ARGS
AIRLINE ROUTES & GROUND SERVICES

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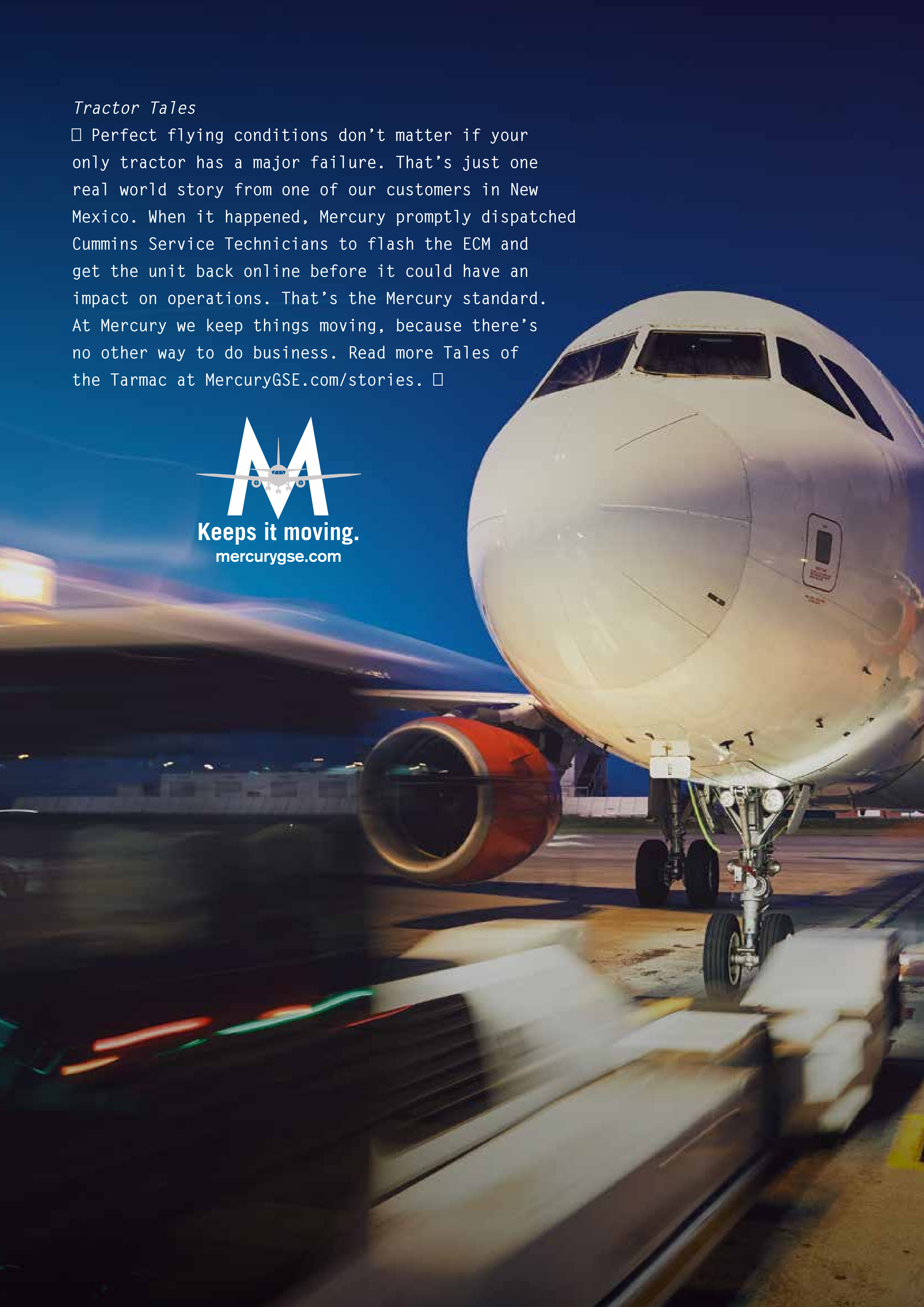
Chief Executive
Worldwide Flight Services has concentrated on its core cargo business to ride out the pandemic.

Abraham Foss
Chief Executive
The leader of Norway's airport and air navigation services operator on turning Avinor around.

Stein Nilsen
Chief Executive
Widerøe is working to bring electric aircraft into its regional airliner fleet by 2026.

Stuttering recovery
The market outlook is erratic and hard to predict


Tractor Tales
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Editor's NOTES

Mark Pilling
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On 3 February, Boryspil International Airport, the main air hub for Ukraine's capital Kyiv, proudly announced the opening of an exhibition at Terminal D of 12 stylised portraits of prominent Ukrainian women-scientists and their stories. "Boryspil Airport is not only an enterprise where a large number of engineering and technical employees are women; it is also a public place where different people will have the opportunity to see this unique exhibition," said Andriy Tarasenko, head of terminal complex at the airport.

Twenty-one days later, on 24 February 2022, Russia invaded Ukraine and Boryspil, located to the south-east of the capital, shut down – as did Kyiv Sikorsky International Airport, situated near the downtown area on the western side of the city. This smaller airport had Wizz Air as its main operator and served 1.4 million passengers in 2021.

Boryspil, meanwhile, handled 9.4 million passengers in 2021, some 62% of its pre-Covid level of 2019 and a significant rise over 2020. In its press release of 6 January, the airport said: "In 2021 we put increased effort into attracting new airlines and launching new routes and destinations. As of today, 38 airlines work with the Airport. Of these, nine airlines entered the market for the first time, and out of 117 operated destinations, 12 are new," said director general Oleksiy Dubrevskyy.

Ukraine and its airports were on the up, as was cargo. In fact, the cargo terminal at Boryspil was operating almost at capacity and a new one was going to start construction this year. Today, terminals and the apron are silent. Boryspil's website shows the flights that should be operating, for example Ukraine International Airlines to Tel Aviv, Wind Rose to Odessa, or Ryanair to Venice.

For Ukrainians, and many others, the clock stopped for normal life on 24 February. In the lead-up to this date we were all looking and planning for what the year would hold as people began travelling again. The prospect of a war in Europe was unthinkable.

Viewed through the lens of air transportation, the war has multiple deep impacts. The ostracism of Russia makes us wonder when we will see our industry colleagues from the country's airports such as Domodedovo and Sheremetyevo at a Routes event again. Russia effectively turns into a domestic-only market. Sheremetyevo had enjoyed a strong 2021; its passenger numbers grew by over 50% to 31 million, making it one of the top three airports in Europe. What happens there and at other Russian airports is a major question mark for 2022.

As the articles in this issue testify, the market is picking up, albeit in very different ways and at different speeds in every region. Even for those that are untouched directly by the Russian invasion there are plenty of risks to growth, including rising fuel prices, increasing interest rates and the chance of further Covid variants.

These risks pale against the pictures we see on the news from Ukraine. The women-scientist portraits at Boryspil only gained a few admirers. We pray for the time we can see them again.

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Nordic turnaround

Abraham Foss, the chief executive of Norway's airport and air navigation services operator Avinor, talks to *Mark Pilling* about the challenges of restoring the fortunes of this large and diverse group.

With a CV that spans 20 years in industries as diverse as telecommunications, construction, and modern digital technologies, and containing duty time in cities like Oslo, Kuala Lumpur, and Washington DC, it is hardly surprising to hear that Abraham Foss was not remotely intimidated by the carnage he faced when arriving in the aviation business for the first time in 2021.

"It was busy," he says with typical Scandinavian understatement. "Obviously, a lot of things were unstable. However, the fundamental operation was running as it should be, with activities conducted as contracted, on a smooth, regular basis."

Foss began working as chief executive of Avinor in February 2021. Avinor is a wholly-owned, state limited company under the Norwegian Ministry of Transport and Communications responsible for 43 state-owned airports. A great deal of these airports service remote communities in this Nordic country with its elongated coastline and numerous islands. Its border is predominantly with Sweden, but it also has a land border in the north with Finland and Russia.

The bulk of Avinor's traffic, about half, is concentrated on capital Oslo and the company, which has some 2,800 employees, is also responsible for the operation of Norway's air navigation service.

"The big thing about handling the pandemic is a practical one in handling all of the changes," says Foss, referring to the constantly shifting travel and health rules and requirements as the spread of the virus ebbed and flowed and states sought to contain it. "We estimate there have been

Avinor chief executive Abraham Foss (photo courtesy of Avinor).

close to 200 different rule changes over this period."

For Foss, it is expected that managing these changes is just part and parcel of what a professional airport and air service provider should do. But the massive traffic losses as a result have played havoc with Avinor's balance sheet. "Financially it's a catastrophe. It is very, very, bad for us," he says. This is a frank admission, but the numbers do not lie. In 2019, Avinor's total revenues were NOK 11,785 million ($1.33 billion) for the entire group with a net profit of NOK 702 million ($79 million). For 2020, this fell back to revenues of NOK 8,183 million ($926 million) and a swing to a net loss of NOK 724 million ($82 million). In 2021 the financial picture will be similar.

When Foss joined Avinor the modus operandi, as it was for most, was working from home. "This was kind of hard for me," he says. The standard on-boarding for a new chief sees them meeting new colleagues face-to-face as early as possible. "When you get into a new industry and considering the geographic spread of the operation this was important, but of course we had to do a lot of Teams meetings."

Foss will begin visiting the extensive Avinor eco-system this year having the quality conversations and interactions that personal meetings stimulate. "I need to get out there and get the feel of the people and of the business," he notes.

Opening up

This year will be the one where it will be "about opening the world again," says Foss. "This industry has a lot of rewarding challenges, both long and short-term." As 2021 went on, Avinor was seeing a promising period towards the last part of the year as the virus threat appeared to wane. This was driven by carriers offering point-to-point services on vacation routes. However, the surge of the Omicron variant stopped the recovery in its tracks and will lead to a poor first quarter of 2022, he says.

Prior to the onset of the pandemic Avinor was seeing decent traffic growth at its airports with a compound annual growth rate of 3.6% in the 2010-2019 period. In 2019, Avinor's systemwide passenger numbers had reached 54 million. This crashed by 63% to 20 million in 2020 and recovered only slightly to 22.4 million in 2021.

After two years of remote working, it is hard to judge whether this practice will sustain. "Although we believe there is a lot of underlying demand, there will be segments of the market where the influence on travel on a more permanent basis will occur," says Foss.

He sees traffic beginning to recover again in the second quarter and the hope is that the summer will be strong. The growth curve for this year will be steeper than predicted. "Our forecast rationale is that we believe in the underlying need and desire of the tourist segment to fly. This will significantly pick up as supply increases and when the market is not so uncertain," says Foss. However, it will take until late 2024 for Avinor's overall traffic volumes to reach 2019 levels.

The growth focus will be on Oslo, which was the hardest hit of Avinor's airports by the pandemic because of its larger proportion of international traffic. Main hub Oslo, which had seen peak traffic numbers grow to 28.5 million in 2019, fell back to 9 million passengers in 2020 and logged 9.3 million last year. The domestic airport system was less exposed and suffered less, says Foss.

"The first phase and an important part of the story for Avinor and for Norway is connections to the main hubs in Europe, and that is lagging all over the place," says Foss. Travel restrictions across the continent have meant swathing cuts to inter-hub service over the past two years, and they are only just being restored. These links will be re-connected over the coming weeks and months, followed by routes to the USA and then Asia, says Foss.

