	-	-	-	-	-	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	538.2	47.3	(70.0)	(292.1)	(394.1)	(170.7)	(107.9)	(278.6)

(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.

31. Financial commitments

	2020 £m	2019 £m
Amounts contracted but not provided for in the accounts	46.0	67.9

Guarantees

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

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

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

NATS Services has guaranteed all of the obligations of NATS (USA) Inc to Aireon LLC in relation to its status as a member of Aireon LLC.

As part of the tendering process for new contracts, the NATS group may be required to put in place a tender or bid guarantee which expires once the contract is awarded. Where tenders are successful, contractual terms may also require performance or advance payment guarantees. These guarantees vary in length depending on the life of the contract and may run until the expiry of the contract. The total guarantees provided in these respects at 31 March 2020 was £8.1m (2019: £8.4m).

32. Share based payments

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

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

Date of share awards	No. shares awarded to employees	No. employee shares outstanding at 31 March 2020	No. employee shares outstanding at 31 March 2019
Free share awards			
21 September 2001	3,353,742	239,314	256,923
20 October 2003	2,459,000	224,782	241,384
10 September 2004	1,966,000	329,557	360,957
11 January 2008	1,071,840	259,557	285,717
18 September 2009	963,200	284,207	314,557
Partnership shares			
1 March 2011	694,783	256,916	288,096
26 September 2012	714,959	316,932	367,007
30 May 2014	496,738	280,066	386,500
31 October 2016	530,303	452,825	471,506
31 October 2018	635,048	603,136	622,117
Matching shares			
1 March 2011	694,783	256,931	287,127
26 September 2012	714,959	316,602	364,656
30 May 2014	496,738	280,132	386,575
31 October 2016	530,303	452,987	471,506
31 October 2018	635,048	603,136	622,117
		5,157,080	5,726,745
Dividend shares issued on 28 June 2005	247,017	28,544	30,625
Total employee shares in issue at 31 March		5,185,624	5,757,370

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	5,757,370	4,944,657
Granted during the year	-	1,270,096
Forfeited during the year	(9,358)	(15,206)
Exercised during the year	(562,388)	(442,177)
Balance at 31 March	5,185,624	5,757,370

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 £13.9m (2019: £19.1m) included in other accruals and deferred income. The income statement includes a credit of £4.8m (2019: £2.9m charge). The payments made to employees for the shares they exercised during the year was £2.1m (2019: £1.6m).

33. Retirement benefit schemes

Defined contribution scheme

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

The group operates a salary sacrifice arrangement whereby employees sacrifice an element of their salary in favour of contributions to the pension scheme. NATS operates a number of contribution structures. In general, NATS 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 £15.1m (2019: £11.4m), excluding employee salary sacrifice contributions of £8.4m (2019: £6.2m), represented 15.5% of pensionable pay (2019: 15.0%).

The defined contribution scheme had 2,041 members at 31 March 2020 (2019: 1,680).

Defined benefit scheme

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

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

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

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

	2020 No.	2019 No.
Active members	1,911	1,990
Deferred members	1,053	1,064
Pensioners	2,782	2,728
	5,746	5,782

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 future benefit accrual and expenses 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 the 2018 calendar year and £41.8m in the 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.

During the year the group paid cash contributions to the scheme of £99.8m (2019: £100.0m). This amount included £8.7m (2019: £8.9m) 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 pay.

The estimated contributions expected to be paid to the scheme during the financial year ending 31 March 2021 is £98.1m, including salary sacrifice contributions estimated at £8.7m.

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

33. 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 in full 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 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 group arising from the scheme are in respect of:

a. asset volatility: for accounting purposes, scheme liabilities are determined using a discount rate set by reference to high quality corporate bond yields. If scheme assets under-perform relative to this yield, this will create a deficit. As explained below, NATS and Trustees have taken and continue to review 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 (bond yields)	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.

