
THE AIRPORT OPERATOR

THE OFFICIAL MAGAZINE OF THE AIRPORT OPERATORS ASSOCIATION

**UK AIRPORTS
HAVE
AMBITIOUS
VISION**

to achieve net zero.



Features

LONDON CITY AIRPORT
chief optimistic about economic recovery

SMART AIRPORTS
How innovative solutions are shaping the future of airports

HOW BIRMINGHAM AIRPORT
helped thousands of evacuees from Afghanistan to the UK

NEWCASTLE AIRPORT
describes how it will achieve net zero by 2035



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KAREN DEE

Introduction to The Airport Operator

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Welcome to this edition of The Airport Operator, which is being published to coincide with our annual conference on the theme "Back to the Future".

This year's conference title reflects our hope that UK airports can now start to contemplate a future which might be more like the normality that we lost so suddenly in the spring of 2020. Last month the aviation industry was relieved to finally see the Government announcing some significant easing of international travel restrictions. We hope that will make a real difference to consumer confidence and encourage people to bring forward their bookings. That in turn should have a positive impact on our airlines as we move into the more difficult winter period.

Even so, we have told Government that this doesn't count as "job done" for our industry. We see this very much as just getting to a point of restart, but it is not yet recovery. We have emphasised to Government that they still need to produce a trajectory back towards zero restriction travel when the pandemic circumstances allow. That should be the aim. We shouldn't just accept that we will forever have restrictions. As soon as they are no longer needed, they should be removed.

For now, we are still in a place where UK restrictions are more onerous than they are across the EU and all the data shows that these additional restrictions have not delivered any benefit in health. We see figures that suggest that EU passenger numbers are 60 to 70% of 2019 levels, while we are still in the 20s and 30s - in some cases lower. We haven't had a good explanation for the extra restrictions and we have also struggled to bring all four nations of the UK together so that the rules are the same across the country. The nature of aviation means that it makes no sense at all to impose different regulations in different parts

of the UK.

Looking ahead, we are keen that the Government should work with us on the policies and financial mechanisms that should be put into place to help the aviation industry drive its own recovery and to deliver on the Government's objectives on improving connectivity, levelling up, securing global Britain and bringing forward the build back better sustainability agenda.

I have been struck, pleased and genuinely impressed by how clear airports are about their commitment to that agenda, even under what have been extremely difficult circumstances. Our forthcoming report on aviation decarbonisation will demonstrate that UK airports are implementing an innovative and wide range of measures as their contribution to emission reduction. There is a very clear role for Government to set a framework, to lead and to invest to help bring that agenda forward and to turn it into a reality. With a bit of pump-priming to get sustainable aviation fuels going, for example, the UK could really become a leader in the field.

I am really looking forward to discussing these themes of zero emissions and powering the recovery at this year's AOA conference. It will again be an online event, but I very much hope that over the coming months we can get back to a more normal AOA programme, including face-to-face meetings with our members.

Meanwhile I hope that you will enjoy the conference and find much of interest in this issue of our magazine. It includes reflections on the last 18 months and on sustainability from the leaders of Birmingham, Bristol, London City and Newcastle airports. There is also a view from a General Aviation airport, as well as some forward-looking articles from some of the leaders of the companies that support and supply our industry, led by our Corporate Partners, Intel and Thales. ■

Karen Dee, Chief Executive



CITY AIRPORT CHIEF OPTIMISTIC ABOUT RECOVERY - INCLUDING IN BUSINESS TRAVEL

London City Airport CEO, Robert Sinclair, has told The Airport Operator that he is more optimistic about the airport's recovery than at any time in the last 18 months.



He expressed an absolute conviction that as people start to return to their offices there will also be a rebound in the business travel which has given the airport its unique profile.

Asked about Government help for UK airports, Sinclair said that the most important thing that the UK Government could do would be to develop a roadmap for the return of restriction-free international travel for all in the months ahead to enable airports to trade their way back to profitability. He welcomed the Government's decision to ease travel restrictions from this month and said the replacement of the traffic light system "with a simpler and more risk-based approach based on the health status of passengers is a confidence boost for London City and our airlines heading into the autumn".

Like many other airport and airline chief executives, he had been critical about the effect of the Government's constantly changing traffic light system for international travel which, he said, had been hugely damaging to passenger confidence and had

been unjustified by evidence. He urged the Government to move further to an EU-style regime with no testing requirements at all for the fully vaccinated, except for those travelling from red-list countries.

Before the pandemic hit, London City Airport had been celebrating its 2019 achievement of reaching the milestone of 5 million passengers a year and had been confident that growth would continue in 2020. Instead, the airport closed to commercial passengers completely for three months in spring 2020 and saw an 82% decline in annual passenger numbers compared to 2019. Due to the delayed restart to international travel this summer, Sinclair expects that the 2021 numbers will be even less.

Meanwhile, the number of full-time equivalent employees at the airport has been reduced by over 40%. The airport's ambitious £500 million development programme has been put on hold until a sustained recovery is in place, though key airside infrastructure improvements, including a full-length parallel taxiway and eight new stands capable of handling larger and

more fuel-efficient aircraft, were completed in 2020.

Today, Sinclair's optimism for the future is based partly on the Government's decision to simplify its international travel rules and partly on the growing pace of the airport's recovery over recent weeks. With the highest proportion of domestic passenger volumes of any London airport, routes to Belfast, Edinburgh and Glasgow have performed well and the July/August period also saw some recovery in travel to

"The most important thing that the UK Government could do would be to develop a roadmap for the return of restriction-free international travel for all in the months ahead to enable airports to trade their way back to profitability".

traditional Mediterranean summer leisure destinations. Looking ahead the airport's focus is increasingly on prospects for the resumption of international business travel, with the popular KLM route to Amsterdam already restored, Lufthansa restarting its flights to Frankfurt, SWISS returning on Zurich and British Airways restarting services to Amsterdam, Dublin, Geneva and Rotterdam.

Sinclair said he did not agree with those who have predicted the end of business travel, citing survey evidence from business leaders, the views of corporate clients and forward bookings. He acknowledged that business travel would be slower to resume than leisure and travel to visit friends and relatives and he also believes that in future many businesses will operate a hybrid model that will continue to include virtual meetings. However, he said he was convinced that travel for client meetings, internal strategy meetings and conferences will rebound and will be seen as vital for businesses to thrive.

A key focus for London City Airport in the future, as it has been for nearly a decade, will be the role that it plays in sustainable aviation, both in terms of its own ground infrastructure and the contribution that it could make to sustainable flights. A strategy in place since 2013 has halved the airport's own carbon footprint, thanks partly to the use of low energy lighting and heating, sourcing electricity from renewable sources and the introduction of on-site solar energy.

The airport is also proud of its status as the UK airport that has the highest proportion of passengers (nearly 70%) coming to the airport by public and sustainable transport modes, thanks largely to the Docklands Light Railway. "Very frustratingly", Sinclair notes, London's new east-west rail line, the Elizabeth Line, will pass only 150 metres away from City Airport's terminal building without stopping. He says that building a station on the line to serve the airport is "absolutely



*Robert Sinclair, CEO,
London City Airport*

part of our longer-term ambitions".

Sinclair and his colleagues believe that the airport is "the perfect test bed for sustainable flights into the next decade and beyond", thanks to its central urban location, its dependence on short-haul flights and London's innovation track record. It is already involved in several experimental projects, including a government-sponsored project to look at the supply and use of hydrogen at the airport as a power source and a project with Heathrow, Rolls Royce and others to facilitate domestic electric aviation.

A key sustainability partner for London City Airport is Embraer, the global aerospace company headquartered in Brazil which accounts for nearly 90% of all movements at the airport. The two

are working, as part of a consortium, to explore the feasibility of electric vertical take-off and landing (EVTOL) aircraft, or "air taxis", to operate in London with Sinclair anticipating that trials could begin "within a matter of years".

Meanwhile, in September London City Airport celebrated the arrival of a new aircraft that is emblematic of its hopes for more sustainable flying, for the recovery of business aviation and for potential new routes in the future. Embraer said that thanks to a reduction of almost 20% in fuel consumption and a noise footprint 63% smaller than previous generation aircraft, the E190-E2 would deliver not only significant reductions in emissions but also a much quieter experience for local residents.