However, Avinor is studying what size and shape the industry will take as the recovery takes hold. It is not certain it will naturally assume the form it took prior to 2020. "It will be interesting to see how low-cost carriers and the whole airline industry will change or is impacted by Covid," says Foss.

"With our role in Norwegian society and with a starting point that makes us neutral to the different airline offerings as we possibly can be, we are definitely looking at how the industry will evolve," says Foss. "We need to understand the changes taking place – whether its point-to-point carriers, network carriers or low-cost carriers – and what that does to our offering."

"We are looking at whether and to what extent these changes reflect in how we package our products and what our role is in all this," says Foss. "We are asking these questions now. We need to challenge ourselves. Do we understand the pain points airlines have? Are there things we can do to lower the total cost of ownership? How to produce our services in a more efficient way?"

While this does not mean Avinor launching an airport product that is totally different from today's, the approach from Foss to ensure the group adapts its product as the market changes will surely be welcomed by airlines, especially if they see services that are more tuned to their operational needs and there are cost benefits. On the charges front, Avinor has maintained a close dialogue with the regulatory bodies and decided to freeze them in 2022, says Foss.

Projects postponed

In normal times Avinor would be spending millions of Norwegian kroner a year on infrastructure and system upgrades, but like every other airport investments have either been postponed or put on review. During the pandemic the group has cut NOK1.3 billion ($150 million) annually from the capital project budget. "It is an

Avinor's sustainability agenda

When it comes to the critical and global issue of sustainability, the group has a simple mission statement: "Avinor will be a driving force for environmental work in aviation."

At the end of 2020, SAS, Widerøe, Norwegian, Avinor, Norwegian Confederation of Trade Unions (LO) and the Federation of Norwegian Aviation Industries (NHO Luftfart) worked together to set a common emissions target, and a roadmap to achieve the goal of Norwegian aviation being fossil-free by 2050.

Avinor works across three headline areas, explains Foss. The first is ensuring its own operations are sustainable. Avinor has set goals for 2030 in terms of reducing its climate impact, and by 2022 has committed to reduce its controllable greenhouse gas emissions compared with 2021 by 50%.

The second area, and probably the most important, is "how can we influence the alternative energy carriers, such as hydrogen and electric, to be proactive," says Foss. "This is where we have a role, both directly in providing the airport infrastructure, but more importantly to be part of the solution and facilitating that infrastructure."

For example, in the field of electric aviation, Avinor and industry partners are aiming to make Norway a world leader. The goal is to make Norway the first country where electric aircraft account for a significant share of the market and to electrify all Norwegian domestic flights by 2040.

The third area is assisting in the development of sustainable aviation fuels in Norway. Oslo was one of the first airports in the world to offer SAF on a commercial basis back in 2016 with Bergen following in 2017. "SAF will become increasingly important in the next 15-30 years, and we have a role in influencing policy-making and in promoting production," said Foss.

"For us, the pandemic was hard, but this is going to be the license to operate," says Foss. "For us it's fundamental and it's long-term."

Avinor has taken delivery of an electric aircraft, the Pipistrel Velis Electro 600, as part of its commitment to sustainability initiatives.

on-going process. The postponement of investment is not just because of the total financial situation it is also driven by the underlying growth going forward," says Foss.

One of the projects that has been affected by the pandemic is the proposal to build a new airport at Bodø on the northwest coast of Norway. In a press statement Foss said: "After almost two years of the pandemic, Avinor is in a serious financial situation, and there is still great financial uncertainty about the future. Therefore, it is not justifiable to assume the risk related to making a decision on the implementation of the project now." Avinor has postponed the decision by 12 months. The new airport is estimated to cost NOK6.6 billion ($750 million) with this move the earliest the airport could enter service is the second half of 2029.

Routes Europe

Bergen, Norway's second largest city and Avinor's second largest airport in its system, is the host of Routes Europe 2022 from 18-20 May. Bergen is branded as the gateway to the spectacular fjords of Norway and is a UNESCO World Heritage City and a European City of Culture. The airport handled 3.2 million passengers in 2021, up from 2.65 million in 2020.

As organiser Routes says: "Routes Europe 2022 will unite decision-makers from airlines, airports, destinations and aviation stakeholders that are invested in the future of European air connectivity." Hosting the event is timely for Avinor as it seeks to restore its fortunes, says Foss. "Being the Routes Europe host is important to demonstrate the fact that we are part of the international community, and of course we need to establish ourselves with a lot of network building," he says. ■

Scandinavian shuffle

The pandemic has made Scandinavia's skies a turbulent backdrop to a swiftly changing airline scene in the region, as airlines close, reorganise or – in some cases – launch. *Alan Dron* reports

As airlines plan for a gradual return to normality from the Covid crisis, there will be significant changes in the Scandinavian market. Some airlines have vanished, others have reorganised, while, remarkably, there will even be a new name on the block.

The name most closely associated with the region for more than 70 years is SAS. Like most carriers, the tri-nation airline is trying to discern the future shape of the market through the mist of economic uncertainty. "Route planning is very difficult," admitted Alexandra Lindgren, head of media relations, SAS Denmark. "As occurred in many countries, many companies switched over to digital meetings during the pandemic, which affected business travellers," she says. "We see business travel recovering, but don't know by how much. Like everyone else, SAS is looking at the leisure market and adjusting its routes accordingly. We see a changed travel pattern in general, [with passengers] booking much closer to departure." That makes it much harder to see the future size and shape of the route network.

"We thought we would have been out of the pandemic by now and I would be giving you a more substantial answer on where we're going," adds Lindgren. "We're flying around 50% of what we used to fly." Lindgren believes that traffic will pick up over the spring and summer.

The key word is flexibility – anticipating where and when passengers want to fly. With this in mind SAS is launching two new brands this spring: SAS Connect and SAS Link. SAS Connect will operate Airbus narrowbodies out of Copenhagen and is considering opening further bases at Stockholm Arlanda and Oslo. SAS's orders for Airbus A320neo-family aircraft will allow it to retire most of its remaining Boeing 737-700s and -800s by end 2022.

Copenhagen-based SAS Link, meanwhile, will be a new subsidiary using Embraer E195 regional jets. A small number of the aircraft will be acquired until a longer term decision is made on new-generation jets.

New entrants in Norway

In Norway, both the long-haul and short-haul scenes have new entrants. Norse Atlantic Airways will initially fly on transatlantic routes (see box story) while a second new carrier, Flyr, is the latest entrant in the low-cost carrier (LCC) sector.

Flyr started operations in summer 2021 and believes it can find a niche both within Norway and in flying Nordic holidaymakers to Mediterranean destinations. The airline has opted for the Boeing 737-800, rather than the newer Max, as -800s are readily available worldwide and many of Flyr's personnel have moved across from fellow LCC Norwegian, which was also a major user of the type, so familiarity is assured.

Like other carriers, Flyr believes that passenger numbers will rise through the spring and summer and has pencilled in a 30-strong fleet by 2024-25.

Pre-Covid, the Norwegian domestic market had some of the busiest routes in Europe, with Bergen-Oslo and Trondheim-Oslo being served as many as 30 times daily by several carriers. Many passengers would fly to the Norwegian capital for business at the start of the week, then fly home at the weekend.

Norwegian re-emerges

LCC Norwegian, meanwhile, has emerged from a restructuring and is now rebuilding. Norwegian's dash for growth last decade, in a bid to build critical mass, led to the company being financially over-extended and to it refocusing on

The Scandinavian airline market has undergone significant upheaval in the past few years, with new players taking to the air in 2022 (photo: Avinor).

profitability. This was going well until the pandemic eviscerated passenger demand. The airline ditched its long-haul services and is now concentrating again on Norway and the Nordics.

"We're going back to our core business," said Magnus Thome Maursund, executive vice-president, network. As others have noted, however, planning is difficult. In terms of the balance between business and leisure traffic, "I think everyone is scratching their heads, trying to find out what will happen post-Covid."

London Gatwick was previously a major base for Norwegian's short- and long-haul fleets. The base has gone, but London remains an important destination and is likely to become more so. Additionally, Norwegian operates into Manchester and Edinburgh.

The English destinations are popular for an unusual reason: "Everyone in the Nordic countries has a favourite English football team," Maursund said. "They follow the English Premier League. The main reason for operating into Manchester is to get that strong catchment area for football – Manchester and Liverpool." The traditional Scandinavian practice of heading to London for shopping trips also remains very popular.

Norwegian's renewed focus on its home turf is understandable: high incomes mean people are prepared to pay for air travel. "It's an attractive market but it's also a highly demanding market," says Maursund. Social responsibility rules have to be followed. Increasingly, those rules include environmental measures, while strong trade unions have to be taken into account, too.

Having shrunk to a shadow of its former self while undergoing major restructuring, Norwegian had bounced back to a 51-strong fleet by January "and we're growing that back up to around 70 tails for this summer," Maursund said. All of Norwegian's aircraft are currently Boeing 737-800s, but there are plans to induct two 737 Maxs in the spring.

Connecting remote communities

Flying plays a significant role in Norwegian society. The country's rugged topography means that road and rail links can be sparse, with air and sea travel often the best ways to reach remote towns. This has led to a dense network of ultra-short-haul sectors, many of them serviced by Widerøe.

Despite the pandemic, "We're relatively stable," said Widerøe chief executive Stein Nilsen. In March 2020 the Norwegian government provided a series of financial support measures, including loan and guarantees arrangements, and Widerøe drew on that.

The airline is unusual in that a significant proportion – around 35% – of its production consists of Public Service Obligation (PSO) routes. "We had a discussion with the ministry of transport in March 2020 on how to handle the PSO route network," Nilsen said. "The network is basically the only transport infrastructure in some parts of rural Norway [and] the ministry wanted to keep up the offering in those areas." That gave Widerøe a vital baseline of income.

An indication of the size of the carrier's PSO network is that, at times during the depths of the pandemic, Widerøe became Europe's largest airline in terms of aircraft movements. However, "65% of our routes have been a nightmare," Nilsen admitted. International services including those to Munich, Hamburg, Gothenburg, Copenhagen, and London were all paused. The only one to continue was the longstanding sector between Bergen and Aberdeen, which links the centres of the Norwegian and British hydrocarbon industries. "We have four important customers completely dependent on that route," Nilsen said.

Speaking in mid-January, when Norway was enduring another lockdown, he confirmed that Widerøe was operating at 30% of 2019 levels, "but I expect 2022 to be all about getting out of Covid and a normalisation of demand in the Norwegian market."

Widerøe operates a fleet based around the De Havilland Canada Dash 8 turboprop – 26 Series 100/200s, four -300s and 10 -400s. There are also three Embraer E190 E2s, for which Widerøe was the 2018 launch customer.

In November 2021, Embraer's Eve subsidiary and the airline's Widerøe Zero offshoot signed an MoU that aims to develop Urban Air Mobility (UAM) solutions, with a focus on deployment of eVtol operations in Scandinavia. "We're very interested in the concept, but of course it will only work with a small part of our route network," said Nilsen.

Additionally, Widerøe has joined up with Rolls-Royce and airframer Tecnam, which are developing the electrically powered P-Volt, based on Tecnam's existing 11-seater P2012 Traveller.