33. 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	(72.7)	(67.6)
Past service cost	-	(1.0)
Net interest credit	0.6	4.2
Administrative expenses	(1.8)	(1.9)
Components of defined benefit costs recognised within operating profit	(73.9)	(66.3)

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)	(181.4)	180.5
Actuarial gains and losses arising from changes in financial assumptions	400.4	(311.3)
Actuarial gains and losses arising from changes in demographic assumptions	-	-
Actuarial gains and losses arising from experience adjustments	9.2	(35.6)
	228.2	(166.4)

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

	2020 £m	2019 £m
Present value of defined benefit obligations	(4,440.1)	(4,789.8)
Fair value of scheme assets	4,672.1	4,767.7
Surplus/(deficit) in scheme	232.0	(22.1)

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

	2020 £m	2019 £m
At 1 April	(4,789.8)	(4,375.0)
Current service cost	(72.7)	(67.6)
Past service cost	-	(1.0)
Interest expense on defined benefit scheme obligations	(115.8)	(114.4)
Actuarial gains and losses arising from changes in financial assumptions	400.4	(311.3)
Actuarial gains and losses arising from changes in demographic assumptions	-	-
Actuarial gains and losses arising from experience adjustments	9.2	(35.6)
Benefits paid	128.6	115.1
At 31 March	(4,440.1)	(4,789.8)

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	(1,780.2)	(1,945.0)
Deferred members	(474.3)	(516.9)
Pensioners	(2,185.6)	(2,327.9)
	(4,440.1)	(4,789.8)

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

	2020 £m	2019 £m
At 1 April	4,767.7	4,485.6
Interest income on scheme assets	116.4	118.6
Return on plan assets (excluding amounts included in net interest expense)	(181.4)	180.5
Contributions from sponsoring company	99.8	100.0
Benefits paid	(128.6)	(115.1)
Administrative expenses	(1.8)	(1.9)
At 31 March	4,672.1	4,767.7

33. Retirement benefit schemes (continued)

The major categories of scheme assets was as follows:

	2020 £m	2019 £m
Cash and cash equivalents	40.9	31.5
Equity instruments		
- Emerging markets	109.7	145.4
- Global	776.1	813.6
	885.8	959.0
Bonds		
- Fixed income	1,830.4	1,633.0
- Index-linked gilts over 5 years	1,328.3	1,550.4
	3,158.7	3,183.4
Other investments		
- Property	242.2	247.0
- Hedge funds	219.3	225.4
- Private equity funds	131.0	125.8
	592.5	598.2
Derivatives		
- Futures contracts	(5.8)	(4.4)
	4,672.1	4,767.7

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

NATS and Trustees implemented a liability driven investment (LDI) programme in 2012 in order to hedge the impact of changes in inflation and interest rates on the value of the scheme's obligations, which are sensitive to inflation and movements in yields in the gilt market. The strategy includes establishing trigger levels which define the rates of interest and inflation rates at which hedging transactions will be executed. In addition, and as an acceleration of the existing strategy, NATS and Trustees agreed during 2014 to increase the level of hedging of interest rates and inflation to 50%, as measured on the Trustee funding basis. 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 £65.0m (2019: £299.1m gain).

34. Related party transactions

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

AG is a consortium of British Airways plc, Deutsche Lufthansa AG, easyJet Airline Company Limited, the Pension Protection Fund, Thomas Cook Airlines Limited (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 AG have not exercised undue influence on the group either acting individually or in concert and therefore the individual transactions with each member of AG have not been disclosed in this set of accounts.

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

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

Transactions between the company and its joint ventures and associate, which are related parties, are disclosed below and in note 35.