The airport described the SWISS flight operated by Helvetic Airways from Zurich as "a significant milestone", demonstrating its collaboration with manufacturers and airlines to introduce more low-emission, low-noise aircraft to the airport as well as re-establishing a vital business connection. The E190-E2 could almost double the available range from London City Airport to more than 4,000 kilometres, bringing destinations such as Casablanca, Istanbul and Moscow within reach for the first time. ■

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AOA CHAIR SAYS GOVERNMENT MUST WORK WITH THE AVIATION SECTOR TO SPEED THE RECOVERY

When I became AOA Chair in 2019, I could not have imagined the crisis that would engulf our sector due to the COVID-19 pandemic. Through this unimaginably difficult time, airports have showed resilience and fortitude to keep going even with the lack of a specific financial package and the continual chopping and changing of rules concerning international travel.

Airports have dealt with this unprecedented challenge by taking steps to safeguard operations, their financial future and staff, although given the scale of the pandemic's impact, airports have also had to make difficult decisions around redundancies. Even amidst the crisis, airports continued to provide lifeline services to the Highlands & Islands communities and the UK Crown Dependencies and freight services to ensure vital supplies (including medical supplies) arrived in the UK.

As we now hold this second virtual AOA Annual Conference, I am hoping

that we can look forward. This is very much an opportunity to turn these awful 19 months towards rejuvenation and re-growth for the sector.

This will only be possible through Government working together with the sector. The Government's economic plans must and will need to include aviation for our mutual success. For example, it is vital that international trade opens up as this provides opportunities for bringing investment to the UK. Aviation plays its role in that, while also benefiting from the travel and freight movements that are necessary for trade. The reverse is also true: a slow

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“Through the Sustainable Aviation coalition, UK aviation has committed to net zero by 2050 – a world first for a national aviation industry”.

recovery of connectivity generally and business-focused destinations in particular will have a significant negative impact on employment and the economy, including the aviation sector.

Furthermore, the Government's agenda on levelling-up will require aviation. It has already been hampered as English regions outside London and the South-East along with the devolved nations have seen a disproportionate reduction in capacity (especially on long-haul routes) during 2020.

It is in the interest of the UK and devolved governments' own ambitions that aviation recovery is actively encouraged and supported. As an industry that is vital to the UK's future prosperity, given our role in connecting the UK to global trading and investment opportunities that bring growth to regions across the UK, it is aviation that provides an investment in the UK's future. Airports are committed to playing their part in implementing this.

Finally, the UK aviation industry is a global leader in sustainable aviation. Through the Sustainable Aviation coalition, UK aviation has committed to net zero by 2050 – a world first for a national aviation industry. Now should be an opportunity to build back better, returning hopefully to 2019 passenger levels but not 2019 carbon emissions and noise impacts. There are further opportunities to build back sustainably in and



*Baroness McGregor-Smith
CBE – Chair, Airport
Operators Association*

around airports. Most of these would normally be (part-)funded by airports and the wider aviation industry. However, the COVID-19 pandemic will result in lower levels of capital investment. This should not lead to a hiatus in the industry's steps to reduce its environmental impact – these cannot be lost years.

These, and other topics, will be discussed at the AOA Annual Conference. I look forward to hearing the contributions of our speakers and

our audience and hope that we will leave inspired and ready to rise up from the depths of the pandemic. ■

**Baroness Ruby McGregor-Smith
CBE is Chair of the Airport
Operators Association.**



GENERAL AVIATION AIRPORT ON TRACK FOR DUAL USE WITH VEHICLE TESTING CENTRE

A Nottinghamshire General Aviation airport is likely to become the new home of a vehicle testing centre next year, with the runway to be used both for flying and car safety testing.

Gamston Airport, near Retford, is on course to be acquired by Thatcham Research later this year, with vehicle testing operations expected to start in spring 2022 alongside the airport's existing flying operations.

Airport Manager, Evangelene McLeod, told The Airport Operator that she was "excited about the opportunity" and believed that it would "take Gamston from strength to strength". She was "optimistic that

Thatcham Research will strengthen Gamston Airport's position, both strategically and technologically".

Thatcham Research, the motor insurers' research centre, said the proposed development would "allow us to increase the already significant contribution we make to vehicle and road safety and secure a sustainable future for aviation. Our investment will create a dual-purpose facility that North Nottinghamshire can be proud of, and it will also secure a future

"During the first lockdown, when private flying and flight training were both severely restricted, aircraft movements and fuel sales fell by around 80%".



Gamston which allowed McLeod to bring back all the members of the team who had been furloughed. "The staff were very keen to come back" she said. "Everybody who works here at Gamston does so because they are passionate about aviation and were pleased to see the sector pick up again. The turning point was the return of flight training. As soon as training could resume, we knew the airfield would become busy again which is when we brought our full team back into work".

The part of the business that has been slowest to recover has been recreational private flying, with half of the hangars at Gamston being occupied by privately-owned aircraft. McLeod speculates that the slow recovery of this sector is partly a reflection of some individuals facing pandemic-related financial difficulties but mainly because of the current high cost of Avgas100LL - the type of aviation fuel used in small piston engine powered aircraft by the General Aviation community. She hopes that as the price of Avgas100LL stabilises post-pandemic, recreational flyers will return.

whereby aviation will continue to have a home at the site".

Gamston Airport, originally built as a Royal Air Force aerodrome during the Second World War, describes itself as "the friendliest and most flexible General Aviation facility in the UK". It has had a challenging 18 months during the Covid-19 pandemic but decided at the outset to stay open throughout.

McLeod said that during the first lockdown, when private flying and flight training were both severely restricted, aircraft movements and fuel sales fell by around 80%. In normal times the airport is busy with training flights every day, so at the beginning of the pandemic she said it was "quiet and strange" with half of her team on furlough. While all the private aircraft were grounded and the flying schools closed, what kept the airport operational were the emergency services, other critical and military flights.



She said that the airport had been fortunate that it is convenient for the emergency services and military training aircraft. "It meant that we could stay open. We remained busy because everywhere else was forced to close. Myself and the staff felt it was critical to continue. We are here to provide a service and none of those obligations disappeared".

Charter flights and other overseas commercial activity began to recover from the spring of this year as restrictions on foreign travel started to be lifted, but McLeod said the big surprise had been a boom in flight training. She attributes that to a variety of factors, including pent-up demand from people who had been prevented from training during the lockdowns as well as "an influx" from commercial pilots who have returned to flight training, having been furloughed or unfortunately made redundant.

The reopening of the private flying schools was the turning point for

In conversation with her, it becomes very apparent that McLeod, still just 28, loves the atmosphere of a General Aviation aerodrome. She studied Mechanical Engineering at Sheffield Hallam University, where she was the Female UK undergraduate mechanical engineering student with the highest mark in their final year of study. From there she went to the FTSE 100 aerospace company, Meggitt, joining their global graduate engineering programme, and then on to Gamston early in 2020.

Explaining the move, she said: "I was pursuing a job somewhere which had a vibrant, varied atmosphere every day. The sense of community here is strong, resilient and passionate. No two days are the same. Gamston has an amazing community spirit, filled with great people who are all motivated by their passion for aviation. That has surpassed all of my expectations". ■

HOW THE AOA BOARD SOUGHT TO HELP ITS AIRPORT MEMBERS THROUGH THE PANDEMIC - A VIEW FROM DEPUTY CHAIR, NICK BARTON

Useful and frustrating are the two contrasting words that Nick Barton reaches for as he describes the work of the AOA Board during the 18 months of the pandemic.

Barton, CEO of Birmingham Airport and current Deputy Chair of the Board, has mixed feelings about the Board's work during the most challenging crisis that UK airports have ever faced.

On the positive side, he said that the weekly meetings had been very useful in providing a forum for airport leaders to exchange experiences as the crisis unfolded and in ensuring that the AOA's management team, led by Chief Executive, Karen Dee, always had an up-to-date sense of the airports' priorities.

On the negative side, he said that it

"The AOA's management team, led by Chief Executive, Karen Dee, always had an up-to-date sense of the airports' priorities".

had been frustrating for the Board to realise that the influence on decision-making of the Department for Transport, the AOA's main point of

contact with government, appeared to be extremely limited, with 10 Downing Street, the Treasury and the Department of Health all apparently more influential.