Top: Airlines are hoping the leisure travel market will lead the sector into recovery this year (photo: SAS).
Left: Norwegian is hoping to bounce back this year, says Magnus Thome Maursund, executive vice-president, network at the carrier (photo: Norwegian).
Right: Finnair is adding long-haul routes from Stockholm's Arlanda Airport, says Ole Orvér, chief commercial officer at the carrier (photo: Finnair).

is starting a Dash 8 life extension programme with De Havilland and Bombardier, to increase their service lives from 80,000 to 120,000 cycles, which will give the airline the option of flying them beyond 2030.

Nilsen is an admirer of the Canadian turboprop, and described it as "a perfect aircraft for a short-haul network". The Dash 8 can get into 800-metre runways in very rough weather. Widerøe has bought three more 100/200s recently, to provide additional backup and improve network months, to reappear. "Wizz has always been a very, very aggressive airline on international routes, especially on those between Eastern Europe and Norway," he said. "We also expect them to try to establish something at Gardermoen."

Nilsen foresees the capital's main airport becoming a major battleground in the near future, with the Norwegian arm of SAS ("a really strong brand in Norway"), a resurgent Norwegian and new LCC Flyr all fighting for market share. "We've seen three operators in

Norse Atlantic Airways plans to take off this spring with 15 Boeing 787s (photo: Norse Atlantic).

The Norse longships arrive

It takes a certain amount of nerve to set up a new airline during the worst crisis the aviation industry has ever suffered, but Bjørn Tore Larsen and his team at Norse Atlantic Airways (NAA) have done exactly that.

Scheduled to launch long-haul services – initially from Oslo – in Q2 2022, NAA will field a fleet of 15 Boeing 787s flying to the US.

NAA has been seen as stepping into the shoes of now-defunct Norwegian Air International, but Larsen insists it is a completely different animal. It will be purely a long-haul operation (Norwegian's operating companies flew both short-haul and long-haul, with the latter proving a considerable drain on the company's finances) and will have a single aircraft type, whereas Norwegian Air International operated a large fleet of Boeing 737-800s before adding a second type, the 787.

"It's a very simple business model, very focused and lean," Larsen said. "We're targeting the leisure market, VFR [visiting friends and relatives] and cost-conscious travellers." It will not be a hub-and-spoke operator, which he said adds complexity, but will "as much as possible be point-to-point". As a brand new airline, it is free from legacy conditions surrounding its operations and can "pick systems from scratch".

Larsen is confident that pent-up demand in the leisure and VFR sectors will propel the new airline's fortunes. NAA will appeal to what Larsen describes as the cost-conscious traveller but does not see itself as a low-cost carrier.

The initial destinations will be several as-yet-unnamed US airports. These will serve popular holiday areas, such as south Florida, Los Angeles, and New York, although they may not necessarily be the major airports in those regions.

Larsen believes that he can operate without arousing the ire of existing transatlantic carriers: "We're a very small player relatively and I don't think we represent a threat to existing airlines. We think our product will stimulate demand."

In January the US Department of Transport approved NAA's application for flights from Norway and the European Union. Larsen said that London also figures strongly in NAA's plans.

The initial fleet of 787s is scheduled to be delivered by early spring, "but we have very flexible arrangements on when we start paying the leases", he said. "We'll start very cautiously... and we need to know demand is back, so we won't fly with half-empty aircraft."

Norway before," he commented. "That did not end well."

In Sweden, meanwhile, both SAS and Norwegian operate services, but the largest local carrier is BRA Braathens Regional Airlines, with 13 ATR 72-600 turboprops and a network throughout the country.

Regional carrier Air Leap went into administration in late January, leaving several routes in Sweden, Norway, and Finland unserved. The company blamed a lack of financial support from the Swedish government for its plight.

Focus on Finland

Finland's national carrier, Finnair, describes the Scandinavian market as "fiercely competitive". Like rivals, it has learned to move quickly during the pandemic. "We saw an opportunity to launch new non-stop long-haul services from Arlanda, when other players shifted their focus," said Ole Orvér, chief commercial officer.

"Finnair's focus is two-fold: we provide the best connections for our home market Finland, and we provide the best connections to Asia. We have been the leading carrier to Asia from Sweden, for example, and last autumn we strengthened our offering by opening non-stop routes from Stockholm Arlanda to Thailand and the US," said Orvér.

"In terms of aircraft, we have received our 17th Airbus A350, with two more aircraft in the pipeline for the next few years. Due to the impacts of the pandemic, we have postponed our narrowbody fleet renewal, so that is not on our immediate agenda now," added Orvér.

A vital part of Finnair's domestic services comes in the form of Nordic Regional Airlines (Norra), which acts as the flag-carrier's 'preferred partner' on regional services. "Norra operates a part of our regional traffic, using 12 Embraer 190s and 12 ATRs," said Orvér. "The flights are sold and marketed as Finnair flights, and it is also our name on the aircraft. Traffic and network planning is done by Finnair;

Norra operates the flights."

"The Norra partnership is well suited for our regional services. It allows us to serve also thinner routes where passenger numbers do not justify flying with a larger aircraft, and during the pandemic we have served many of our regional destinations with the smaller aircraft operated by Norra, enabling us to maintain the connections in a sustainable way," said Orvér.

"Asia continues to be key to our strategy. Our Asian services have been supported by strong cargo demand, which has enabled us to also launch passenger services even though the passenger load factors have been low. We currently operate to Tokyo Narita, Osaka, Shanghai, Seoul, Delhi, Singapore, Bangkok, Phuket and Hong Kong."

"As Japan and China, which traditionally have been strong markets for us, are largely closed for international travel, we have placed more capacity to the North Atlantic routes, serving New York, Miami, Los Angeles and Chicago from our Helsinki hub, and serving New York, Los Angeles and Miami from Stockholm Arlanda," said Orvér.

Environmental aspects continue to increase in importance when customers make travel decisions, said Orvér. "We are committed to halving our net emissions by 2025. Our strength is the short northern route between Europe and Asia, which besides being the fast alternative for travellers also generates less CO2 emissions. This is something that we see cargo customers, for example, placing greater focus on already."

In Denmark, meanwhile, the country's sole remaining scheduled operator, DAT, has survived – and even made a profit in 2020 – through an eclectic mix of scheduled and charter services, ACMI contracts, PSO flying and aircraft trading and leasing.

Chief executive Jesper Rungholm puts its success down to its ability to turn on a sixpence when making decisions. If an airport director says, 'I urgently need someone to start flying scheduled services to A next week', DAT can respond, he said.

DAT is also the majority (60%) shareholder in Norra, with Finnair holding the other 40%. ■

"I expect 2022 to be all about getting out of Covid and a normalisation of demand in the Norwegian market"

Stein Nilsen,
Chief Executive, Widerøe

Asia-Pacific patchwork

The destructive impact of the Covid-19 pandemic and the travel restrictions that were implemented in response to it have combined to impede aviation's recovery across the Asia Pacific. By *Tony Harrington*, Queensland, Australia

Before Covid, the closest an Airbus A380 ever came to Alice Springs was about 40,000 feet, as it passed over the arid town in the centre of Australia, usually en route between Sydney or Melbourne and the major hubs of Asia or the Middle East.

But as travel restrictions and border closures forced airlines to gradually ground their fleets, 'The Alice', as it is known, became one of the biggest parking lots for commercial jets in the Asia-Pacific (APAC) region, as airlines sought hot, dry climates in which to store surplus aircraft, and minimise the risk of corrosion from rain or moisture while they stood idle.

At the peak of the pandemic, a storage zone next to Alice Springs Airport hosted more big jets than many international hubs, its visitors including Singapore Airlines A380s, Cathay Pacific Boeing 777s, Jetstar and Scoot B787s, and lines of others – an aviation Wonderland in Alice exhibiting spectacular outback monuments to the airline industry's greatest crisis.

Now, as air transport slowly begins to recover, these aircraft are starting to depart, each exit a sign of incremental resurgence. But the anti-Covid measures of Asia-Pacific governments being among the most aggressive and disparate in the world, coupled with the already-weak positions of many operators, and then the arrival of the Omicron, the consolidated recovery of APAC aviation is seriously lagging behind the rest of the world.

'Asia Pacific' is a generic descriptor for a diverse collective of almost 40 nations, ranging from the two most populous, China and India, to tiny island states like Nauru in the south-west Pacific, whose total area of 21 square kilometres could easily fit within the perimeters of Alice Springs Airport, and still leave space to park planes.

Together, APAC countries comprise the world's biggest single air travel market, their domestic, intra-region, and international long-haul services collectively estimated by the International Air Transport Association (IATA) to deliver almost 39% of global passenger traffic.

As the region with the largest and fastest-growing population, APAC's aviation market has by far the strongest growth potential, though granular analysis reveals a messy mix of domestic and international markets, characterised by enormous cultural, social, geopolitical, economic and demographic differences and needs.

Regional differences

"We'd argue that there are as many as eight regions within Asia Pacific," said Timothy Ross, head of investor relations for major aircraft lessor BOC Aviation, a Singapore-based subsidiary of Bank of China with a global portfolio of 520-plus aircraft owned, managed or on order. "This region is massively different, depending on which market you're talking about – north Asia, south-east Asia, the Indian sub-continent, Oceania. Describing it as one region is like calling Africa one country."

That complexity is replicated in the vastly varying performances and strategies of aviation players across APAC, which are roughly following a global pattern of bumpy but steady domestic recovery, and the opposite for international operations, with connectivity between countries upended by uncoordinated, unpredictable, and uneven government responses to the pandemic.

Aviation data group OAG reported in January that eight of the top 10 domestic routes were in Asia Pacific, reflecting the strength of intra-market recovery, while only two APAC routes, Hong Kong-Taipei and Singapore-Kuala Lumpur, featured among the busiest international sectors.

Subhas Menon is executive director of the Association of Asia Pacific Airlines, a collective of 14 key operators. "When the pandemic first started, we thought that the Asia-Pacific region, being the first to confront the crisis, would be the first to emerge from it," said Menon, a former senior executive of Singapore Airlines, and chief executive of its now-integrated regional subsidiary Silk Air.

"It was looking pretty good," he said. "But Asia-Pacific governments are easily spooked. Once Omicron appeared they immediately reacted. They put the brakes on. If we can get back to 30-40% of 2019's international demand in the first part of 2022 then hopefully governments will get more confident in dealing with this, and realise you can't operate borders on a stop-start basis."

Tony Webber, a former chief economist

Cathay Pacific has been hit hard by China's zero-Covid strategy and has been operating just 2% of its pre-pandemic capacity at the start of this year (photo courtesy of Cathay Pacific).

for Qantas, and now head of Sydney-based consultancy Air Intelligence, said the skittish behaviour of regulators, particularly in the APAC region, had created an additional impediment to airline recovery in 2022. "[There is] hesitancy around governments re-imposing border or travel restrictions while you're away, and fear of not being able to get back home," he said.

Omicron's arrival just as regional recovery was gaining traction intensified regulator reactions, caused airline capacity to porpoise, and heightened customer anxiety, he said, further slowing recovery in Asia-Pacific nations, particularly in inherently nervous markets like Japan and Korea, stalling the new year turnaround that APAC's airline sector so desperately needed. That instability has persisted into the new year, with capacity elasticity increasingly shifting from seasonal to sudden.