34. Related party transactions (continued)

Trading transactions

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

	Sales		Purchases		Amounts owed by related parties		Amounts owed to related parties	
	Year ended 31 March 2020 £m	Year ended 31 March 2019 £m	Year ended 31 March 2020 £m	Year ended 31 March 2019 £m	Year ended 31 March 2020 £m	Year ended 31 March 2019 £m	Year ended 31 March 2020 £m	Year ended 31 March 2019 £m
LHR Airports Limited	49.3	55.5	0.5	0.4	5.8	10.3	0.1	-
Ministry of Defence (MOD)	52.0	50.4	2.8	4.0	-	5.7	36.5	28.4
The Airline Group Limited	-	-	0.3	0.2	-	-	-	-
Department for Transport (DfT)	0.4	0.9	-	-	-	0.1	-	-
Meteorological Office	0.4	0.3	1.1	1.0	-	-	0.1	0.2
European Satellite Services Provider SAS	0.1	0.1	-	-	-	-	-	-
FerroNATS Air Traffic Services SA	0.5	0.4	-	-	-	-	-	-
Aquila Air Traffic Management Services Limited	23.6	26.3	0.5	0.1	0.2	2.5	0.3	-
Searidge Technologies Inc	0.1	0.1	2.3	0.9	-	-	0.1	-

Sales are made to related parties at the group's usual rates and purchases at market prices. The amounts outstanding are unsecured and will be settled in cash. No guarantees have been received. No provisions (2019: £nil) have been made for doubtful debts in respect of amounts owed by related parties.

Remuneration of key management personnel

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

	2020 £m	2019 £m
Short term employee benefits	8.7	8.0
Post-employment benefits	0.4	0.3
Other long term benefits	1.2	2.8
	10.3	11.1

35. Subsidiaries, joint ventures and associates

The group's subsidiaries at 31 March 2020, all of which have been consolidated in these accounts were:

Name of company	Principal activity	Proportion of ordinary shares and voting rights held	Country of registration	Country of operation
Direct holding:				
NATS Limited*	Corporate services	100%	England and Wales	United Kingdom
Indirect holding:				
NATS (En Route) plc*	En route air traffic services	100%	England and Wales	United Kingdom
NATS (Services) Limited*	Airport air traffic services	100%	England and Wales	United Kingdom
NATS Solutions Limited*	Airport and airfield air traffic services	100%	England and Wales	United Kingdom
NATSNav Limited*	Satellite based navigation	100%	England and Wales	United Kingdom
NATS Employee Sharetrust Limited*	Corporate trustee of employee share plan	100%	England and Wales	United Kingdom
National Air Traffic Services Limited*	Dormant	100%	England and Wales	United Kingdom
NATS Services DMCC *Suite 1201, Platinum Tower, Plot No. PH1-I2, Jumeirah Lake Towers, PO Box 392497, Dubai, United Arab Emirates*	ATM consultancy	100%	UAE	UAE
NATS Services LLC *PO Box 533, Ruwi, PC 112, Muscat, Sultanate of Oman*	ATM consultancy	70%	Oman	Oman
NATS Services (Asia Pacific) Pte. Limited *3 Raffles Place, #06-01 Bharat Building, Singapore 048617*	Airport and ATM consultancy	100%	Singapore	Singapore
NATS Services (Hong Kong) Limited *31F Tower Two, Times Square, 1 Matheson Street, Causeway Bay, Hong Kong*	Airport and ATM consultancy	100%	Hong Kong	Hong Kong
NATS (USA) Inc *The Corporation Trust Company, 1209 Orange Street, Wilmington, New Castle County, Delaware, United States*	Engineering and ATM consultancy	100%	USA	USA
NATS (Services) Canada Inc *100 King Street West, Suite 6200, 1 First Canadian Place, Toronto, Ontario, M5X 1B8, Canada*	Digital airport air traffic services	100%	Canada	Canada

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

The group had one associate and three joint ventures as at 31 March 2020, details are as follows:

Name of company	Principal activity	Date of acquisition	Proportion of ordinary shares held	Country of incorporation
European Satellite Services Provider SAS *18, Avenue Edouard Belin - BPI 602, 31 401 Toulouse Cedex 9, France*	Satellite based navigation	1 September 2008	16.67%	France
FerroNATS Air Traffic Services SA *Calle Principe de Vergara, 135, 28002, Madrid, Spain*	Airport air traffic services	28 January 2011	50.00%	Spain
Aquila Air Traffic Management Services Limited *2 Dashwood Lang Road, The Bourne Business Park, Addlestone, Surrey, KT15 2NX, United Kingdom*	Asset provision and ATM services to UK MOD	9 October 2014	50.00%	United Kingdom
Searidge Technologies Inc *19 Camelot Drive, Nepean, Ontario, K2G 5W6, Canada*	Digital airport air traffic services	28 April 2017	50.00%	Canada

The associate and joint ventures are indirectly held by NATS Holdings Limited. The investment in ESSP is held by NATSNav Limited, investments in FerroNATS and Aquila are held by NATS (Services) Limited and the investment in Searidge Technologies is held by NATS (Services) Canada Inc.