Barton said that, although the Board had been forced to switch to virtual meetings, the frequency of meetings (every Monday) and the unusually high attendance rates (+90%) meant that Board meetings had offered tangible benefits in helping airport CEOs to exchange views and to better understand rapidly changing events. Speaking personally, he said that he had found it "very helpful" to be able to speak to other CEOs and to check

that what they were doing was in line with his own approach in finding a way through “the fog of war”.

He also had praise for Dee and her small team who, he said, had been “steadfast and resilient” throughout the crisis and had shown a high level of understanding of airport concerns. A larger and better resourced team might have been able to achieve even more, but, given the financial challenges that all airports were facing, he acknowledged that the team had adopted “a balanced approach based on the realities of life”

Reflecting on the AOA's representations to Government, he said it was clear that Ministers and officials at the Department

for Transport had listened to the concerns that airports had expressed, but what was much less clear was how far those concerns were appreciated by others in Government who appeared to have a greater influence. Another challenge had been that, because health is a devolved issue, the problems facing airports in Scotland, Wales and Northern Ireland were not always the same as those facing English airports, making it harder for the AOA to speak with a single voice.

Most frustrating of all, he said, had been the moment when people in Government had discontinued bilateral engagement with the aviation sector because they felt that the sector was leaking the content of discussions. Barton

said he saw no evidence that was the case, “but the net result was that the trust between us and Government for some reason evaporated”. The result, he said, had been much less effective dialogue and “not the way we should be communicating with Government at all”.

On a more optimistic note, he said that the AOA Board welcomed the changes to the UK's international travel rules announced by Transport Secretary, Grant Shapps, in September and was hopeful that they would “strengthen consumer confidence and allow the UK aviation industry to finally start to recover”. ■



BIRMINGHAM AIRPORT CEO TELLS THE STORY OF HOW HIS AIRPORT HELPED THOUSANDS OF EVACUEES FROM AFGHANISTAN ARRIVING TO THE UK

It was, recalls Birmingham Airport CEO, Nick Barton, an “Alice in Wonderland moment”.



*Nick Barton, CEO,
Birmingham Airport*

On one side of the airport passengers were flying off for their summer holidays, setting off to visit friends and relatives or leaving on business trips, completely unaware that “down the rabbit hole” on the other side of the airport thousands of exhausted and anxious evacuees from Afghanistan were arriving on a series of rescue flights from Kabul Airport.

Over a two-week period in the second half of August the airport remained open around the clock to provide a warm welcome to over 8,000 non-military Afghan and British nationals escaping from the chaos that had engulfed the airport at Kabul.

It was a complex operation that at the time was conducted “under a cloak of secrecy”. Barton said he took the decision not to talk about it to the media in August partly because “it was not our story. We were simply welcoming them to the UK. It was their story to tell. Also, we didn’t know what state the individuals would be in because of the carnage that we all saw unfolding at Kabul. Finally, I didn’t want to put my team under any more pressure than was necessary to deal with what was already a very difficult and trying situation”.

Now the complex and sensitive operation, which welcomed a

Over a two-week period in the second half of August the airport remained open around the clock to provide a warm welcome to over 8,000 non-military Afghan and British nationals escaping from the chaos that had engulfed the airport at Kabul.



majority of the total civilian evacuees that were brought into the UK, is complete and Barton is keen to pay tribute to the tireless efforts of the airport community and the voluntary, charity and government agencies who coordinated it.

Around 100 volunteers signed up to ensure that the needs of the arriving evacuees were met 24 hours a day and seven days a week. Together the airport and the voluntary sector provided thousands of hot meals, snacks and fruit. The volunteers set up a prayer room and gave blankets, baby products, clothing, toiletries and first aid support to the new arrivals.

Barton said that the volunteers had given “incredible levels of support” for a project that had been both time-consuming and emotionally draining. It was, he said “a very impressive team and it actually became a team-building event. People got really caught up with the idea of helping the evacuees against a background of 18 months of endless challenge for the airport and then here they were having the

opportunity to do something really worthwhile”.

Looking back on the airport’s experience of the coronavirus pandemic over 18 months, Barton said that at the outset Birmingham Airport had faced a “nightmare scenario”. In terms of passenger volume, 99% of it had disappeared, yet the airport still had to maintain the operating capability that would initially allow it to serve the remaining 1% and then to support a long and slow recovery. Nearly 300 airport jobs have been lost, with the original 860 airport staff now pared back to 587, a figure which Barton does not anticipate will rise significantly, reflecting permanent steps that the airport has taken to improve efficiency. “We need to be open” he said “about the fact that the future is going to be tough. Yes, we have survived, but now we have to recover”.

Barton himself took some comfort at the outset of the pandemic from his recollections that over 30 years the aviation sector had recovered eventually from multiple crises,

including previous flu epidemics, volcanic ash, the Gulf War and financial crashes. "You name it" he said "and the industry has always prevailed in the end. We will do so again, even if, at this stage, we can't be certain how long it will take".

His expectation is that this year Birmingham Airport's passenger numbers will be down to about a quarter of its pre-pandemic total of just under 13 million passengers a year – in line with the overall performance of UK airports, but well below current passenger levels in the rest of Europe and the United States. The discrepancy can be explained, Barton believes, primarily by the simplicity of the EU's vaccine pass and the continuing strength of the domestic market in the US.

Asked to comment on the ever-changing and costly UK international travel rules, Barton opts to be diplomatic, merely noting dryly that by insisting until this month on PCR tests for all arriving international passengers the Government had introduced "a spectacularly expensive regime which has been funded by the travelling public". The tiny volume of genomic sequencing carried out had come at "an extraordinary cost", with Barton estimating that over half a billion pounds had been wasted on PCR tests that had not been sequenced for variants of concern.

That said, he responds positively to the rule changes announced in September, saying: "We welcome plans for the phased relaxation of travel rules, which incorporates the benefits that vaccinations provide and will make international travel more affordable and straightforward for travellers. Having more simplified rules with a single red list and cheaper testing will strengthen consumer confidence and allow the UK aviation industry to finally start to recover". Barton said that beyond these changes he would like to see the complete removal of double testing for vaccinated travellers and a continual review of the red list to open more global destinations as

We welcome plans for the phased relaxation of travel rules, which incorporates the benefits that vaccinations provide and will make international travel more affordable and straightforward for travellers.

infection rates decline.

Looking ahead a few years Barton expresses confidence that Birmingham Airport will eventually be able to "pick up where we left off", referencing growth through to 18 million passengers a year and the prospect of securing significant new destinations, including New York and Hong Kong.

His optimism for the future is built on a series of considerations, including the airport's huge catchment area – 38 million people live within two hours' drive of the airport, a number bigger than any other UK airport. There is also the pending arrival of HS2, which will cut the rail journey time from the airport to central London to just 37 minutes. As Barton put it: "HS2 has come along and dramatically improved the appeal of development in the region. It is literally on our doorstep. We have got a foreign direct investment case being driven by HS2's mere existence, even though it is not operating yet and won't be for a number of years. The fact that it has got diggers on the ground is driving investment already into this region".

According to the Office of National Statistics, no region in the UK suffered a bigger hit to its economy during the pandemic than the West Midlands, but Barton says there is now a remarkable sense of confidence about the region's economic prospects, symbolised by the September opening of a new Goldman Sachs office in Birmingham city centre. Goldman considered 10 cities across the UK

for its new office, finally settling on Birmingham because of the strength of its talent base – a decision which West Midlands Mayor, Andy Street described as "an incredible vote of confidence for the city and the region".

Beyond the airport's recovery from the pandemic, Barton said that Birmingham Airport's biggest priority over the next decade will be delivering on the promise that it made in 2019 to achieve net zero carbon emissions by 2033. He said that the details of how the target will be delivered are still being worked on, but no-one at the airport is "anything other than crystal clear" that a plan will be worked out and implemented and that the target will be met. He said that the plan will certainly include a series of investments in green power sources and there will also be consideration of how the airport's infrastructure will need to change in the future to accommodate electric aircraft. ■

Birmingham Airport's biggest priority over the next decade will be delivering on the promise that it made in 2019 to achieve net zero carbon emissions by 2033.

