

Chief Executive's review

The aviation sector appears to be at something of an inflection point now with respect to Covid. Air traffic volumes have grown strongly since the start of 2022, albeit with considerable variability from week to week and day by day, and reached close to 90% of pre-pandemic levels during May 2022. While this has presented challenges across the sector, throughout the pandemic we have retained the essential skills to support the recovery in aviation. This was one of our key considerations when assessing our options for cost reductions in response to Covid which were necessary to protect our liquidity. Our focus throughout has been ensuring we could safely support traffic regeneration while continuing to protect our employees. We remain of the view that this was the right decision for us to take.

We set three priorities for this financial year to: deliver a safe, efficient and resilient service; secure our long-term finances; and simplify our business to take advantage of opportunities which we expect to arise post-Covid. We have maintained these priorities for this coming year as they remain important and have added a fourth, which is to progress our carbon target zero plan. We are committed to both decarbonising our own estate as well as supporting the aviation sector in meeting its targets.

Air traffic volumes

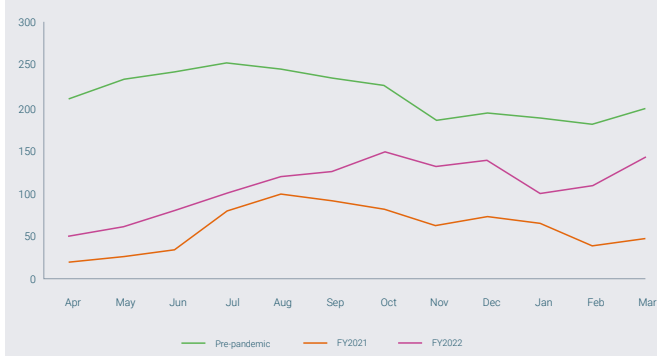
	2022 ('000s)	2021 ('000s)	Change (%)
Chargeable Service Units*	6,504	3,389	91.9%
UK flights	1,289	661	95.0%
Oceanic flights	305	164	86.0%

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

This year we handled 1.29m flights as air traffic volumes recovered to an average of 50% of 2019 volumes (2021: 661,000 or 26%). While undoubtedly positive, this is a relative improvement that needs to be put in context. We estimate that, since travel restrictions to control Covid were first introduced in March 2020 up to 31 March 2022, there have been 3.2 million fewer flights in UK airspace compared with pre-pandemic levels. The loss of revenue this has entailed has required a continuing focus on operating efficiency and liquidity.

During the year, air traffic volumes started to recover from May 2021 with the gradual lifting of domestic and international travel restrictions, reflecting progress with vaccination programmes in the UK and Europe. This growth was not uniform across our network with some airspace sectors and airports much busier than others. The emergence of the Omicron variant later in the year briefly curtailed the recovery but volumes picked up from February 2022.

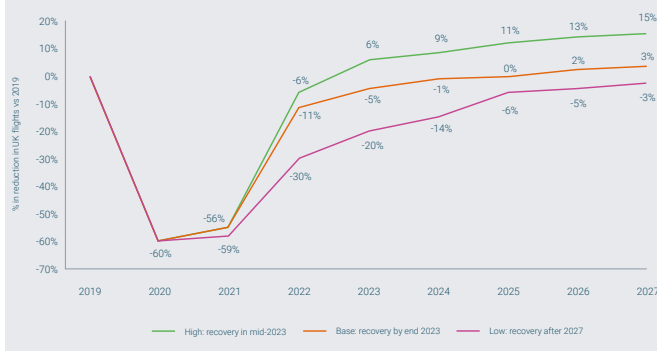
UK air traffic volumes ('000s)



While recent traffic levels have been encouraging, it remains to be seen whether the rate of recovery will endure through the summer and beyond given the challenging economic environment and geopolitical situation. Both factors make for an uncertain outlook and there is currently no consensus longer-term forecast across the industry.

Understanding the level of demand for our service underpins our operational resourcing, investment plans, service performance and our charges. NERL's NR23 plan was developed as the aviation industry started its recovery from the Covid pandemic and was based on October 2021 forecasts from Eurocontrol, Europe's network manager. Their seven-year recovery projections set out three scenarios which reflected assumptions on the strength of the UK's economic recovery and the ongoing response to Covid and its impact on aviation.

UK 7-year traffic recovery scenarios % reduction on 2019 flights (source: Eurocontrol)



The plan was based on the base traffic forecast, which assumes a recovery to pre-pandemic levels by 2025 and then to historically high levels during the plan period, with additional growth in the years beyond that.

Normally we would have stable trends and reliable estimates of future air traffic forecasts as we develop our price control plans. However, we now have had to offer a business plan covering a broad range of possible scenarios and outcomes. The ATC industry has never faced such a prolonged period of volatility and for this reason we have also planned for a plausible range of scenarios and indicated the trades-offs that would have to be made under each.