Balancing risk

IATA described APAC's tentative recovery as "the lowest among regions", and while predicting continued reduction in global air travel during January and February, frustratedly and pointedly added: "Bookings for travel within Asia, once one of the largest markets globally, remain insignificant amid risk-averse behaviour by governments."

Singapore was one of the most proactive responders to Covid. Late last year, as confidence in recovery trickled back, the island state established Vaccinated Traveller Lanes for eligible passengers from 27 countries. But just as the programme started, so did Omicron, causing the sudden suspension of new ticket sales over Christmas-New Year, and limiting access beyond that, further impeding recovery at one of APAC's busiest air transport hubs.

Australia and New Zealand also had a world-watched 'travel bubble', which drove significant growth in air passenger journeys, and raised hopes of similar arrangements to reactivate growth in 2022. But it, too, was increasingly disrupted by Covid, until New Zealand, fighting to contain its own infection rates, deflated the deal until April 2022.

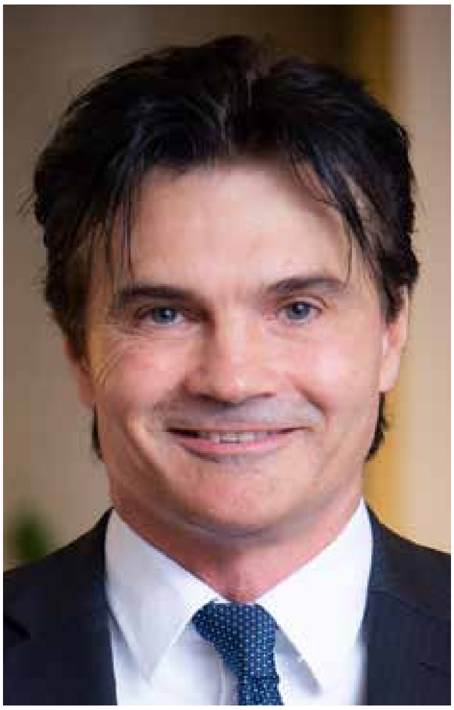
"I think one thing that we've learnt over the past two years is that Covid makes fools of those who want to make long-term forecasts," said BOC Aviation's Ross. "We're very encouraged by the public's desire to get back on aeroplanes. But recovery is uneven, non-linear."

BOC Aviation says it's clear a global comeback is starting, albeit patchy, and slower in south-east Asia than elsewhere, with domestic passenger volumes worldwide getting close to pre-pandemic levels. "I'm not about to put a number on it," said Ross, "but we're entering 2022 probably with greater confidence than we started 2021."

Boeing Commercial Airplanes, in its recently released 20-year forecast of global air traffic growth, said: "Today, roughly one-quarter of world air travel is flown within Asia, the highest share of intra-regional air traffic globally. Boeing forecasts intra-Asia traffic's share will increase to nearly half of all global air travel over the next 20 years."

Growth, not just recovery, is already happening on APAC domestic routes.

China, the world's largest aviation market, has all but grounded international passenger flights, as it pursues a zero-Covid policy. But internally, both there and in other APAC nations with sizeable domestic networks, air travel is, for the most part, climbing as airlines perfect the practice of flying a fine, zig-zag line between short-term caution and longer term optimism.



Left: Brad Moore is regional general manager, Australia and New Zealand, for Swissport (photo: Swissport).

Right: Timothy Ross is head of investor relations at BOC Aviation (photo: BOC Aviation).

Home encouragement

Raul Villeron, vice-president, Asia Pacific for regional jet maker Embraer Commercial Aircraft, said Omicron had dimmed hopes of recovery in the first half of 2022. "However," he said, "we have seen encouraging signs of domestic aviation growth in Asia Pacific," particularly through deployment of regional jets, not just to maintain or incrementally restore service on key routes, but also to pioneer new non-stop operations in Vietnam, China, Japan, and Australia.

Pre-pandemic, he said, the Vietnamese archipelago of Con Dao was served by direct flights from only two destinations. But during 2021, Embraer E-jets were used to expand that market to six direct destinations and a daily average of 10 flights. Growth has also been facilitated by regional jets within China and Japan, while in Australia, through a capacity deal with Alliance Airlines, Qantas plans to deploy up to 18 E190s on new direct routes or downsized existing sectors.

While APAC, like every market, has been concussed by Covid, one standout in the region has been India, where industry capacity is nearing pre-Covid levels. Low-cost carrier IndiGo, with almost 55% market share, continues to display robust intent, while investment titan TATA has just taken control of perpetually troubled Air India, flagging hope after decades on the cusp of collapse.

IndiGo has been one of the industry's success stories during Covid. It increased its domestic network from 60 to over 70 destinations; inked major commercial partnerships with American and Air France-KLM; updated its fleet with new A320s, A321neos and ATR72 turboprops; and signalled expansion of its international network – which, pre-pandemic, absorbed 25% of its capacity, and is now targeted to reach up to 40%. IndiGo has also ventured into dedicated cargo with letters of intent for four A321 jets converted from passenger planes to freighters.

Another surging APAC low-cost player, VietJet, has renegotiated and recommitted to orders for 119 new Airbus neo narrowbodies and three widebody A330s, while Qantas will replace its domestic B717s and B737-800s with up to 134 A320neo and A220 family jets over the next decade, with firm orders for the first 40 to be formalised by mid-2022.

Among these will be 20 A321XLRs, with range not just for every route in Australia, but also destinations throughout south-east and north Asia, until now served almost exclusively by widebody jets. This would potentially enable smaller gauge re-entry into suspended markets, more frequent flights in place of or alongside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The opening up of the Australian market to international travel will be a major boost for the country's airports (photo courtesy of Melbourne Airport).

widebodies, and establishment of new routes.

"I do believe that we're at the beginning of the end," Air Asia Group chief executive Tony Fernandes told CNBC's Squawk Box Asia programme, in a discussion of Covid's impact on APAC travel. "At this time last year, we had no planes flying," he said. "Now we've got a large chunk of our fleet flying domestic Malaysia, Thailand and Indonesia."

He sees international recovery beginning around March, and through a rebranded holding company, Capital A, has flagged plans for two new low-cost carriers in south-east Asia.

Brad Moore is regional general manager, Australia and New Zealand, for the global ground handling company Swissport, whose APAC activities are extensive, diverse and serve as another key barometer of industry health.

In Australia and New Zealand, supporting domestic passenger flights is the biggest part of Swissport's business, while elsewhere in the region, particularly Japan and Korea, international passenger and freight operations dominate.

"We know from experience that when border restrictions are relaxed, the volume of travellers comes back in a flood," said Moore. "There's enthusiasm by the airlines to return capacity to the market. But Omicron has thrown a new curveball, and that's the impact on staff numbers.

Cargo strength

"In Australia, where most of our work is domestic, almost everybody has been stood back up as the market has returned," said Moore. "In Japan and Korea, though, it's a very different story. International borders are largely closed for passenger traffic. But cargo is strong, so our check-in staff are being redeployed on freight and logistics. In some cases, they're 'on loan' from us to other employers."

He believes APAC aviation will rebalance in the second half of 2022, once restrictions ease again, adding that Swissport has just secured new international contracts across the region to support carriers including American, Hawaiian, Finnair, Turkish, Cebu Pacific and Fiji Airways.

But international aviation, while slowly growing back, has been – and remains – seriously challenged across APAC.

Pre-pandemic, many long-haul operators were already experiencing trauma, particularly in south-east Asia where national carriers including Malaysia Airlines, Garuda Indonesia, Thai International and Philippine Airlines had all undergone life-saving restructures, some more than once. Meanwhile others, such as Qantas International, had endured a long-term decline of fares, market share and profitability, largely from capacity and price wars with lower cost Asian airlines and surging Gulf carriers.

Cathay Pacific, once proud and powerful within and beyond APAC, has also suffered serious damage, but of a different kind to others. The rise of mainland China has created more airlines, diminishing the importance of the once-vital Hong Kong gateway, Cathay's hub, by overflying it with direct, competing operations.

Now, the enormous political upheaval in Hong Kong has critically damaged its remaining appeal as both a destination and a stopover hub. And with China's zero-Covid strategy extending to Hong Kong, Cathay's crisis continues to deepen, with just 2% of its pre-pandemic capacity scheduled for the start of 2022.

Not to mention the worrying uncertainty about Taiwan. What will happen there?

Notably absent from the list above is Singapore Airlines (SIA). Not only is it emerging from Covid in reasonable shape: it might even return in better shape, serving not only its previous global network, but also potentially becoming a strong long-haul surrogate for its struggling neighbours.

Star Alliance member SIA recently reactivated a deep commercial partnership it had struck before Covid with oneworld's Malaysia Airlines, including extensive codeshare access to Malaysia's domestic routes and reciprocal attachment of its flight numbers to long-haul SIA services. (The two were once one as Malaysia-Singapore Airlines, or MSA, and there are some who argue that they should be again.)

As well, SIA has just signed a similar agreement with SkyTeam member Garuda Indonesia, giving SIA codeshare access to Garuda's internal Indonesia flights, Garuda the right to code on long-haul services by SIA, and both the potential for other collaboration.

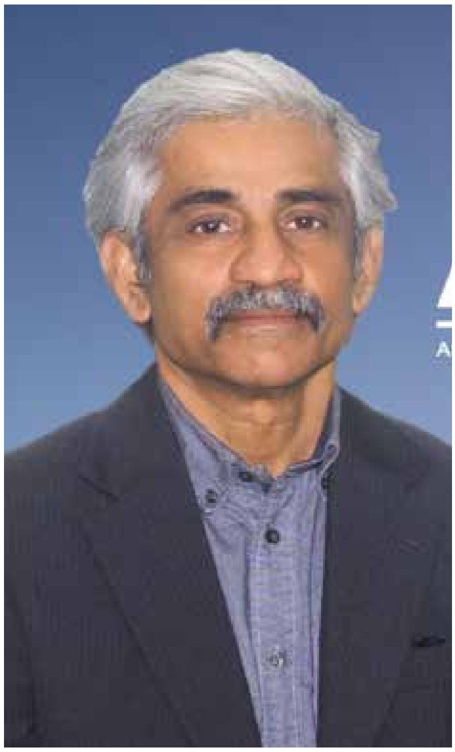
"This whole situation resonates very well for Singapore Airlines," said John Grant, a partner at global air transport consultancy Midas Aviation. "The Singaporeans think long term, not short term. They don't need a second invitation to an opportunity. They can serve everywhere non stop with their fleet of new aircraft. And their domestic market, as such, is akin to the European Union."

But he sees even bigger APAC evolution, as legacy carriers struggle, low-cost carriers thrive, and new entrants potentially take advantage of a big pool of good but unrequired aircraft, attractive lease rates or purchase prices for new or returned fleet, and access to under-utilised airports, under-served routes, and under-employed aircrew. In Australia, start-up airline Bonza has just secured a fleet of B737 Max jets.

"Airlines are staying in markets but offering once-a-day services where previously they had three or four, or four times a week instead of daily," said Mr Grant. "That leaves room for start-ups to come in and disrupt the market for two to three years. But they'll also distract the recovery of the legacy carriers."