PRISON TO PROTECTION? WORLD LEADER IN AIRPORT COUNTER-DRONE SOLUTIONS ORIGINATED IN A MEXICAN PRISON CELL

D-Fend Solutions, the AOA's newest Gold Member, is currently a leading provider of innovative counter-drone defences to airports around the world – but it all started in a prison cell in Mexico.

Five years ago, the company's Israeli co-founder and CEO, Zohar Halachmi, was on a business trip to Mexico, in an unrelated industry, when a prison official he was pitching to threw open a door to reveal a room full of drones, explaining that they had been used for drug smuggling into the prison.

Halachmi told The Airport Operator that the visit had inspired him to investigate the fast growth in the use of drones worldwide across business sectors. Eventually, he concluded that there was a significant gap in the market for drone-defence technology that would enable airports to identify



Zohar Halachmi, CEO,
D-Fend Solutions

and neutralise dangerous drones, while ensuring both passenger safety and business continuity.

Before co-founding D-Fend Solutions, Halachmi was the founder and CEO of two mobile and enterprise application start-up companies and held senior positions in global and public corporations. He is a graduate of both the Haifa-based Technion - Israel Institute of technology, rated the top university in both Israel and the Middle East, and Tel Aviv University, Israel's largest, and was a lecturer at both.

Explaining D-Fend Solutions' rapid growth, Halachmi said that the Israeli-headquartered business benefits from Israel's reputation for innovation and its cluster of highly

creative technologists as well as the company's commitment to a multi-disciplinary approach. These factors taken together represented, Halachmi said, D-Fend Solutions' "secret sauce".

Today D-Fend Solutions' flagship offering, EnforceAir, is deployed in airports of all sizes around the world. EnforceAir automatically executes radio frequency, cyber-takeover of rogue drones for safe landings and safe outcomes. Along with ease of operation, one of the most important benefits is the preservation of continuity. Airports' communication systems and approaching planes are unaffected and airports can continue to use their own authorised drones for perimeter surveillance and aircraft inspection, with no disruption.

Halachmi said that the 2018 drone scare at Gatwick Airport, which shut down the runway for more than 33 hours and cost over £50 million, had been a "wakeup call" for airports around the world. Three weeks after Gatwick, Heathrow had to be shut down for an hour following drone sightings. Since then, there have been incidents across the UK. Last year, an Airbus A320 aircraft flying at 8,000 feet, close to Manchester Airport, was involved in one of the UK's closest recorded near misses with a drone and this summer police were scrambled after an unauthorised drone came within 100 feet of a plane near Glasgow Airport.

Such incidents have undoubtedly helped UK airport leaders to understand the importance of detecting unauthorised drone flights, Halachmi said, but he believed there was still work to be done with drone mitigation to ensure full control and business continuity. He also emphasised that the drone threat is constantly evolving with an increased frequency of events involving multiple drones flying simultaneously (drone swarms).

Halachmi, who often advises airport top personnel, said he was deeply impressed by the importance that airports across the UK attach to



safety issues. As they seek to rebuild their businesses after the pandemic, Halachmi is convinced that this commitment to safety and an understanding of the vital importance of business continuity would ensure that they would direct their teams to continue to prioritise cost-effective counter-drone measures.

In all the countries in which it operates D-Fend Solutions, whose Advisory Board includes Michael Huerta, the former head of the US Federal Aviation Administration, seeks to work closely with both regulators and law enforcement agencies. Halachmi emphasised that advantages of D-Fend's technology are that it is simple to use, does not require technical training and offers multiple deployment options: stationary, vehicular and tactical. This includes a long-range directional option designed for airports.

Huerta said that security agencies around the world recognised the need for new solutions for sensitive environments without the drawbacks of conventional jamming and kinetic technologies. He described D-Fend as "an early leader and pioneer in counter-drone systems with its one-of-a-kind radio frequency cyber-takeover and safe landing

"Security agencies around the world recognised the need for new solutions for sensitive environments without the drawbacks of conventional jamming and kinetic technologies".

technology, which will become increasingly important to deliver control, safety and continuity to airports worldwide as drones proliferate".

In the UK, D-Fend Solution's business is led by Martin Broomhead, a veteran aviation and aerospace executive, who previously had senior roles at Thales, QinetiQ and Boeing. Broomhead is supported by Simon Foreman, previously head of International Business at Babcock, whose earlier career included 16 years in the Royal Navy and three years at the Ministry of Defence. ■

Zohar Halachmi is CEO of D-Fend Solutions, a Gold Member of the Airport Operators Association.

HOW THE PANDEMIC IS ACCELERATING THE INTRODUCTION OF NEW TECHNOLOGY AT UK AIRPORTS - THE VIEW FROM THALES

UK airport and airline investment in the touchless passenger experience is growing significantly as a recovering sector focuses increasingly on making life easier for returning passengers according to aerospace giant, Thales.

Julia Jiggins, Head of Strategic Marketing for Aviation and Space at Thales UK has seen some slowdown in big high-risk infrastructure investment and in refreshing old technology at airports. By contrast, she reports a growing focus on investment in new technology that improves the experience of passengers from pre-registration at home, through their entire airport journey to the boarding of their aircraft.

That has been encouraged and enabled by people's experience of using digital technology during the pandemic, Jiggins suggests, including using smart phones to access the NHS app with its vital



proof of vaccination status. She cites her own parents as typical of a generation that had been wedded to paper but is now increasingly at ease with digital technology. Jiggins predicts that passengers who leave

checking in and obtaining boarding passes to the moment when they arrive at the airport will soon be in the minority.

For Thales, the French multinational that describes its mission as "building a future we can all trust", that has meant an increasing focus on the biometric touchless passenger journey, enabled by investment in kiosks at key airport transition points, as well as state-of-the-art temperature monitoring equipment. Jiggins says that these are all relatively easy to install and popular with most passengers. Perhaps surprisingly, she notes that it is the UK's smaller airports that have been at the forefront of this kind

of technology investment. As a result, Jiggins says, the passenger experience at many UK airports today is already “like night and day, compared to what it was ten years’ ago”.

Meanwhile, a combination of pressure to increase efficiency and the green agenda is also encouraging airports to look at how they can use new technology to improve ground support for their airline customers. She gives the example of the increasing use of IoT devices for ground support equipment to enable airport operators to track the deployment of equipment, cut out unnecessary journeys and reduce carbon emissions.

Jiggins says that while the immediate focus for Thales has necessarily been on helping airports and their passengers and customers to recover from the crisis of the last 18 months, it has continued to invest in collaborative research projects that will help airports to meet the challenges of the future. She highlights both the Digital Aviation Research and Technology Centre (DARTEC) at Cranfield University and the Future Flight Challenge.

Thales is one of the founding members of DARTEC with a particular focus on how future innovations could help the traditionally segmented elements of the aviation system (airports, airlines, airspace managers and aircraft manufacturers) to work more closely together to further improve both passenger safety and the passenger experience. Three laboratories at Cranfield, covering the passenger experience, connectivity and vehicle health monitoring, will enable the centre to trial and observe a variety of new tools and techniques.

The Airspace of the Future Consortium and the Future Flight Challenge is another area where Thales is playing a central role, with a special focus on three innovative aircraft types - drones, flying taxis and small electrical or hydrogen-fuelled regional aircraft. Their

“By 2030 there will be 70,000 commercial drones flying in the UK, which will present many challenges for airports since they are the key part of the infrastructure that needs protection from drones”

introduction into the UK’s aviation eco-system will only be possible at scale by modernising airspace to connect unmanned traffic management with manned traffic management.

Jiggins notes estimates that by 2030 there will be 70,000 commercial drones flying in the UK, which will present many challenges for airports since they are the key part of the infrastructure that needs protection from drones. Similarly, the emergence of a completely new urban air mobility sector based on flying taxis will present challenges of integration of the new customers with traditional commercial flights at airports serving large cities.

As airports start to consider the implications of such future developments on their own operations and investments, Jiggins is convinced that they will be greatly helped by the growing use of digital

twins, enabling them to use digital replication of airport systems to experiment, trial and test. That will enable them to analyse data and look at the implications of new investments at much lower cost than a traditional pilot project-based approach, de-risking and accelerating approvals and regulatory endorsement.