35. Subsidiaries, joint ventures and associates (continued)

Summarised financial information relating to the associate and joint ventures

European Satellite Services Provider SAS (ESSP)

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

The associate is accounted for using the equity method. Pursuant to the shareholder agreement, the group has the right to cast 16.67% of the votes at shareholder meetings. The financial year end is 31 December 2019. For the purposes of applying the equity method of accounting, the financial statements of ESSP for the year ended 31 December 2019 have been used. These financial statements have been adjusted for a final dividend of €0.4m (£0.3m) declared by ESSP at its AGM on 24 March 2020. No other adjustments are required to be made for the effects of significant transactions between the 31 December 2019 and 31 March 2020.

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

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

FerroNATS Air Traffic Services SA

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

FerroNATS draws up its accounts to 31 December. For the purpose of these financial statements management accounts have been used to derive its performance as at 31 March 2020.

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

Aquila Air Traffic Management Services Limited

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

The group has recognised £1.3m (2019: £0.5m) as the carrying value of its investment in Aquila. This is less than a 50% share of Aquila's net assets of £6.1m (2019: £5.1m) at 31 March 2020. The difference is a result of impairment charges recognised due to differences in accounting policies and the uncertainty surrounding future profit forecasts.

During the year, Aquila repaid loan finance of £5.4m (net) (2019: £1.4m draw down) from the group. At 31 March 2020, the loan (including interest) outstanding was £16.8m (2019: £21.1m).

Searidge Technologies Inc

On 26 April 2017, NATS (Services) Limited incorporated a 100% subsidiary entity, NATS (Services) Canada Inc. On 28 April 2017, NATS (Services) Canada Inc. acquired 50% of the voting equity interest of Searidge Technologies Inc. (Searidge). Searidge works with airports around the world, providing technology that helps reduce delays, increase efficiency, and overall safety. This includes the delivery of digital tower solutions, which see air traffic controllers managing aircraft from remote facilities instead of in traditional airport towers.

Details of the purchase consideration, the net assets acquired and goodwill are as follows:

	C$m	£m
Purchase consideration:		
Cash paid	7.9	4.7
Acquisition-related costs	0.3	0.2
Contingent consideration	1.5	0.9
Total purchase consideration	9.7	5.8

Additional consideration is payable if the joint venture meets a cumulative EBITDA threshold of C$4.17m for the period 1 September 2017 to 31 August 2020, up to a maximum of C$1.5m at cumulative EBITDA of C$4.92m. The potential undiscounted amount payable under the agreement is C$nil for EBITDA below C$4.17m and C$1.5m for EBITDA above C$4.92m over that period. Every C$1 of EBITDA above C$4.17m earns C$2 of contingent consideration, up to the cap of C$1.5m.

The fair value of the contingent consideration is estimated to be C$nil as the joint venture is not expected to reach the EBITDA threshold of C$4.17m by 31 August 2020.

The carrying value of goodwill recorded at cost less any provisions for impairment is as follows:

	C$m	£m
Goodwill recognised on acquisition	9.2	5.5
Exchange differences	-	(0.2)
At 31 March 2019	9.2	5.3
Impairment losses recognised to 31 March 2020	(9.1)	(5.4)
Exchange differences	-	0.2
At 31 March 2020	0.1	0.1

35. Subsidiaries, joint ventures and associates (continued)

Searidge prepares its accounts in accordance with Canadian GAAP and its functional currency is the canadian dollar.