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In June 2022, Eurocontrol published a new three-year outlook for 2022 to 2024, which projects traffic levels for 2022 at below the base case recovery scenario shown in the graph above but rising above that level in 2023 and 2024. However the implications for air travel demand in the short and medium term remains unclear given cost of living pressures and the potential for higher jet fuel prices to impact air fares. Eurocontrol will provide its next seven-year forecast (covering the NR23 period) in October 2022. Given this uncertainty, it will be critical for the CAA to assess its proposals for NR23 in light of the latest forecast available to ensure prices and service performance outcomes are calibrated as closely as possible to projected traffic levels. We stand ready to assist the CAA with this assessment.

Securing a revised regulatory settlement

The development of NERL's business plan for the NR23 price control was a significant focus this year. It was developed in consultation with airline and airport customers, as well as being informed by passenger research (see page 29-30 for more information on the Board's engagement with stakeholders in this respect).

Customers generally supported the continuation of safety, capacity and environmental metrics and targets while ensuring these are appropriately calibrated and sufficiently stretching for the level of flights forecast. They also supported a margin of resilience in operational resourcing to accommodate the potential for traffic to exceed base case demand. Passengers valued safety, environmental factors and resilience more than cost.

Overall our plan delivers:

- > a safe air traffic system under any recovery scenario, which continues to be our top priority;
- > an efficient service level, similar to RP2 (2015-2019), underpinned by operational and technical resilience;
- > cost effective prices to support industry recovery, including deferring recovery of the 2020 to 2022 revenue shortfall;
- > capacity increases to support 2027 traffic growth up to 15% higher than 2019 volumes, which themselves were the highest levels ever experienced;
- > enhanced environmental and fuel benefits consistent with achieving UK aviation's target of net zero carbon emissions by 2050 and meeting increased societal expectations of aviation; and
- > appropriate financial resilience against a slower recovery or future traffic/economic shocks, essential for maintaining the critical national infrastructure we manage.

In order to achieve these objectives during NR23 we will continue to develop and train the next generation of air traffic controllers to mitigate expected retirements, safely meet projected demand and provide further operational resilience. We will also progress our technology transformation programme, started in RP2 (2015 to 2019), while sustaining our legacy technical equipment, and we will advance airspace modernisation to improve environmental performance and accommodate future traffic growth. We will invest in solutions which support our target of net zero carbon emissions across our estate by 2035.

The CAA is expected to reach its final decision in the first quarter of 2023 on the NR23 price control, as well as its retrospective review of 2020 to 2022 for the impact of Covid. In order to achieve the plan the price control will need to provide the resources to deliver the operational service, technology change and airspace modernisation to meet stakeholder priorities for the future.

Strengthening our UK Airports portfolio

Our airport customers have continued to recognise the support that we have been providing to them during this very challenging period. I was delighted that we were able to extend our strategic partnership agreement with London Heathrow Airport to 2030. We have also started to work on the transition of Gatwick Airport's ATC and engineering service which we will provide from October 2022. We now have the longest order book of contracts with airport customers in recent years and can focus on supporting them with the return of traffic and implementing new technology to support service performance and efficiency.

Employee relations

Alongside the company, our employees have faced exceptional challenges, both professional and personal during this period. The company has experienced its worst ever financial threat and continues to face significant uncertainties from Covid, the rate of traffic regeneration and the geopolitical situation. Meanwhile we are financing the deferral of the recovery of our revenue entitlement in order to support the sector's recovery. Nevertheless, we have done everything we can to support our employees, protecting everyone as much as possible, both in terms of health and wellbeing as well as job security and pay.

While the economic environment has made for difficult conversations and a challenging period for industrial relations, we have sought to recognise everyone's contribution in supporting the company over the past two years. Despite the challenges the company has faced there have been several actions taken to protect employees during the pandemic, including for furloughed staff. At the peak of the pandemic's impact on traffic volumes in summer 2020, we had 2,180 staff actively furloughed, almost all of whom continued to receive 100% of their pay. We also continue to provide attractive benefits, such as the defined benefit pension scheme for which we will contribute 66% of pay from 2023 while its 1,600 employee members generally contribute 6%. We recently offered staff a pay rise from January 2022, together with a lump sum to recognise the impact of current inflationary spikes. While, similar to many companies, challenges inevitably remain we continue to engage and consult in a constructive and positive manner seeking to balance the recognition of the contribution our employees make and the wider challenges facing the aviation sector.

A central priority is to significantly advance our progress toward creating a truly diverse and inclusive business at all levels to ensure that we retain and attract the very best talent. I feel that this year we made some real progress on that journey. We established a diversity and inclusion (D&I) steering group, which I chair, which includes D&I leads from across the business and our employee networks and trade union representatives.