Meanwhile, as technology continues to evolve, Jiggins, who has spent her working life in the aviation sector, has also observed changes in her working environment. She spent 13 years in the Royal Air Force and then six years at Boeing before joining Thales in 2008, stepping into her current role at the beginning of this year.

Over 30 years in aviation she has never had a female boss and has, she says, long felt like a woman in a man’s world. More recently, however, she has seen female representation in key aviation roles increasing significantly. Among other factors, she believes that the growing importance of the green and digital agendas has helped to encourage more women and more young people to join, stay in and enjoy the fast-changing world of aviation. ■

Julia Jiggins is Head of Strategic Marketing – Aviation & Space at Thales UK. Thales is a Corporate Partner of the Airport Operators Association.



AVIATION SECURITY SPECIALISTS BACK LONG-TERM THINKING BY UK AIRPORTS TO SOLVE POST-PANDEMIC ISSUES

Aviation security solutions provider, ICTS, is working collaboratively with leading UK airports and airlines to find scalable and enduring answers to challenges created by the coronavirus pandemic.

Terry Sallas, the company's Vice President of Technology and Group Products, told The Airport Operator that he had been impressed to observe the aviation industry avoiding knee-jerk reactions to issues thrown up by the pandemic and opting instead for solutions that would endure over time and continue to be effective and efficient as passenger volumes grow.

Sallas, a technology specialist who worked across several different sectors before joining ICTS Europe formally in April 2020, just as the pandemic was starting, said that he had been very struck by the collegiate approach of many aviation industry leaders, which was

something that he had not seen to the same extent in other industries.

By contrast, a similarity that he had noticed with successful businesses in other industries that had faced other crises, was an understanding by aviation businesses of the importance of avoiding "knee-jerk reactions" and adopting instead "a more reflective and thoughtful approach" to the technologies they invested in. He said that was encouraging and had the advantage that investment decisions based on these approaches were more likely to prove successful and commercially beneficial over the long term.

Asked how airports that had suffered



Terry Sallas, Vice President of Technology and Group Products, ICTS

huge financial losses could be persuaded to invest more in ICTS services and products now, Sallas said that, in his experience, business leaders were “pragmatists first and foremost”. They would support investment decisions that deliver “a material and tangible value”, giving the green light to proposals “if the benefits and the returns are real”.

Sallas said that travel requirements varying by destination will be with us for a while, so investment in the right solution to address increased operational costs and deliver value is an inevitable necessity for airlines and airports, and particularly important in tough financial conditions.

He said that the ICTS ethos of delivering value through innovation and working collaboratively with its customers to solve their important challenges was one that had been embedded in the company by Oren Sapir, the ICTS Europe CEO to whom Sallas reports. Sapir’s approach of focusing on solving these challenges rather than on short-term wins was, Sallas said, one that had proven to be well-suited to the conditions that the pandemic has presented to the aviation sector.

ICTS Europe Systems’ “landmark innovation”, “Ready to Go”, its fully automated travel verification platform for airlines, launched in July, is a good example, Sallas suggested, of a product that has been carefully developed through collaboration with long-standing ICTS customers. Rather than rush to market with a product developed in haste, ICTS had chosen instead to develop a solution that would have enduring value. The company’s market-leading live library of travel rules and regulations, encompassing health and immigration, had been “the key capability” allowing it to build the platform.

Sallas said that the problem that it was designed to solve for airlines and their passengers was “really

Rather than rush to market with a product developed in haste, ICTS had chosen instead to develop a solution that would have enduring value.

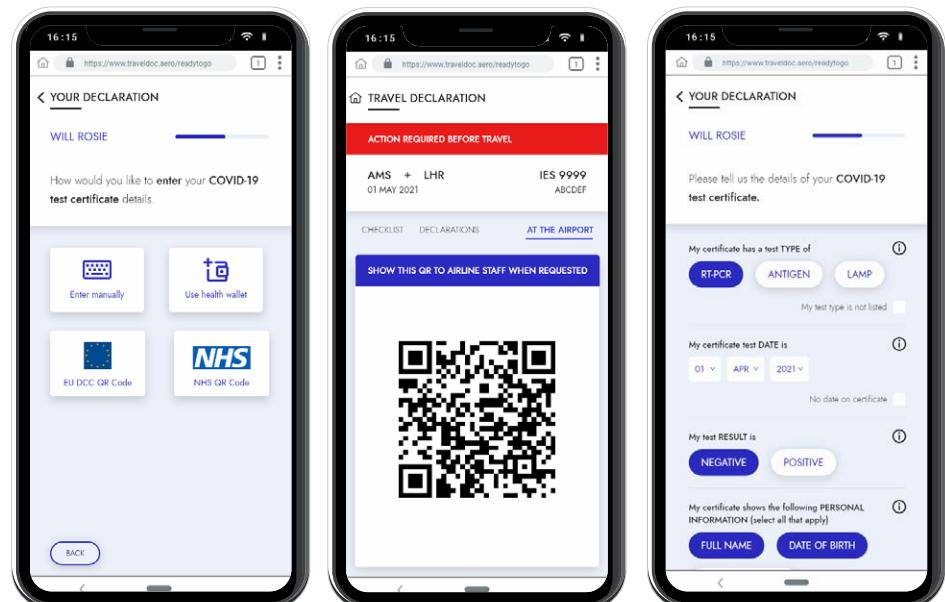
quite a simple one. If you don’t get passengers cleared before they arrive at the airport it means that you are spending more time operationally clearing them at the desks. This isn’t good for passengers, because obviously they arrive uncertain about whether they have everything they need to go. It means that a lot more money is spent on staff at the airport and the check-in desks and passengers face queues, as well as the uncertainty. The value of Ready to Go for the airlines of course is that they can streamline operations to address those passengers that need attention”.

Some competitors had “not solved the dominant problem”, Sallas suggested, by going early with a wallet-based offer that was great at digitising and gathering documents but didn’t do anything about clearing passengers before travel. He said that the ICTS design ethos for the

product had been really simple – “Let’s solve the problem, let’s get it right and provide something that offers a degree of permanence for the passengers and the airlines. Also, our solution had to be scalable and work seamlessly with traditional check-in and booking processes already trusted by airports, airlines and passengers globally. Those were the key drivers for designing the solution”.

ICTS, which describes its mission, as “rising to meet tomorrow’s challenges”, was founded in 1987. Today its UK airport clients include Aberdeen, Belfast International, Bristol, Cardiff, Edinburgh, Gatwick, Glasgow, Heathrow, Manchester and Southampton. During the pandemic it has expanded its airports offer to include Covid-19 testing, working with the Francis Crick Institute and Imperial College London to identify the most effective and efficient ways to conduct tests and to deliver accurate results. It currently provides Covid-19 testing at Aberdeen, Glasgow and Southampton airports.

Terry Sallas is Vice President Technology and Group Products and Managing Director ICTS Systems Europe. ICTS UK & Ireland is a Silver Member of the Airport Operators Association.



HOW INNOVATIVE SOLUTIONS ARE SHAPING THE FUTURE OF SMART AIRPORTS

By Sameer Sharma, Intel Global GM for New IOT Markets (Smart Cities & Intelligent Transportation)

The past couple of years have been especially challenging for global industries, with the travel industry being one of the hardest hit. The impact from air travel restrictions has been devastating. While the near-term impact will be deeply felt, technology can help provide a path forward through this difficult time. At Intel, we believe in the power of creating world-changing technology that enables global progress and enriches lives. It is with this mission in mind that we are working with airport solution providers to uplift the passenger experience. But how does a company most known for its semiconductors engage with airports? Broadly, Intel engages with airports in many ways, from providing the computing foundation for IT systems to powering high-performance data centre and cloud solutions, to optimising user-specific workloads to help increase performance and efficiency. More specifically, within the Smart Cities & Intelligent Transportation sector, we work with partners across the ecosystem to understand challenges at the industry and end-user levels and collaborate to define how



Sameer Sharma, Intel Global GM for New IOT Markets

Together, Intel and the airport solutions ecosystem are working to help realise a new era of travel.

current and future technologies may provide long-term solutions that are key for airport digital transformation.