Searidge draws up its accounts to 31 August. For the purpose of these financial statements management accounts to 28 February 2020 have been used. No adjustments are required to be made for the effects of significant transactions between 1 March 2020 and 31 March 2020. The Searidge management accounts include unrealised tax losses of C$1.3m (£0.7m) that cannot be recognised in accordance with Canadian GAAP. The group has recognised a deferred tax asset of C$0.3m (£0.2m) on consolidation as the group considers that these losses will be set off against future taxable profits.

An impairment review of the goodwill recognised on consolidation has been performed based on the latest business plan. An impairment provision of C$9.1m (£5.4m) has been recognised in the year to 31 March 2020.

During the year, Searidge drew down loan finance of C$0.3m (£0.2m) from the group (2019: C$0.4m, £0.2m). At 31 March 2020, the loan (including interest) outstanding was C$2.8m (£1.6m) (2019: C$2.5m, £1.4m).

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

	2020				2019			
	Associate ESSP £m	Joint venture FerroNATS £m	Joint venture Aquila £m	Joint venture Searidge £m	Associate ESSP £m	Joint venture FerroNATS £m	Joint venture Aquila £m	Joint venture Searidge £m
Non-current assets	2.1	0.1	6.0	0.7	2.2	0.2	1.9	1.0
Current assets	29.7	9.3	57.6	3.8	29.2	7.5	71.8	3.5
Current liabilities	(19.2)	(3.7)	(36.9)	(1.3)	(21.0)	(3.3)	(52.7)	(1.9)
Non-current liabilities	(1.4)	-	(20.5)	(3.1)	(1.6)	-	(15.9)	(3.1)
Net assets of associate/joint ventures	11.2	5.7	6.2	0.1	8.8	4.4	5.1	(0.5)
Group share	1.8	2.9	3.1	0.1	1.4	2.2	2.5	(0.3)
Goodwill on acquisition of joint venture	-	-	-	5.5	-	-	-	5.5
Exchange difference on goodwill since acquisition	-	-	-	-	-	-	-	(0.2)
Other adjustments	-	-	-	-	-	-	-	0.3
Impairment provision brought forward	-	-	(2.0)	-	-	-	(2.0)	-
Impairment provision recognised in income statement	-	-	0.2	(5.4)	-	-	-	-
Carrying amount of the group's interest in associate/joint ventures	1.8	2.9	1.3	0.2	1.4	2.2	0.5	5.3
Revenue	52.6	15.0	101.6	7.1	54.3	13.7	101.4	7.2
Profit/(loss) after tax for the year	4.4	2.2	1.2	0.3	3.2	1.1	1.0	0.1
Group share	0.7	1.1	0.6	0.2	0.5	0.6	0.5	0.1
Impairment provision recognised in income statement	-	-	0.2	(5.4)	-	-	(0.1)	-
Group share of profit/(loss) after tax and impairment	0.7	1.1	0.8	(5.2)	0.5	0.6	0.4	0.1
Dividends received	(0.4)	(0.5)	-	-	(0.8)	(0.7)	-	-
Other comprehensive income/(loss)	0.1	0.1	-	0.1	-	(0.1)	-	-

36. Ultimate controlling party

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

37. Change in accounting policy

The group 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 group recognised right-of-use assets and lease liabilities 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 group's weighted average incremental borrowing rate on 1 April 2019 was 2.60%.

Practical expedients applied on transition

In applying the modified retrospective approach, the group 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 group 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 consolidated balance sheet at 1 April 2019 and the group's operating lease commitment at 31 March 2019 can be reconciled as follows:

	1 April 2019 £m
Operating lease commitment at 31 March 2019	84.0
Agreements determined as not giving rise to a right-of-use asset under IFRS 16[1]	(7.8)
Effect of discounting lease commitments within the scope of IFRS 16 at the date of initial application[2]	(11.3)
Effect of applying a different treatment of extension and termination options for leasehold land and buildings[3]	9.9
Effect of extending the term on airport equipment leases[4]	1.2
Effect of changes in indices or market rents affecting variable payments[5]	(0.7)
Lease liabilities due to initial application of IFRS 16 at 1 April 2019	75.3
Lease liabilities from finance leases (recognised under IAS 17) at 1 April 2019	1.4
Total lease liabilities at 1 April 2019	76.7

[1] The group 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:
- Leases of land and buildings from airports. NSL does not have the right to direct the use of these assets, the purpose of which has been predetermined and cannot be changed. NSL's rights are limited to operating the asset for the provision of air navigation services;
- 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 group'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 term on airport equipment leases assumed for the disclosure of operating lease commitments was the non-cancellable period of the lease. Under IFRS 16 the term has been assumed to be extended to include the period to which the group is reasonably certain that options to extend the leases will be exercised.