Change is occurring everywhere, but in a market the size of APAC, the scale of opportunity is enormous for those confident, competent and cashed up enough to explore new directions, he said.

"Covid has given every existing airline a chance to reset its business for the future. It's a fascinating time," said Grant. "The uncertainty creates opportunity for everyone, and that's why it's so exciting. If ever there was a time, then this is the time we should see some airline consolidation." ■



Subhas Menon is executive director of the Association of Asia Pacific Airlines (photo: AAPA).

Climate change

Aviation's drive towards net zero emissions by 2050 means embracing a new way of thinking for the route development community, says *David Stroud*, managing director of global route development consultancy ASM

Last year ASM produced a series of White Papers under the title of 'Route to Recovery'. In these papers, we tried to set out ways in which our industry should act to rebuild the routes and air services lost or paused by the pandemic. Many of those recommendations still hold true, albeit we had expected the foundations of recovery to be further advanced by now.

In October we had the great pleasure of attending the first World Routes event in two years. Brilliantly hosted by Milan's airports and tourism authorities, much of the airline and airport industry was in attendance, certainly from the European and Americas markets. Whilst not every market was fully represented, the sense of optimism around the industry was truly tangible. There was a real conviction that many routes and markets would recover through 2022, and a real sense that airlines were looking more closely at new and emergent markets to serve pent-up passenger demand.

Now, our industry is fully concentrating on how to build back as quickly as is feasible and the dialogue during World Routes between airlines, airports, and tourism authorities was, in many ways, as it has been for many years – all parties trying to understand the extent of expected market demand, reviewing the main drivers of that demand – tourism, VFR (visiting friends and relatives), corporate travel, etc – and of course many negotiations about cost reduction, route support, and incentives.

There is, however, a new agenda building that is shaping all aspects of the aviation industry and will have a major influence on route development and the meetings at Routes events moving forward. Anyone who has followed global news will be more than aware of the increasing number of stories, conversations and action plans to address the fundamental challenge of climate change. A Net Zero Carbon emissions agenda for 2050 is a stated aim for many in the industry.

Climate change is going to be the dominant agenda facing society in the upcoming years, and likely for the next few decades. The challenges were also held up front and centre for all of us during COP26 in Glasgow on 31 October to 12 November last year. Indeed, it was certainly a consistent topic of conversation at the various conference sessions in Milan.

Matter of survival

Lena Wennberg, sustainability and environmental manager at Swedavia, said: "We have to show everyone that aviation, especially airports, can be run without fossil carbon. Everyone is focused on this goal of reaching zero – it's part of the business' survival."

The Air Transport Action Group's (ATAG) Commitment to Fly Net Zero 2050 Statement highlights four key areas by which the decarbonisation of air transport would be achieved:

- Increasing use of sustainable aviation fuels (SAF)
- Research, development and deployment of evolutionary and revolutionary airframe and propulsion systems (including aircraft powered by electric or hydrogen engines)
- Improvements in the efficiency of operations and infrastructure across the air transport system, including airports and air navigation service providers
- Investment in carbon offsets and carbon capture or removal

Beyond these four elements, many believe further action around 'market-based measures', such as carbon-based pricing and frequent flyer taxation, is needed to truly achieve a Net Zero industry. These measures will either speed up the movement towards carbon-free flights or depress demand.

As route development professionals, our ability to influence much of the transition to Net Zero feels limited. Today, we work in our own specialist function in the industry, one focussed on serving market potential, driving traffic growth, building connectivity, linking cities and countries together, and enabling the strong economic and social benefits that air transport is so powerful for.

In the post-pandemic recovery, this rebuild of connectivity is needed more than ever. Market-based measures, however, should they become widely introduced, could have a real impact in shaping the extent of route and connectivity growth that we can pursue.

We cannot detach ourselves from the climate change challenge, and we cannot

Considerations around sustainability will have to be woven into route development planning, according to ASM (photo: courtesy of Copenhagen Airport).

continue to act as if the problems our industry faces are for others to solve. We are part of the problem, the growth that we are driving is the reason why air transport is so problematic for the future, and in many ways, it could be argued that route development runs contrary to the efforts to limit carbon growth.

The 2-3% share of global emissions attributed to aviation today is undoubtedly going to rise significantly because of the inherent growth we are pursuing. Furthermore, other sectors will be able to decarbonise far faster than air transport. By 2050, it is not unreasonable to expect that annual global passenger numbers will have more than doubled from 4 billion to 10 billion. Aviation's share of emissions, without success in delivery of the above decarbonisation measures, is going to be much more significant than it is today.

The impact of aviation is demonstrably starker when we acknowledge that those who travel by air are drawn from a small proportion of the world's population; they are often frequent and wealthy travellers. The impact we have and are likely to have is disproportionately higher when considering the real size of the traveller market driving demand.

The role of technology

To add further risk, the success of the measures above is dependent on major advances in technology and innovation. In aviation, these can take many years to be proven, become commercially viable, and be deployed widely enough to achieve the required results. The race is truly on to be ready for 2050. So, whilst the world's aircraft makers, fuel companies, and policy makers are clearly setting about their challenges, we as route development professionals need to look closely at our profession and do what we can to work towards the Net Zero industry we need.

Indeed, the ability of our profession to support the transition to Net Zero aviation will be reflected in the potential for the industry to grow over the coming decades and the extent of the role it will play in a low-carbon economy post 2050. How then do we start to build the climate change agenda into the work we do? And how can we do things differently?

We at ASM are committed to build climate change considerations into all our advisory and consulting work, whether it be strategy formation, route development representation, or data and analytics. How climate change will influence the practice of route development will evolve over time, but for now we think the core considerations that airports, destinations, cities and airlines should focus on are the following:

1. ROUTE DEVELOPMENT STRATEGY ADAPTATION

For airports, cities and destinations, setting out a strategy is the start of the route development process. It identifies the key priorities of connectivity, routes and airline targets, as well as the incentives and other enabling strategies that will help realise the strategic direction. Such strategies now need to set out more than just the routes and airline targets based on market sizes and gap analysis. They should also consider which routes and airlines would better align with a Net Zero carbon strategy.

Applying a carbon agenda to determining targets will involve:

- Which routes and airlines would deliver the highest load factors, assuming greater efficiency outweighs negative per-passenger carbon impact
- Which routes and airlines would deliver the greater social and economic benefit compared with the resulting carbon impact
- The most fuel-efficient aircraft

"As route development professionals, our ability to influence much of the transition to Net Zero feels limited"

David Stroud,
Managing Director, ASM

The aviation industry's uptake of sustainable aviation fuels will be a key element of the sustainability actions taken by airlines over the coming years (photo: courtesy of Rolls-Royce).

(airframe and engine propulsion) operated by target airlines

• The ability of target airlines to dynamically change aircraft to better match supply and demand

• Carbon merits of non-stop O&D-serving routes vs hub connectivity

• Optimising inter-modal public transport airport access

• Demographic mix of passengers, which routes offer a balance of demand types, directionality and cabin class usage

New forms of analysis are required to refine these factors and determine the trade-offs between setting a growth ambition and one that offers a more favourable climate impact. In CAPA's Airline Sustainability Benchmarking Report 2021, analysis was undertaken to show the scale of emissions by airline. The total CO_2 emissions by airline in 2019 highlights the largest emitters and the significance of the top 10 airlines relative to total industry emissions.

In determining route development targets, we will go a step further by looking at the specific fleet options an airline can deploy on a particular route, as well as the overall airline's efforts to achieve Net Zero.

We mention above the need to consider the merits of the non-stop opportunity vs hub connectivity. It is true that hubs provide much-needed connectivity to many markets that would otherwise not sustain non-stop service, so the merits of either option are too opaque to simply declare that one is better than another.

At ASM, we are already helping our clients understand and calculate the carbon cost of their passenger O&D markets, and frame strategies about the best way to serve these through a better mix of non-stop and network-based routes.

2. MINIMISING MARKET LEAKAGE

The extent of market capture of an airport and/or route within a catchment determines competitiveness. This is a data point that is extensively used in route development as airports try to arrest market leakage to a rival, whether this is through ground leakage (as primarily discussed here) or air leakage through indirect connecting flights.

In many markets, airports compete with a nearby alternative, but often leakage can take place over long geographic distances, particularly to major hubs or major airports with long-haul services. Leakage is driven in large part by the varying extent of air services across airports, the price differentials across these services and the ground access advantages one airport may have over another.

Aside from the resulting competitive dynamic between airports, excessive and long-range leakage comes with an additional and likely unnecessary carbon cost, particularly if the leakage mode is by car. Now, ground leakage may not be a major proportion of the overall carbon impact of a flight, but everything counts in the race to achieving Net Zero and reducing unnecessary leakage should be an easy win. As airports, airlines and transport planners, we need to understand the extent of and carbon cost of 'unnecessary' leakage.

Not only as an industry are we providing weak customer service, we are creating a climate change impact that

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should be easily arrested. In the UK, the government has put the brakes on regional airport infrastructure expansion, apparently as part of climate change constraining measures.

This may well be too simplistic a view of the reasons why certain planning applications approvals across airports have been paused. Understanding better the carbon cost of unnecessary leakage, rather than just pure market leakage, should also help make for better-informed decisions around permitting expansion plans. Having better knowledge of how we are influencing passenger behaviour is a key starting point to working together to reduce the negative impact of air travel through smarter route development and better airport capacity planning.

David Stroud, managing director of global route development consultancy ASM (photo: ASM).

"As part of the route development community, we need to start thinking deeply about the impact we play in the future"

David Stroud,
Managing Director, ASM

3. NEW INCENTIVE SCHEMES

Incentive schemes – whether in the form of published reductions of fees and charges, marketing funds, or community-driven support financing – are fundamental building blocks of route development. Airports have historically used fees and charges mechanisms to influence noise mitigation (and engine emissions) and to deter the use of older aircraft; however, the basket of measures deployed in negotiations with airlines are, I would contest, 100% market and revenue based.

This has to change. Incentive programmes and route support need to acknowledge the carbon impact of a new service or operation. Put simply, more support should be given to those airlines and routes that are demonstrating, either generally or specifically on the route in question, real reductions in emissions and progress along the path to Net Zero. Less support, and ultimately no support, should be directed to the opposite.

As an industry, we are going to struggle to look the outside world in the eye if we continue to pump prime our routes and growth with funds, often coming from our communities, that do not factor improved carbon emissions performance into the support funding agenda.

New incentive schemes need to be designed, rigorously implemented and performance audited with a carbon agenda in mind. For route development professionals, the instigation of new incentive schemes and support programmes will be one of the toughest challenges. These programmes are also very much negotiated, and in the heat of negotiation with a business to build back post pandemic, it will be a real test of wills to apply new criteria. This may be made even harder if the cost incurred by airlines working towards Net Carbon Zero means that aircraft and route operating costs rise. This is a challenge we all have to meet.

The air transport sector faces a particular challenge in transitioning to Net Zero as compared with other sectors of the economy. In part, this is because airlines are likely to be legacy users of carbon fuels and emitters of CO_2, and in part because the industry is so carbon intensive.

Lifting an aircraft into the sky and propelling it over long distances at rapid speeds requires a significant amount of energy. On top of this, demand for air transport is growing fast and showing no signs of abatement. As a result, we will remain in the public and political spotlight as pressures build to address the worst effects of climate change.