While air travel has long been associated with stress for travellers, conjuring images of navigating

heavily trafficked terminals, long security lines and lost baggage, the current state of data collection and analysis offers new hope. In many ways, the Covid-19 pandemic has served as a catalyst for airports to engage more fully with smart technology solutions. In the short term, solutions enabled by the Internet of Things (IoT), edge computing, and Artificial Intelligence (AI) have helped airports respond and recover from the pandemic. These connected technologies can help with identifying and managing traveller health checks, social distancing, queue management and more. Airports may soon be able to offer a more seamless passenger journey from start to finish, beginning with touchless check-in and biometric-enabled ticketing; moving to contactless and personalised retail in the terminal, kept safer with disinfecting robots; and finally, touchless customs and integrated personalised services at the destination, both within the airport and beyond.

Realising this vision will require the coordination of many ecosystem

contributors. Intel participates closely across multiple aspects of the ecosystem to ensure solutions for airports are optimised and efficiently enabled for specific end user needs. The Intel IoT Solutions Community includes over 4,500 solutions and enables collaboration across the ecosystem in areas ranging from engineering and software, to matchmaking with other partners to solve end-user problems. For example, over the past several months we have continued to conduct trials with ecosystem partners and airports to demonstrate how AI can be used to improve passenger wait times, help identify security risks, and improve auto traffic flow on the land side.

Together, Intel and the airport solutions ecosystem are working to help realise a new era of travel. On land and in the terminal, smart technologies can supply real-time information and options to personalise the passenger journey, helping to enable safe, fast, and contactless transportation, traffic management, parking and airport access. Airport operators can use IoT solutions to manage usage of energy for lighting, air conditioning/heating and transport systems, with data-driven, real-time, and predictive adjustments based on demand. Airside, AI, and autonomous aircraft will one day make air travel more safe and efficient. For example, AI capabilities provided

by Intel software and hardware supported systems may be used to help monitor and manage wildlife on runways, provide inspection of runways and the surrounding environment, and digitise air traffic management.

We are excited to join AOA as a Corporate Partner and look forward to collaborating with members to help enhance the traveller experience, increase revenue, and drive operational efficiencies. Our team welcomes the opportunity to engage with you to solve current and future challenges.

Sameer Sharma is the Global GM (Smart Cities & Transformation) for IoT Solutions at Intel and a thought leader in the IoT/AI ecosystem, having driven multiple strategic initiatives to scale over the past 20+ years. Sameer's team focuses on establishing leadership across the industry, playing a pivotal role in deploying solutions for the development of smart cities around the world – an important effort in furthering the goal of sustainability.

These solutions include Intelligent Transportation, AI/Voice, Air Quality Monitoring and Smart Lighting. ■

Intel is a Corporate Partner of the Airport Operators Association.

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We are excited to join AOA as a Corporate Partner and look forward to collaborating with members to help enhance the traveller experience, increase revenue, and drive operational efficiencies.





UK AIRPORTS HAVE “AMBITIOUS VISION” TO ACHIEVE NET ZERO, BUT URGE PARTNERSHIP WITH GOVERNMENT TO DRIVE INNOVATION AND SPEED UP ADOPTION OF NEW TECHNOLOGIES

The AOA will shortly publish a first-of-a-kind comprehensive report summarising the actions that UK airports have taken and will be taking to reduce carbon emissions and achieve net zero.

Published ahead of COP26, the UN Climate Change Conference being held in Glasgow from 31 October to 12 November, the AOA report will say that “airports have an ambitious vision to achieve net zero in their operations and support the decarbonisation of others operating on the airfield”, but it will also state that “while industry can make significant progress on its own, there is a need for a clear partnership with government to drive innovation and speed up adoption of new technologies and opportunities”.

Pointing out that the pandemic and resulting travel restrictions have decimated airports’ balance sheets and paused most capital investment, the report will call for “a close partnership with UK Government, initially to bridge the funding gap that the pandemic has left in industry and more broadly to ensure that the UK gains a position of international leadership”.

The UK aviation industry has committed to net zero by 2050, but many leading UK airports have set earlier targets to cut direct and indirect emissions, including Aberdeen (mid-2030s), Biggin Hill (2029), Birmingham (2033), Bristol (2030), Gatwick (2040), Heathrow (mid-2030s), Luton (2040), Liverpool (2040), Newcastle (2035) and Southend (2027).

A first step in airports’ journey to decarbonisation is reducing energy use. Airports are making progress reducing energy consumption from lighting, increasing the energy efficiency of terminal buildings, upgrading current heating and cooling solutions to more efficient ones and decarbonising ground power units.

UK airports have ambitious plans to decarbonise their own operations by adopting renewable heat and cooling systems. Both Gatwick and Heathrow have started to generate onsite renewable heat by using biomass. Working with West Sussex County Council, Gatwick is examining the feasibility of re-using surplus

heat produced at the local sewage works. Other airports are looking to use air source, ground source and water source heat pumps.

Decarbonising airport-owned vehicles is a priority for many UK airports. As electric and low-emission vehicles become more available, airports have started to trial and use these vehicles airside. Most airports already have a small but growing number of vehicles that are electric or hybrid and all airports plan to replace their fleets with low- or zero-emission vehicles in the coming years. Significant progress has already been made in introducing electric bussing



operations, both landside and airside.

Many of the vehicles that passengers see driving around an airfield are vehicles operated by third parties, often ground handling companies contracted by airlines. Airports licence ground handling companies to operate at airports and can, in some cases, encourage and mandate certain operating conditions. Encouraging the use of low- or zero-emission vehicles is an important part of that.

Across the country airports are working to decarbonise their energy consumption by procuring green electricity or developing renewable electricity generation on site. In some cases, this is through wind

UK airports have ambitious plans to decarbonise their own operations by adopting renewable heat and cooling systems.



and energy-from-waste generation, but more frequently it is solar photovoltaic. London City Airport is exploring the potential for a floating solar array in the Royal Docks and Newcastle Airport has submitted a planning application for a major solar farm to be built between 2022 and 2035, with the aim of providing 100% of the airport's electricity requirements.

While most of these projects relate to greenhouse gas emissions within the airport's control, airports are also looking to play their part in promoting the decarbonisation of other operations in and around the airport. They have strategies in place to cut the number of employees that commute to the airport by private car. Initiatives include employee car-sharing schemes, encouraging public transport use and cycle-to-work schemes.

Passenger surface access is also an important focus for airports. Improvements in public transport can bring greater numbers of people to the airport while minimising the impact on local roads, in terms of congestion, air quality and carbon emissions. Where public transport is available, airports promote these travel options to passengers. Drop-off charges at many airports reduce emissions on the airport forecourt and improve air quality.

There are also steps that airports can take to help to reduce airline emissions. They can enable airlines to reduce the use of their engines on the ground (saving fuel, reducing greenhouse gas emissions and improving air quality) by providing electricity on-stand that aircraft can be plugged into and by offering pre-conditioned air.

Through their landing charges, airports can vary pricing structures to encourage the use of cleaner and quieter aircraft. As home to three successful budget airlines, Luton Airport has one of the youngest fleets in the UK. EasyJet, Ryanair and Wizz Air, which represent 94% of the airport's traffic, all have a strong



Airports are playing an advocacy role in support of the wider aviation industry's efforts to ensure the right conditions exist in the UK for sustainable aviation fuels to reach their potential.

focus on renewing their fleets to ensure efficient and sustainable operations. Luton has incentives in place, through commercial agreements, to increase the number of latest generation NEO and MAX aircraft. Nearly one in ten of the aircraft flying from Luton in 2019 were either NEO or MAX and current projections indicate this number will go up to nearly one in two in 2025, an increase of over 400% in just over five years.

Finally, airports are playing an advocacy role in support of the wider aviation industry's efforts to ensure the right conditions exist in the UK for sustainable aviation fuels to reach their potential. Heathrow was the first major UK airport to successfully incorporate sustainable aviation fuel into its main fuel supply and at Biggin Hill sustainable aviation fuels account for over a third of the fuel mix for aircraft. ■

*Nick Jones, Chief
Executive, Newcastle
International Airport*



NEWCASTLE AIRPORT DESCRIBES HOW IT WILL ACHIEVE NET ZERO BY 2035

As part of its Corporate Social Responsibility Strategy, Newcastle International Airport has publicly committed to reducing the overall per passenger environmental impact of operations.