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This followed the creation of a D&I vision by employees during National Inclusion Week, which we marked for the first time this year with a series of virtual sessions on D&I which engaged people across all areas and levels of the business. This is the first time that, despite the measures we have taken over the years to improve diversity, we have had a forward-looking and, rightly, ambitious D&I vision, which states what type of organisation we want to be. The most valuable aspect though comes from creating an inclusive, safe and enjoyable place to work for all of us. We have started to recruit again, after freezing new hires due to Covid, and we have reviewed our processes to ensure that we attract a broad range of talent enabled by a fair and inclusive process.

We are continuing to develop our operational service resilience as traffic recovers, and this is reflected already in our response to operational training. Our training college, which was closed during Covid, is now undertaking ab initio operational training. We have also continued to extend the sector validations of our air traffic controllers, achieving more new validations than planned.

Our S172 statement provides a comprehensive review of the Board and executive engagement with employees in the year.

Our role in a sustainable future

In 2020, the UK aviation industry, including NATS, made a commitment to net zero emissions by 2050 and during consultations on the NR23 plan customers and passengers supported ambitious environmental targets. Our plan aims for a reduction in carbon emissions of 4.4% between 2020 and 2035, in line with independent assessments of the contribution air traffic control can make to overall aviation emissions reduction.

We will achieve this through a range of measures including optimising flight paths to reduce aircraft fuel burn and CO₂ emissions and delivering airspace modernisation. This will sit alongside the benefits of our current environmental programme, which has delivered annual emissions savings of around 1.5 million tonnes of CO₂ each year compared with 2006 levels.

While the greatest CO₂ savings for aviation are expected to be made through new aircraft and engine technology and sustainable fuels, these are still many years away. In the short-term, managing our airspace to enable more efficient flying can play a crucial role in mitigating emissions. During the year we implemented free route airspace over Scotland by removing the long-established air routes above 25,000 ft, allowing aircraft the freedom to plan and fly their optimal route. This flexibility has not previously been possible, with our airspace structure requiring aircraft to follow predefined routes. Up to 2,000 flights a day use this crucial part of UK airspace, which supports 80% of transatlantic traffic. This introduction, which is the biggest ever geographical airspace change in the UK, will help reduce airline costs, flight time, fuel burn and save 10,500 tonnes CO₂ emissions annually. We are now targeting free route airspace over Wales and South West England in 2023.

Progress with the wider and more complex airspace modernisation of the South East and London area, which we have planned for NR23, has been slowed by Covid but remains a stakeholder priority which can only be delivered as a collaboration of ACOG, NATS, airlines, airports, the CAA and the UK government.

In spite of the challenges the pandemic has posed, jointly sponsored by London Luton Airport and following extensive public consultation in 2021, we implemented a change to the airport's arrival routes which segregated them from Stansted Airport to reduce complexity and ensure continued safety. This change increases capacity in the Luton and Stansted area in time for summer 2022 traffic. It also supports the resilience of our service at these airports to changing patterns of demand between these airports, which was a focus of the CAA's 2020 Project Palamon report.

Acquiring Searidge Technologies

During the year we acquired full ownership of Searidge, a Canadian digital tower and artificial intelligence company, in which we have held a 50% interest since 2017.

Since our initial investment in Searidge it has established itself as a world leader in the growing digital tower market. Today, it is involved in supporting our work with CAAS (Singapore's civil aviation authority) to deliver Singapore's innovative smart tower, as well as leading on Airport Authority Hong Kong's project to deploy a single digital tower and apron platform at Hong Kong International Airport. Searidge's work supporting us with Heathrow's 'tower in cloud' project is well known, and it has many direct customers in Europe and North America as well. We expect digital towers to become an important part of the future of ATM, and Searidge is pivotal in how we intend to support our customers in this systemised, digitised environment.

Concluding remarks

We clearly still have some way to go before the industry is recovered and while the sector is optimistic for a stronger summer this year than last year, the longer-term outlook for air travel demand remains uncertain due to the current geopolitical landscape, economic situation and continued presence of Covid. There is also the risk that the traffic levels recover unevenly across our network. We have become accustomed to operating with uncertainty over the last two years and have taken steps to ensure that we are more operationally and financially resilient to a range of recovery outcomes across our airspace and airports activities. In 2020 we agreed with the CAA that it was appropriate to defer the start of the next price control until 2023, in the expectation that the operating environment and outlook for air traffic volumes would be more stable and reliable as a basis for the NR23 price control. However, significant forecasting uncertainty remains. While our NR23 business plan is for a resilient service which can cope with more variability in outturn traffic from the levels currently forecast, we are looking to the price control to provide the resources and incentives for such an environment.



Martin Rolfe, FRAeS
Chief Executive