[5] 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 £1.4m)	68.4
Decrease in prepayments and accrued income	(1.6)
Decrease in accruals and deferred income	10.2
Transfer of finance leases from borrowings to lease liabilities	1.4
Recognition of lease liabilities	(76.7)
Impact on retained earnings	-

38. Events after the reporting period

In August 2020 NERL agreed a further £380m bank facility (see note 19) and in September 2020 NATS 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.

Balance sheet
at 31 March

	Notes	2020 £m	2019 £m
Assets			
Non-current assets			
Investments	4	141.0	141.0
Net assets		141.0	141.0
Equity			
Share capital	5	140.6	140.6
Share premium account	5	0.4	0.4
Retained earnings		-	-
Total equity		141.0	141.0

As permitted by section 408 of the Companies Act 2006 the company has elected not to present its own income statement for the year. For the year ended 31 March 2020 the company recognised a profit of £59.0m (2019: £59.0m).

The financial statements (Company No. 04138218) were approved by the Board of directors and authorised for issue on 22 October 2020 and signed on its behalf by:

Paul Golby
Chairman

Alistair Borthwick
Chief Financial Officer

Statement of changes in equity
for the year ended 31 March

	Share capital £m	Share premium £m	Retained earnings £m	Total £m
At 1 April 2018	140.6	0.4	-	141.0
Profit for the year	-	-	59.0	59.0
Other comprehensive income for the year	-	-	-	-
Total comprehensive income for the year	-	-	59.0	59.0
Dividends paid	-	-	(59.0)	(59.0)
At 31 March 2019	140.6	0.4	-	141.0
At 1 April 2019	140.6	0.4	-	141.0
Profit for the year	-	-	59.0	59.0
Other comprehensive income for the year	-	-	-	-
Total comprehensive income for the year	-	-	59.0	59.0
Dividends paid	-	-	(59.0)	(59.0)
At 31 March 2020	140.6	0.4	-	141.0

Notes to the financial statements

1. Cash flow statement

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

2. Significant accounting policies

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

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

Investments in subsidiaries are stated at cost less, where appropriate, provisions for impairment. Income from subsidiaries is recognised when received.

3. Profit for the year and dividends

Profit for the year has been arrived at after charging:

	2020 £m	2019 £m
Staff costs	-	-
Auditor's remuneration	-	-

	2020 No.	2019 No.
Executive directors	2	2
Non-executive directors	10	10
	12	12

The company incurred no charge to current or deferred taxes in the year (2019: £nil).

Dividends	2020 £m	2019 £m
Amounts recognised as distributions to equity holders in the period:		
First interim dividend of 20.97 pence per share (2019: 20.62 pence per share)	30.0	29.5
Second interim dividend of 20.27 pence per share (2019: 20.62 pence per share)	29.0	29.5
	59.0	59.0

4. Investments

	Investments in subsidiary undertakings £m
Investments at 31 March 2020 and 31 March 2019	141.0

The company's investments in subsidiary undertakings are as set out in note 35 to the consolidated financial statements.

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

5. Share capital and share premium accounts

These items are disclosed in the consolidated statement of changes in equity and notes 26 and 27 of the consolidated financial statements.

6. Financial instruments

The company held no financial instruments at 31 March 2020 (2019: none).