In parallel, the airport has pledged to play its part in supporting the global agenda on decarbonisation.

Along with many other airports across the world, Newcastle has recently announced a plan to become net zero. Unlike many others, it set a target year of 2035 rather than 2050.

The airport has identified a range of measures to both reduce and offset carbon emissions under its control, with the Net Zero 2035 strategy aligning with the end date of its masterplan and what will be its centenary year.

The aim of the strategy is to reduce scope 1 and 2 emissions to zero, and to be carbon neutral for those scope 3 emissions that the Airport can influence (passenger surface journeys).



Electric Vehicles

To help deliver its Net Zero Carbon 2035 strategy, Newcastle International has developed a roadmap with key deliverables to achieve the target. Despite the significant impacts of the Covid-19 pandemic on travel over the past 18 months, the business remains on track to achieving this goal.

Procuring a new fleet of electric vehicles forms an important part of the strategy and in December 2020 the airport took the first step, by becoming one of the first airports in the UK to operate a fully electric,

zero emission airside bus. The bus has been used during the Covid-19 pandemic to coach passengers to and from the terminal in an environmentally friendly way.

Solar Farm

Alongside a new fleet of electric vehicles, the ability to generate renewable energy is also identified in the roadmap as critical to achieving the 2035 goal.

In August of this year, following detailed environmental and ecological impact assessments, the airport announced plans to submit a planning application for a solar farm on its land.

Following the announcement and prior to the submission of the application, an eight-week public consultation was completed to gather feedback on the plans from

If approved, the solar farm will be built in four phases between 2022 and 2035 to provide renewable energy for the airport now and in the future.

local stakeholders.

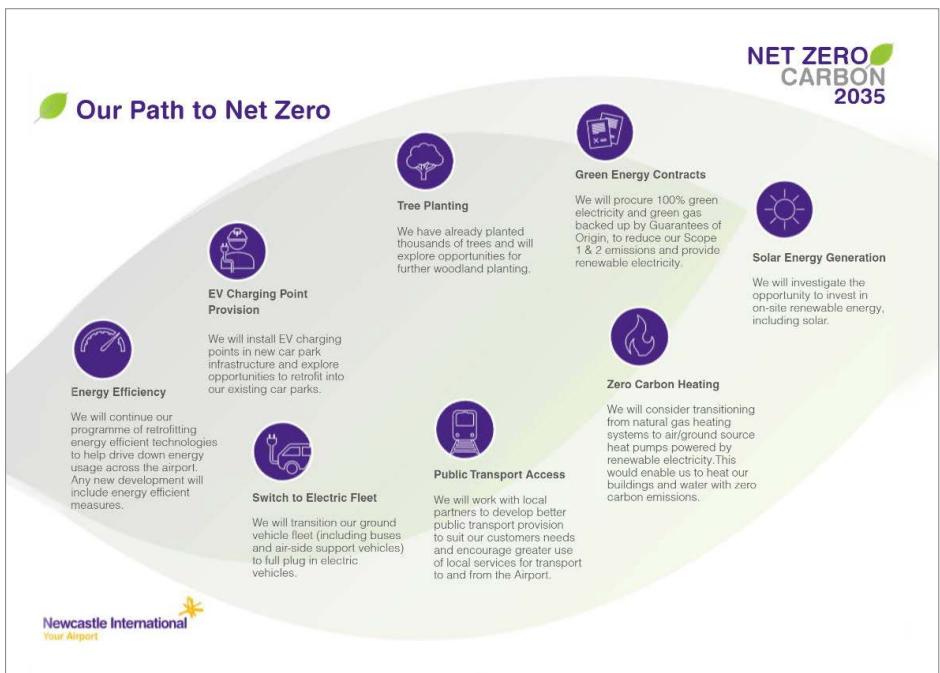
Social media posts about the project were viewed 120,000 times, and the dedicated website visited over 1,700 times. Over 100 individual comments or responses were collected, with 98% of respondents supporting the Net Zero 2035 strategy and 96% supporting the use of airport land for a solar farm.

If approved, the solar farm will be built in four phases between 2022 and 2035 to provide renewable energy for the airport now and in the future. The farm will be capable of generating up to 16MW of electricity and will seek to provide 100% of the airport's electricity requirements through sustainable means. The scheme will also feature battery units to store excess energy for use during the evening or days with less sunshine.

In addition to the solar farm project, large areas of woodland planting are planned on airport land. These areas will contribute to the offsetting of Scope 3 emissions.

Nick Jones, Chief Executive at Newcastle International Airport, said: "Decarbonising the airport before 2035 will be a challenge, but this is something that we feel strongly about.

"Newcastle International Airport is an extremely important asset to the North East and we pride ourselves on being a good



"We will also play our part within the aviation sector to ensure that this globally important industry makes the transition that will enable it to serve the future low carbon economy".

neighbour. The people of our region are at the heart of everything we do, so it is vital that we make the changes needed to be able to grow the airport in a sustainable manner that protects the environment we all live and work in.

"We will also play our part within the aviation sector to ensure that this globally important industry makes the transition that will enable it to serve the future low carbon economy." ■

HEATHROW STARTS RECRUITMENT DRIVE FOR SUMMER 2022

Heathrow Airport is aiming to recruit over 500 people by next year's peak summer travel season, as it prepares for recovery.

The UK's largest airport has begun a search for security personnel to start from spring next year. Recruitment for security positions is beginning now due to the extensive training, vetting and counter-terrorism checks that are required, and which can take up to six months to complete.

Paula Stannett, Heathrow's Chief People Officer, told The Airport Operator: "Travel restrictions continue to have a significant impact on our operations, but, over time, as the UK and other countries reap the benefits of successful vaccination programmes, we expect to see passenger numbers increase and consequently our operational needs grow".

She said: "As more countries hit their vaccine milestones, Heathrow can continue to restore connections, reunite loved ones and re-energise British businesses. In doing so our aviation sector can help the UK cement its economic recovery and we can protect the future of one of this country's greatest industries".

Heathrow has also registered to the Government-sponsored,



*Paula Stannett,
Chief People Officer,
Heathrow Airport*

but business-led Aviation Skills Retention Platform, which is also supported by Bristol, Cardiff, Farnborough, Humberside and Leeds Bradford airports.

Stannett said: "Some of the main benefits of the platform are that there is no cost to Heathrow, and

we can post roles knowing that they will reach an audience of relevant candidates from the sector. The platform will give us the ability to directly search the candidate database for individuals registered on it, for example seeing who has previously performed similar roles at other airports and would therefore be well suited to a job. We recognise the challenges that the pandemic has created for our sector and are keen to give those impacted the opportunity to continue their career at Heathrow".

Before the pandemic Heathrow was one of the busiest airports in the world, handling 81 million passengers a year, but from April 2020 to March this year that number collapsed to just 9 million. Pre-pandemic Heathrow employed 7,500 staff, but that number is now under 5,000.

Stannett said that while Heathrow and the entire UK aviation sector had faced unprecedented challenges as a result of Covid, her colleagues had "worked tirelessly to keep people safe and provide excellent service at the airport, and I'm incredibly proud of the resilience they have demonstrated". ■



BRISTOL AIRPORT SEEKS PERMISSION TO GROW WITH A RAFT OF NEW DECARBONISATION COMMITMENTS

Bristol Airport is appealing to overturn a local council vote to block its expansion, with a pledge to become the UK's first net zero airport in 2030.

The airport has spent the summer and autumn giving evidence to planning inspectors at a public inquiry to appeal the decision by North Somerset Council to reject its plan to lift the current cap on passenger numbers from 10 to 12 million. In 2019, before the pandemic, Bristol was the 8th busiest airport in the UK, with 8.9 million passengers.

The airport's QC, Michael Humphries, told the inquiry that expansion of the airport would not cut across climate change ambitions but be consistent with and complement them, noting that the airport's net zero announcement had merited an approving mention in the Government's Jet Zero consultation.