As part of the route development community, we need to start thinking deeply about the impact we play in the future. The economic and social benefits of our more connected world – hugely facilitated through air services – are too great and too important to be heavily constrained, but we cannot sit back and hide behind these benefits as reasons not to be a key part of reaching the Net Zero goal: we need to aspire for both sides of the equation to be achieved.

Route development itself needs to rise to the challenge and become a key part of the solution and not the problem. Route development professionals have always been some of the most innovative, creative and solutions-driven people in the industry, and I am certain we will face these challenges head on.

What does Net Zero carbon mean?

Organisations committing to achieve Net Zero carbon are planning to take action to cut carbon emissions under their direct control to an irreducible minimum and then invest in 'Carbon Capture' schemes to compensate for any residual emissions. The result would be that no net carbon dioxide emissions arise from the operation of that organisation.

Global voice

Independent ground handlers are seeking to raise their collective influence and add valuable services for their business needs via an invigorated global body: the Airport Services Association, writes *Mark Pilling*

Today, ASA represents about 70% of the global independent ground handling industry by turnover (photo: Çelebi).

One of the surest signs that an industry is growing up is a stronger membership association. That is the goal of Atilla Korkmazoğlu, the chairman of the Airport Services Association (ASA), and Fabio Gamba, its managing director, in their roles at the head of a body that represents a healthy proportion of the independent ground handling industry.

"We are a critical element of the aviation value chain and our importance to customer service can sometimes be overlooked," said Korkmazoğlu, who combines his role as ASA chair with his day job as president ground handling and cargo (EMEA) at Istanbul-based Çelebi Aviation Holding. "Using the ASA platform to promote a strong and dynamic message about our role as vital business partners for airlines, airports and aviation authorities is essential." This seems the least this relatively quiet, but surprisingly large, part of the aviation world deserves. Prior to the pandemic, ASA estimated that the ground handling workforce had reached 1.6 million employees worldwide and was growing fast. That has gone backwards over the last two years of plunging traffic but will grow again as passenger numbers recover.

Today, ASA represents about 70% of the global independent ground handling industry by turnover, which was estimated to be worth more than US$100 billion in 2019, said Gamba. The association was established in 1974 as the Independent Aviation Handlers Association (IAHA), focusing on European airport- and ground handling-related issues. "Especially in the past 10 years, ASA has grown to become the global representative of the independent ground and air cargo handling industry," said Gamba.

Recruitment drive

"A big ASA focus has been to recruit more small and medium-sized handlers to ensure the association represents businesses across the industry spectrum, and not just the largest players," said Korkmazoğlu. ASA now has 58 members. "Our drive has been to be truly global and represent all airport service providers and not only those in Europe or the western world. We've succeeded to a point, but we want to go further," he said.

While ASA has reduced its membership fees for smaller handlers to make it cheaper for them to join, the main attraction to join "must be that the association adds value – we must be relevant," said Korkmazoğlu. "The main issues that we all face, day in, day out, are common," he added. "Our aim is to create a dialogue between ground handlers and the authorities and the other industry associations where we are instrumental in directing and shaping the conversation. We should not be passive as ground handlers."

Korkmazoğlu and the ASA board members understand this is not an overnight task, but the association is making steps in the right direction. "In 2021 we concentrated on making more effort on advocacy, not only to the other associations and regulatory bodies but also internally to create unity amongst members," he explained.

"We have had our successes. We increased the number of ASA members in 2021 despite there being a deep crisis affecting the whole industry," said Korkmazoğlu. Expanding the membership base boosts ASA's claim to be the single industry voice that the main aviation associations such as IATA, ACI and TIACA, and the regulatory bodies like ICAO, EASA and FAA, should listen to. "Our aim is to be recognised as the global association for all service providers by the aviation industry including regulatory bodies and other associations," said Korkmazoğlu. Over the past couple of years, ASA has stepped up its collaboration with IATA and is in talks with ACI and TIACA about deeper co-operation, he said. This has included ASA having a voting seat on the IATA Ground Operations Group, which advises the IATA airline board on all matters related to ground operation, safety, and efficiency.

Over the decades, the work of IATA has grown to include numerous working groups that deliver advice and guidance, and establish industry standards. An important and practical move taken by ASA in 2021 was to establish its own set of six working groups, which are:

- Ground Support Equipment
- Sustainability
- Safety
- Training
- Legal
- Cargo

"It is very heartening to see this good progress and how well the groups are working," said Korkmazoğlu. "This is voluntary work for the individuals concerned and I'm proud to see the enthusiasm of the group leaders and members." An early deliverable from the safety group, for instance, is the finalisation of the ASA Safety Incident Database, which will be a global record of ground handling incidents ¬– a necessary step in improving ground safety.

ASA Leadership Forum

The most important move ASA is taking to increase its visibility is the decision to create its own global forum, to be called the ASA Leadership Forum. Up to now handlers have gathered either at the annual IATA Ground Handling Council or other events. "These are valuable, but the board believes we need an ASA forum to bring the ground handling industry together to debate and work out the solutions needed for ourselves," explained Korkmazoğlu.

ASA is working with the publisher of ARGS, EVA International Media Ltd, to host the forum, which will take place on 5-7 September in Athens. The ASA Leadership Forum will be part of the Airline Ground Service Global Networking Summit, "creating an event that brings together all stakeholders within the world of ground handling services", according to EVA.

The forum is one of several practical initiatives ASA has kicked off to create

Left: ASA chairman Atilla Korkmazoğlu, who is also the president ground handling and cargo (EMEA) at Istanbul-based Çelebi Aviation Holding (photo: Celebi).

Right: ASA managing director Fabio Gamba (photo: ASA).

value, along with the hosting of webinars to increase its global reach on important topics and using social media more effectively, said Korkmazoğlu.

The event will undoubtedly provide a key waypoint in understanding how far and fast the industry has recovered from the Covid-19 pandemic. "Ground handlers have suffered like all other players in the industry and have shown an incredible resilience despite crippling revenue losses," said Gamba.

During the pandemic, ASA lobbied governments to obtain support cash to help them weather the storm, but with limited success. This contrasts with the airlines ¬– which did relatively well in this respect. Korkmazoğlu acknowledges that having a strong association behind them, such as the airlines have with IATA, is an important factor in winning support for members. "We did raise our voice during the crisis, but with mixed results so far," he said.

Business partners

Raising the profile and influence of the handling industry is something only ASA and its members can do. However, handlers often feel under-valued as business partners. "There is no doubt that as a part of the industry with some of the highest numbers of employees at airports, our services are key," said Korkmazoğlu. "We are an indispensable and invaluable piece of the travel and logistics industries. Ground handlers and their employees should be treated as respected business partners, and we say strongly that some players do not act in the proper way."

In practical terms, this can be seen at airports where the playing field in the handling market is not even for all participants or would-be entrants to the market. There are also locations where the widely recognised industry standard Service Level Agreement (SLA) protocol is not applied or is simply ignored.

"Bringing the industry to a level playing field in terms of access as well as economic sustainability and quality is vital," said Korkmazoğlu. "There must be minimum levels for employees in things like restrooms and changing rooms at each airport, there must be measures to prevent the use of black-market labour and there must be minimum SLA levels," he added. ASA is working hand in hand with the civil aviation authorities, both in Europe via EASA, and globally via ICAO, to work on some form of legislation to impose standards for training, safety management systems, minimum quality of service, etc, explained Gamba.

These areas are important for safety and social reasons at any time, but especially so today when the ground handling industry has lost large numbers of skilled and experienced staff because of the pandemic. "There have been many who have left to work at call centres and such like," said Korkmazoğlu. "How are we going to get them back or recruit a new generation?

"Our job is often a difficult one," he went on. "We work around the clock, 24/7, often outside in all weathers and with shifts, and in an industry where a delayed flight or other problem is common. This is why we must give a higher priority to employee recognition in the handling function, including the application of regulated training standards; otherwise, finding the right people to do our crucial roles as the rebound comes will be extremely challenging."

Even before the pandemic struck, there were voices in handling saying that the race to the bottom on pricing had been reached, and that some SLAs with airlines were punitive and nowhere near true partnerships. However, since the liberalisation of many handling markets in the late 1990s, which triggered the globalisation and consolidation of a large chunk of the industry, business has become intensely competitive. This benefited airlines, which saw handling as an ideal function to outsource.

Korkmazoğlu and Gamba understand that it will take time, hard work and money for ground handling as an industry to change the dynamics at play in these areas. As the association's website states: "ASA unites members to provide a platform where our independent companies can drive change, influence the industry and promote safety and quality at our airports." ■


Join us in Iceland!
Last summer we saw 22 airlines returning to Keflavik Airport and this winter we had 16 airlines come through which exceeds what we had before the pandemic by one. For the coming summer, 25 airlines will have Iceland as a destination proving that travellers are eager to experience what our island has to offer - no matter the season. The demand is as high as ever.
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KEFLAVIK AIRPORT

Carlos Zuazua of VivaAeroBus was the keynote speaker at Routes Americas, highlighting the strong growth of this Mexican low-cost carrier (all photos courtesy of Routes).

Back to business

The US has been one of the markets that has recovered fastest from the ravages of the pandemic, and the industry met at Routes Americas 2022 to review progress.

Mike Miller reports

Masks were off and hugs were plentiful as more than 800 airlines, airports and consultants convened in San Antonio, Texas for Routes Americas 2022 in February. There were more than 2,500 airline-airport meetings, the second most of any Routes Americas event. San Antonio impressed attendees by offering a constant stream of local culture, food, whiskey, and hospitality to the largest air service development event in the Americas.

San Antonio previewed its third terminal now under construction and revealed that it has more international seats than any medium-sized hub airport in the US. While industry leaders spoke frequently about the ongoing recovery in aviation, several speakers highlighted black clouds still present in the Americas – a somewhat negative outlook that came even before Russia invaded Ukraine a week later.

"There are all sorts of issues we're facing," said ASM managing director David Stroud. "It is a recovery, but is it a good recovery?" IATA regional vice-president Americas Peter Cerda noted that 2022 will be a better year, "but we will have to be flexible and a return to 2019 numbers will not be good enough.

"In 2019, many Latin American carriers were losing money, and now there are a lot of new governments coming in," Cerda continued. "Are the governments going to see aviation as good for the economy or a source of new tax revenue?"

Rafael Echevarne, director general of ACI Latin America & Caribbean, believes the industry "is going faster in the recovery than we expected, but there are dark clouds in the governments right now," referring to potential new taxes and fees. Shane Downey, vice-president government relations for the Global Business Travel Association (GBTA), was more optimistic. "Those headwinds are not in your face now. We're seeing countries re-opening. Corporate travel policies are changing," he said.

"There's a lot of pent-up demand for international travel. Going forward, airlines will be more flexible to taking risks," said Downey. "Technology will play a role, as new efficient aircraft will allow secondary cities to see new service, better connections and hub bypass opportunities."

> **"There's a great opportunity for medium and small [US] destinations to get to Mexico without going through a big hub"**
>
> **Carlos Zuazua**
> Chief Executive, VivaAerobus

Latin American dark clouds

The outlook for Latin America is far more uncertain now than during any recent period. While the US domestic airline market has been in full recovery for several months, Latin America has seen three major airlines – LATAM, Avianca and Aeromexico – all endure the bankruptcy process during the last two years. That


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is not the biggest worry among leaders, however.