7. Ultimate controlling party

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

2019	Financial year ended 31 March 2019
2020	Financial year ending 31 March 2020
3Di	3 Dimensional Flight Inefficiency Metric
ACOG	Airspace Change Organising Group
ADS-B	Automatic Dependent Surveillance-Broadcast
AESOP	All-Employee Share Ownership Plan
AG	The Airline Group Limited
AIM	Aeronautical Information Management
AIREON	Aireon LLC, subsequently Aireon Holdings LLC
AMPRPS	Annual Management Performance Related Pay Scheme
ANSP	Air Navigation Service Provider
AQUILA	Aquila Air Traffic Management Services Limited
ATC	Air Traffic Control
ATFM	Air Traffic Flow Management
ATM	Air Traffic Management
CAA	Civil Aviation Authority
CAAPS	Civil Aviation Authority Pension Scheme
CANSO	Civil Air Navigation Services Organization
CDSB	Climate Disclosure Standards Board
CEO	Chief Executive Officer
CPI	Consumer Prices Index
CPNI	Centre for the Protection of National Infrastructure
DB	Defined Benefit Pension Scheme
DC	Defined Contribution Pension Scheme
DfT	Department for Transport
DNV GL	DNV GL is a quality assurance and risk management company
DSESAR	Deploying Single European Sky ATM Research
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
EC	European Commission
ESSP	European Satellite Services Provider SAS
EU	European Union
FerroNATS	FerroNATS Air Traffic Services SA
FRC	Financial Reporting Council
GAAP	Generally Accepted Accounting Principles
GDPR	General Data Protection Regulation
GHG	Green house gas
HMG	Her Majesty's Government
HMRC	Her Majesty's Revenue & Customs
IAS	International Accounting Standard
IASB	International Accounting Standards Board
ICAO	International Civil Aviation Organization
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standards
INEA	Innovation and Networks Executive Agency
ISO	International Organisation for Standardisation
iTEC	Interoperability Through European Collaboration
KPI	Key Performance Indicator
LAMP	London Airspace Modernisation Project
LHRA	LHR Airports Limited
LIBOR	London Interbank Offered Rate
LTIP	Long Term Incentive Plan
MOD	Ministry of Defence
NATS	NATS Holdings Limited and its subsidiaries, together the NATS group
NATS Services	NATS (Services) Limited
NERL	NATS (En Route) plc
NESL	NATS Employee Sharetrust Limited
NHL	NATS Holdings Limited
PPP	Public Private Partnership
R&D	Research and Development
RAB	Regulatory Asset Base
RAT	Risk Analysis Tool
RP1	Reference Period 1 (2012-2014)
RP2	Reference Period 2 (2015-2019)
RP3	Reference Period 3 (2020-2024)
RPAS	Remotely Piloted Aircraft Systems
RPI	Retail Prices Index
SEARIDGE	Searidge Technologies Inc
SES	Single European Sky
SESAR	SES ATM Research
SMS	Safety Management System
SPA	Strategic Partnership Agreement
STEM	Science, technology, engineering and mathematics
TANS	Terminal Air Navigation Services
TC	Terminal Control
USS	USS Sherwood Limited
UTM	Unmanned Traffic Management

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

6 Aireon LLC provides a space-based air traffic surveillance system with global coverage capable of tracking and monitoring aircraft in real-time. This improves ATC and surveillance over regions with limited or no radar coverage and backup surveillance for regions with full radar coverage. Aireon is a private company whose investors are Iridium Communications, NAV CANADA, ENAV, IAA, Naviair and NATS.

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

8 Link to Gender Pay Report: https://www.nats.aero/wp-content/uploads/2019/03/NATS-Gender-Pay-Report-2018.pdf

9 Link to NATS Slavery and Human Trafficking statement 2019: https://www.nats.aero/wp-content/uploads/2019/01/Modern_Slavery_Act-Statement_Jan_2019.pdf

10 Link to Responsible Business policy: https://www.nats.aero/wp-content/uploads/2019/07/NATS7224_Responsible_Business_Report_2018_V10.pdf

11 Link to NATS CDP Report: https://www.cdp.net/en/responses?utf8=%E2%9C%93&queries%5Bname%5D=nats
CDP, formerly the Carbon Disclosure Project, runs a global disclosure system on behalf of investors that enables companies and cities to measure and manage their environmental impacts.