He drew the attention of the inspectors to the Government's statement in the consultation document that it believed the sector could achieve carbon emission goals by focussing on new fuels and technology rather than capping demand. The document also confirmed that making best use of existing runways remains Government policy and that this should be a material consideration in decision-making on applications for planning permission. Earlier this year similar expansion plans for Stansted Airport were approved by planning inspectors.

The Bristol Airport inquiry concluded this month, and a decision is expected either later this year or early next year.

Bristol Airport CEO, Dave Lees, told The Airport Operator that if the appeal is successful, the airport will move forward with plans to improve its terminal and airside infrastructure. Immigration and security will be enhanced. There will be new car parking facilities and surface access improvements on and off-site. Airside changes will include additional piers and a new parallel taxiway – all of which will enable the airport to enhance



Dave Lees, CEO,
Bristol Airport

"The airport would continue to incentivise airlines to operate their quietest aircraft and would provide noise insulation for those living near to the airport".

existing connectivity, not just to European destinations, but also potentially to the US East Coast, to a Middle East hub and to Istanbul.

Reaffirming commitments that Bristol Airport made to the public inquiry, Lees said that the airport would continue to incentivise airlines to operate their quietest aircraft and would provide noise insulation for those living near to the airport.

Work would continue to enhance public transport facilities and the airport would help to ease traffic congestion by contributing to the cost of improving adjacent road junctions. It would also use its skills and employment fund to help people living in some of the most deprived areas of south Bristol and Weston-super-Mare to secure some of the close to a thousand jobs that would be created as the airport moves towards 12 million passengers a year.

Lees was also keen to emphasise the airport's aspirations to become a testbed for aviation decarbonisation initiatives, suggesting that Bristol Airport is well-positioned to take on that role, "given that we sit at the heart of the UK's aviation cluster, which includes GKN, Rolls Royce and Leonardo, and which is progressively working towards net zero plans. That is critical for us, and we want to play a very active part. We have enough gravitas and significance to act as an

industry focal point".

The airport has made a series of announcements underlining its commitment to decarbonise its own operations and to collaborate with other major players in the sector to advance wider decarbonisation plans. Earlier in the summer it announced that it would achieve being a carbon-neutral airport four years ahead of schedule, reducing the time scale from 2025 to 2021. It also claimed a leadership position in the sector by confirming that it will be the first net-zero airport in the UK by 2030, 20 years ahead of the Government target date.

Bristol Airport is part of a consortium exploring the feasibility of air taxi services in the South West using electrical vertical take-off and landing aircraft. Vertical Aerospace, the Bristol-based manufacturer of the aircraft, says that, when compared to helicopters, they offer significant improvements in safety, noise and operating costs, while also being carbon free.

In August Bristol Airport announced that its new fund to support innovative research and projects to decarbonise was open and was expected to consider both hydrogen and electricity projects. Commenting on this, Lees said: "The bit which we think we can really have a positive influence on is the aircraft emissions on the ground. That is something we really want to focus on and that is why we set up the fund".

Later the same month the airport announced that it is joining forces with easyJet to trial a range of initiatives to achieve a zero-emissions turnaround at Bristol alongside steps to reduce the airline's overall carbon footprint. Selecting Bristol as its testbed to trial and implement decarbonisation solutions, easyJet said it hopes that successful results could be rolled out across its network, which spans 150 airports in 35 countries.

EasyJet remains the largest airline



The aviation sector had been devastated and Bristol Airport, like others across the UK, had not had “the opportunity to recover during what continues to be the most challenging period in our history”.

at Bristol, but the airport also became Jet2.com's 10th UK base this summer, a development which Lees described as "a very significant new addition to our airline customer base". A further new development this summer was the launch for the first time of daily Lufthansa flights to Frankfurt. Overall passenger numbers at Bristol have recovered to about a third of 2019 levels, but

continued to be held back, Lees said, by restrictions on international travel.

Like many other UK airport CEOs, Lees had been lobbying for an overhaul of the UK's international travel rules. He said he was "delighted" with the Government's announcement on 17 September of simpler requirements from 4 October for fully vaccinated customers from non-red list countries. He said that it would "provide confidence to customers in arranging the long-awaited family visit, a well-deserved holiday or business trip".

Reflecting on the impact of the coronavirus pandemic, Lees said that the aviation sector had been devastated and Bristol Airport, like others across the UK, had not had "the opportunity to recover during what continues to be the most challenging period in our history". He said that providing the safe return of international travel would play "a vital role in the South West region's economic recovery and protect jobs now and in the future from the impact of this pandemic". ■

AOA WELCOMES LEADING TECHNOLOGY, COUNTER- DRONE, AIRPORT INSTALLATION, FIRE SERVICES AND SPECIALIST LAW FIRMS INTO MEMBERSHIP

Five leading global providers of airport services have joined the AOA.



Intel has joined as a Corporate Partner. Intel says it “has a unique ability to bring together software, silicon and platforms for our customers. However, we’re not doing it alone: we work with our customers and galvanise the industry for positive impact. In partnership with our customers, we advance breakthrough technology and solutions in a variety of segments – from safe roads and autonomous driving to medical advancements powered by AI and machine learning to technology readiness in education, and more.”

“As a company we’ve broadened from processors and expertly construct the best products using the best technologies. Our ability to combine multiple process technologies – both internal and external – with novel packaging technologies to uniquely tailor products to customer and market needs is a critical differentiator for us – and one that delivers enormous value for our customers.

“As we transform beyond a PC-centric company to address the needs of the

new data-centric world, we have expanded our product offerings to provide end-to-end solutions, scaling from edge computing to 5G network, cloud, and the emerging fields of AI and autonomous driving.

"Leading in the future means living up to our purpose, which is much bigger than the products we create. Intel's long-standing commitment to corporate responsibility and sustainability – built on a strong foundation of transparency, governance, and ethics is deeply integrated throughout all aspects of our business".



D-Fend Solutions, the leading counter-drone technology provider, has joined as a Gold Member. D-Fend says that it focuses on the real threats from potentially dangerous drones, so that varied organisations around the world can maintain full control of drone incidents in complex environments and be prepared for future threats.

It says that EnforceAir, its flagship offering, automatically executes radio frequency cyber takeovers of rogue drones for safe landings and safe outcomes. Authorised drones that underpin modern society can proceed uninterrupted. D-Fend says that it facilitates continuity by ensuring the smooth flow of communications, commerce, transportation and everyday life.



Dormakaba UK, one of the world's largest providers of building access solutions, has joined as a Silver Member. It specialises in product lines designed to optimise passenger flow through concourses and terminals while maintaining high security standards. Dormakaba's offering includes airport entrance, boarding pass control, automatic border control, business lounge access self-boarding, one-way corridors, access and partition systems, accessibility, airport safety and restricted area solutions and services.

The company says that it helps airports to meet challenges posed by access and security control to improve their operational efficiency. It advises through every stage of modernisation and development projects, drawing both on its experience and its knowledge of current requirements, airport regulations and standards. Dormakaba says that its installations at major airports around the world exemplify its capabilities and its commitment to developing state-of-the-art solutions designed for lasting dependability.



Falck Fire Services UK, part of the leading provider of fire services globally, has joined as an Associate. Its dedicated aviation firefighting teams, operating in highly regulated environments, provide lifesaving rapid response within airfields, using the latest technologies to raise standards across airports and aerodromes.

Offering emergency planning, prevention, protection and response, the company delivers business continuity and asset protection through an integrated service, with firefighting, medical services and site management at the core, all tailored specifically for individual locations. Falck's accredited service is supported by specialised hazard management and risk assessment capabilities.



Trowers and Hamlin LLP, a full service national and international law firm, with offices in Birmingham, Exeter, London and Manchester, has also joined as an Associate. Its aviation real estate practice has expertise in airports and aviation related property, including hangar space, terminal offices, retail space and the extension and development of adjacent land for airport uses.

The firm also advises on issues arising in airport property transactions, including specialist planning, construction and development assets. This includes advice in areas such as public safety zones, air traffic movement limits, access routes and security. As a full-service law firm, Trowers and Hamlin says it is also able to help with all other matters that an airport operator may need advice on, including employment and pensions, intellectual property and commercial contracts and disputes.





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