"The biggest challenge is Latin American governments leaning left – Colombia could be next – with more authoritarian regimes being voted in," said Cerda, a long-time Latin American aviation expert. "Governments can't continue to over-regulate and over-tax aviation," he said. "It's really an important issue if we want the region to be successful. If not, this region [Latin America] will not be able to compete with other regions."

Cerda cited several cases of new taxation that is hampering Latin American aviation recovery, including the tiny Caribbean island of St Maarten, which introduced a US$35 fee for Covid-19 testing and now wants "to make it permanent, to milk it", he said. Argentina also has tax hikes, "and lots of flights have not returned there".

Cerda noted that 6,000 city-pair connections have not yet restarted in the Americas. "We are going to have to convey better messaging to governments to show we are part of the solution," he declared, noting that past approaches to regulatory authorities likely will not work going forward.

ALTA head of fuel and user charges Jaime Escobar-Corradine said that despite regulatory hurdles there are reasons to see progress in the region. New aircraft are being delivered regularly in Latin America, maintenance facilities are fully booked for all of 2022 and 2023, and there are six new airlines starting. "Brazil, Mexico and Colombia are reaching pre-pandemic levels," he said. "We need to lower intra-regional fees and fuel taxes to stimulate the region."

Mexico is the lone bright spot in Latin America. The country took a hands-off approach to managing the travel downturn and airline traffic has rebounded to 92% of 2019 levels as of December 2021, while the US market reached only 84%.

VivaAerobus: good times ahead

VivaAerobus has bucked Latin America's downward trend like a stubborn mule, to use a San Antonio phrase. Routes Americas keynote speaker Carlos Zuazua, the airline's chief executive, outlined VivaAerobus' 164% international capacity growth – all during the pandemic.

"It should be surprising because in Mexico, six airlines received zero government subsidy, while US airlines received $49.5 billion in aid," said Zuazua. With 55 Airbus A320 family aircraft after 15 years in business, VivaAerobus added 30 new routes in 2021, 19 of which were new international flights. The airline has before-tax margins "in the high 30% range", said Zuazua.

During December 2021, VivaAerobus and fellow low-cost carrier Allegiant, based in Las Vegas, unveiled a new and unique low-cost-carrier alliance that will yield a significant number of new flights between the US and Mexico. "There's a great market opportunity for medium and small destinations [in the US] to get to Mexico without going through a big hub," said Zuazua. The 31 million passengers between the two countries are heavily weighted southbound, with US travellers seeking out the sunny beaches of Mexico.

A pair of local Texan alpacas offered a great photo opportunity at Routes Americas.

Routes news briefs

• United Airlines' Mark Weithofer, director of domestic network planning, said his carrier expects transpacific traffic to be "depressed for a while," although United has added new flights to European destinations. "We needed to put our assets in the right places," he said. Weithofer noted that United has 542 aircraft on order, and there will be "plenty of upgauging and more first-class seats" coming.

• American Airlines' Philippe Puech, director domestic planning, said that without the dedication of the network planning team, which worked all night sometimes, "we wouldn't have made it". He noted that when data showed a route opportunity, "we acted fast" to add flights.

• Brazil's Gol is restarting flights to Miami and Orlando during May, building to 800 daily departures, said network planning manager Bruno de Paula Balan. Flights to Cancun have already resumed, and Gol's new alliance with American is just starting to show positive results.

• GBTA's Shane Downey, vice-president government relations, said the industry needs to work harder internally to improve travel and connections. For example, he had to provide "a Covid test at [London] Heathrow for a two-hour layover, and we can't even explain Canada; we're trying to shame Canadian officials" due to severe restrictions, he said.

• Mexico's capacity problem with several overly congested airports is returning, said Fabricio Cojuc, chief network officer of Mexican regional airline Aeromar. "Five airports concentrate 65% of demand in Mexico. Where is there space at airports going forward?" he asked.

• US start-up airline Airbahn is in the final phase of beginning operations, focusing on the Los Angeles basin initially, said executive vice-president Scott Hall. "California is a great market with a lot of opportunity," he said. "Then we will look at other Western [US] states. Canada is a market we're looking at too." Hall noted that a first-year pilot could make $200,000 at Airbahn, adding: "It's a very competitive market."


HOBART

Wei Jin, director of network planning for Mexico's Volaris, said his carrier had shrunk to just 12% of its 2019 capacity. Volaris has now built up its schedule to 98% of 2019 levels, he said, boosted by US passengers coming to Mexico. Volaris has also been hampered by the safety downgrade of Mexico by US regulators. "There's been a vacuum in the Mexico market," he said, since Volaris and others stopped their growth during May 2019.

Norse Atlantic launch

Norse Atlantic Airways is expected to have announced its first transatlantic destinations imminently from its base in Oslo, Norway. While the airline's application cites New York Stewart field north of New York City, as well as Ontario International Airport near Los Angeles, it is not fixed on secondary airports.

"We will be launching in Q2. We are focused on long-haul point-to-point flying and we will start in a cautious manner," said Norse chief executive Bjorn Tore Larsen. "I'm a born pessimist; you have to be cautious. We might have a cost advantage and stimulate the market, but I've seen so many airlines lose money across the Atlantic."

The airline will focus on alternative airports. "We're looking for secondary airports who can offer better deals than the big airports," Larsen said.

Unlike defunct Norwegian Air, which used many of the same Boeing 787s to operate from Scandinavia and London to the US, Norse does not expect to follow the same structure. Larsen has described the airline as "European-American", with all of Europe and the US as its market. The airline will fly to/from Paris at some point after Oslo, and will add European cities as well.

Majority owner Larsen is the co-founder of OSM Aviation that provided flight crews to Norwegian. Bjorn Kjos, former Norwegian Air CEO, is also a shareholder in Norse.

The new Atlantic battleground

Flights are being added by all airlines on both sides of the Atlantic, and the new wrinkle in the always-competitive market is that airlines are exploring new non-stop services to smaller markets.

"New fleet types will open secondary transatlantic markets this year," said Aer Lingus director network planning Chris Keen. "Airbus A321s will be driving several of them." He added: "Ireland is well-situated [geographically] and we know this is a leisure-led recovery. We are seeing positive signs in business travel as well."

Virgin Atlantic, which took admittedly "drastic steps" during the pandemic, is relaunching transatlantic as well, according to Virgin's vice-president networks and alliances Rikke Christensen. "We flew cargo-only flights for a while, and flew to Pakistan and India. But recently we began Nassau and St Lucia flights from the UK, and are starting US destinations now. The key question is business class recovery and which industries will see demand return," Christensen said.

"We expect demand to be consistently strong" across the Atlantic, noted American's director international planning Henning Greiser. "We will have 14 Europe destinations from 10 US gateways." American is also launching new services from New York JFK to Doha, Qatar, and returning to Barcelona, Venice, and Lisbon.

"The one thing that makes me optimistic about transatlantic travel is last summer's actions," Greiser said. "Greece was open and passengers went there. The most open markets will get the passengers."

London-Austin, Texas is a new secondary market route for Virgin. "We can do sexy destinations, and not just island destinations," Christensen said with a smile. Virgin has a new codeshare with LATAM and Virgin expects "a lot of pent-up demand in Latin America," she said.

United is adding back transatlantic flights to former destinations including Lisbon, Madrid and Milan, and the airline

Top Left: Virgin Atlantic is re-booting its transatlantic network said vice-president networks and alliances Rikke Christensen.

Top:IATA's Peter Cerda warned governments about over-regulation and over-taxation.

Right: Routes Americas saw some 800 network development professionals gather in San Antonio.

will also explore new secondary cities such as Bergen, Norway; Edinburgh, Scotland; Naples, Italy; Shannon, Ireland; Amman, Jordan; Tenerife and Palma de Mallorca in Spain; as well as Ponta Delgada in the Azores.

Pilot shortage

After nearly 6,000 mainline pilots in the US either retired or left the industry during the two-year Covid-19 pandemic, the ability to replace them has been difficult. The effect on small-city air service is increasingly devastating as airlines cut cities from their network because regional airlines no longer have pilots to fly the routes.

In early March, United announced that it was cutting an additional 17 regional routes, after cutting 20 routes in January. Big airlines 'cannibalizing' the pilots from smaller airlines is again the reason, according to airlines and consultants who spoke to ARGS. Southwest Airlines pilots' association said the eight largest US airlines are expected to hire 8,000 jet pilots during 2022. Others believe that number may be even higher.

A study by aviation consulting firm Swelbar-Zhong Consultancy revealed that US airlines operated a stunning 43% fewer regional flights in March 2022 than in the same 2019 period.

Most US airlines have raided the coffers of their regional airline partners, and other small carriers. This has led the largest regional in the US, SkyWest Airlines, to shrink its 2022 scheduled capacity 10-15% this year. Moves by SkyWest, which operates regional jets for Alaska Airlines, Delta Air Lines, American and United, caused Delta to declare during a recent earnings call that it would lower its regional capacity by more than 20%. United also has ended regional service to a dozen small cities.

"With our 540 aircraft on order, those pilots are coming from the regional space," said United Airlines' Mark Weithofer, director of domestic network plannings. "By the end of 2023, pilot hiring could be the size of every regional airline pilot in the US."

As bigger carriers siphon more pilots from regional airlines - including targeting their competing airline's regionals - routes maps are expected to shrink during the next two years as pilot hirings by Delta, American, United, Southwest, Spirit and Frontier and FedEx continue unabated. ■

Cargo focus pays dividends for WFS

Global handler, Worldwide Flight Services (WFS), has ridden out the pandemic in reasonable shape with a concentration on cargo, acquisitions and keeping strong with core customers. Its chief executive talks exclusively to *ARGS* editor *Mark Pilling*

Craig Smyth was finally able to take a short break recently. Sealing a €950 million (US$ 1.1 billion) finance package, a standard practice that takes place every five years to refinance debt; working on the acquisition and integration of three businesses acquired by WFS over the past six months or so; and then the small matter of running a business during a pandemic has resulted in Smyth putting time off on the backburner.

ARGS interviewed Smyth at his UK home about the global company he runs – Worldwide Flight Services. A 30+ year career in aviation handling, with the last five-and-a-half years leading WFS, means the industry veteran has seen everything that can be thrown at this business.

"To say the last six months have been busy would be an understatement," joked Smyth, a plain-speaking Scotsman, who joined Menzies Aviation as chief financial officer in 1993 and ran the business for 11 years before leaving to lead WFS. After re-charging his batteries, Smyth was ready to resume his monthly routine. This sees him spend two weeks travelling around WFS bases: one week in the Paris headquarters and one week in the UK. "We will be weaning ourselves off Teams and the digital meetings – I am looking forward to getting around the network and visiting customers," said Smyth.

And as he prepared to clock up the air miles once again, it was clear that WFS had weathered the pandemic storm better than most handlers. The main reason is air cargo. WFS has a different business mix compared to other global handlers because its focus is first cargo and second passenger handling. "About 80% of our business is cargo and it takes up about 90% of our effort," Smyth said.

A combination of organic growth and acquisitions has seen WFS double in size to annual revenues of €1.4 billion ($1.6 billion) since 2014 when it made its first bond offering, said Smyth. "In 2021 our revenue overall was close to the 2019 pre-Covid level, and the cargo ground handling business has earned the same as in 2019. However, there has been almost zero contribution from [passenger] ground handling." This side of the business continues to struggle in terms of both revenue and profit.

Global investment firm Cerberus Capital Management acquired WFS in 2018, buying it from private equity player Platinum Equity.

Cargo staying strong

But as a critical service, cargo is strongly recovering. "In cargo our volumes have not only recovered, we are doing 15% more tonnes overall because of contract wins, improved market share. We've opened 15% more cargo capacity and have another 10% secured," explained Smyth. "Our aspiration is to have another 30% of capacity online in the next few years."

In Europe, WFS has expanded its cargo operations at Paris Charles de Gaulle, Amsterdam, Brussels and Liege airports, and has opened an off-airport warehouse at Cargo Point near London Heathrow.

Moving into Liege for the first time 18 months with what Smyth described as a "pop-up" operation has been so successful that WFS is staying on.

It began operating at Liege in early 2020 after the airport called for help to cope with the surge in freighter flights carrying shipments of personal protective equipment (PPE). WFS subleased half of a warehouse used by global strategic partner AirBridgeCargo Airlines (ABC) to handle business from its other customers, and in August 2021 signed a 10-year deal to handle ABC at Liege.

WFS has taken the opportunities afforded by the crisis to expand like this wherever possible. For example, it took over a cargo warehouse at Johannesburg airport in South African from the Lufthansa Group last year.

In the USA, which along with Europe is easily the largest of the WFS markets, the company has committed to operating a new state-of-the-art 350,000 sq ft cargo facility at New York JFK, which is scheduled to open at the end of 2023. "A facility of this magnitude and location will see WFS use its know-how as the leading cargo handler to deliver the best services to all industries that depend on air freight," said Smyth.

It has also opened new capacity in

Chicago O'Hare and in Atlanta. It won the tender to operate the airport's new Cargo Building C in 2019. The 120,000 sq ft Atlanta facility is already full, Smyth said.

The decision to add markets is chiefly based on where the opportunity arrives to add capacity. Customers are looking for a consistent, high-quality product at the right locations. "At WFS we are so strong in Europe and the US, and we do operate uniquely as a network where cargo is very much more of a network proposition with an end-to-end connectivity product, the same SLAs (service level agreements) and the same confidence in delivery," explained Smyth. "Our core business is with our top 15 customers, and we grow with them as they get bigger."

Smyth was not being arrogant when he said: "It's almost a case of 'build it and they will come'. We are confident and humble in our ability to win business but we are financially disciplined in going about it. We back ourselves and that has been our track record."

"When you focus on one service, and the WFS DNA is in cargo handling, you don't complicate it by offering all sorts of other non-cargo services. We are striving to be better," said Smyth. WFS has forty engineers across its network whose sole job is continuous improvement using tools like Lean and 5S. "We are focusing on our operational efficiency and are part way through that journey."

Passenger handling plan

WFS' strategy to expand its cargo footprint is clear. The passenger handling operation is also important, but the company is only active in certain markets on this side of the business. "We do not set out to conquer the world in ground handling. We look for business with high-volume leisure or low-cost carriers operating narrowbodies. We have done this is pockets in Europe and have been successful in North America," said Smyth.

"For me, the story has been about nurturing the recovery of that business over the last couple of years while we grow in air cargo," he noted. The passenger handling business will take more time to revive than cargo, and probably no earlier than 2023 or 2024. But: "We have still got the same contracts, the same ground support equipment pool and the same management team as before Covid, so the strategy is there to rebuild," said Smyth.

US acquisitions

"When you look at our core strategy you look first at the things you can control," explains Smyth. "You can grow the business organically, there are contract wins, you develop the network with new capacity and new airports, and you drive operational efficiency and cost-efficiencies to sustain and improve profitability. Then you look selectively at acquisitions."

Craig Smyth has led Worldwide Flight Services for five years (photo: WFS).

WFS' first acquisition in 2021 was Paris-based R.A.HAND, a move that enabled it to extend its specialist handling services to freight forwarders in France.

Another business that came to the market and that WFS has managed to grab is Mercury Air Cargo's operation at Los Angeles International Airport (LAX) at the end of 2021. "This creates a strong position in LAX giving us large airport warehouses," said Smyth. Mercury is the largest cargo handler at the airport and began operations there in 1967. "We have been trying to buy Mercury for almost 30 years," he joked, adding that he has personally known its former CEO Joseph Czyzyk for all that time.

Another US deal saw WFS buy Texas-based Pinnacle Logistics in September 2021, giving it a cargo handling operation in Dallas Fort Worth and Houston International airports. This acquisition has seen WFS doubling its business with key partner Amazon and has expanded its work with integrated cargo businesses at these important locations. The purchases of Pinnacle and Mercury were the first WFS made in the US since its purchase of New York-based Consolidated Aviation Services in 2016.

WFS will always be alive to acquisition opportunities in the handling arena, and while chances to enhance its customer-valued US and European networks are attractive, it has an eye on opportunities elsewhere. These could be in Africa, the Asia-Pacific, India, Latin America or the Middle East as tenders for new buildings are issued and handling licences come up for renewal, said Smyth. "We should be in some of these places to offer our network service to customers."

WFS will always seek to offer network enhancements to its main cargo customers, such as Amazon, UPS and DHL in the e-commerce business and the likes of Atlas Air, Polar Air Cargo and Kalitta Air in the dedicated freighter field, as well as to network carriers such as Emirates, Air China and American Airlines. Its partnership approach to these relationships and the delivery of a strong, consistent service means it has a 90% plus contract retention rate, said Smyth.

Post-Covid reaction

Having been through many tough

The focus on air cargo for WFS has kept the business strong during the pandemic (photo: WFS).

periods, such as SARS, the global financial crisis and the volcanic ash cloud, Smyth recounted telling his management team in February 2020 as the pandemic began to take shape that this time the impact could be as large as all of those challenges wrapped into one. And that is how it turned out.

WFS moved fast in the February-May 2020 period to change its operation as business dropped off, said Smyth. "Over those 10 weeks we made all the changes we needed to. Then it was a monitoring and governance task to manage any flights that were necessary, such as delivering PPE, pharmaceuticals and any cargo services that were needed – we were there to serve the industry."

"We worked with Swissport, Menzies and Dnata collaborating on our messages to governments about assistance for our businesses and our people," said Smyth. There was downsizing with the assistance of government-backed furlough schemes in various countries. At its lowest point, WFS was down from around 27,000 staff to just 12,000.

"It was a very challenging time for everyone, but our employees have been outstanding in their response to the pandemic," said Smyth. "They have made such a positive difference for WFS in continuing to provide the best support to our customers while we navigated the crisis."

Today, WFS is finding the US the first market to recover, while Europe is slower. The firm did not freeze the investments it was making in IT and labour deployment planning pre-Covid. "We have to come out of this a leaner and fitter organisation, as well as more efficient," Smyth said. One of the changes brought about since the pandemic is a 15% improvement in productivity on a like-for-like basis in its handling operations, he added.

Another change Smyth has seen is a "new sense of purpose serving a broad spectrum of airlines" beyond the traditional stronghold of the network carriers. In the cargo world there is great activity from the dedicated freighter operators, the express parcel operators, and the direct e-commerce players. Freight forwarders, which have not traditionally operated aircraft themselves, have been establishing their own cargo operations, which has brought opportunities for WFS to capture their handling business. WFS has also seen the development of new products in the e-commerce and pharma worlds.

As it rebuilds in 2022, WFS is working hard too on its Environmental, Social and Governance (ESG) strategy. "This is a top priority for the senior teams, the board and the shareholders and we are working with PWC to refine that strategy," said Smyth. Examples of WFS looking to lower its own carbon footprint include the construction of its own €3 million ($3.4 million) electrical power plant in France to run its 1,200 strong forklift truck fleet, and the introduction of biodegradable stretch wrap for cargo shipments in North America, reducing non-biodegradable plastic in landfills by the equivalent of 68 million bottles in one year. In addition, WFS' new Chicago cargo warehouse will feature solar panels on the roof as its power source.

What does success look like for Smyth this year? His message is simple. "It is more of the same," he said. "Winning more customers for our existing and new capacity, growing the network, doing as well as we have done in the past two years in bringing on new capacity, and carrying on with operational excellence." ■

Hard labour

One of the biggest challenges for airports, airlines and handlers as traffic begins to revive is finding the right manpower when and where it is needed. ABM Aviation Services believes it has some of the answers

The most prized asset in any business, apart from a loyal customer base, is a workforce able to deliver a stellar service for clients. In today's fragile and erratic recovery, it is proving hard and increasingly expensive for many aviation providers to plan, resource and deploy workers to meet expectations.

"It is a difficult balancing act as the industry ramps up," said Dave Cauvin, commercial director at ABM Aviation, the large US-owned services and facilities management firm that provides a range of airport services across the UK and US including cabin cleaning, PRM, airport bussing and staffing solutions. "There is still a lot of uncertainty about the pace and shape of the next 6-18 months, and no-one is sure about the resource levels they will need." There is also the issue of wage inflation as players struggle to attract talent to an industry that has lost so many people.

Cauvin, who is focused on re-growing ABM's business in the UK and Europe, saw the firm's work shrink significantly as the pandemic took hold. The company diversified into working for the UK's National Health Service and supported a major Covid testing business with several labour solutions. Some of that work will remain; however, ABM is determined to play a greater role for airports, airlines, and handlers as a "partner that can be adaptable in providing flexible numbers of people to enable businesses to restore services in an efficient and cost-effective way", he explained.

"A lot of people have been made redundant [at airport-based businesses] and there is hesitancy and there are difficulties about hiring on a large scale," said Cauvin. "At ABM we have a pool of people we can call on and the ability to deploy relatively large numbers of people in a short period. It's valuable to be able to flex numbers up and down at short notice. We have also been active in training our staff to have multiple skills; they can be cleaning cabins one day and performing Covid checks the next. This is a real benefit for ABM and our customers. In addition, we recognise our multi-skilled workers with excellent career progression, which helps generate staff loyalty.

"Supporting airports and others with labour provision is key to us, but because we have a wide range of services we see an opportunity for a true aviation multi-service provider with a single team," continued Cauvin. These types of services have long been popular choices for in-sourcing – but "mindsets are changing. Airports have suffered and many are reviewing their operations; we can take some of the restart pain away."

ABM is present at 20 airports in the UK and Ireland and is seeking to build on its footprint in these markets. "In addition, we are looking at opportunities to expand into Europe in the next five years, either through acquisition or through customer-led opportunities," said Cauvin.

For a firm like ABM, which was formed in 1909 in San Francisco, the pandemic has raised the importance of cleaning at major buildings like airports. "There is a much higher focus on cleanliness and disinfection and it's likely to remain the case, which is no bad thing," said Cauvin.

"As we come out of the pandemic everyone is asking questions about the best way to work going forward," he said. "At ABM Aviation our specialism is people and flexibility to help make the recovery process as seamless as we can."

Dave Cauvin of ABM Aviation (photo: ABM).

"There is still a lot of uncertainty about the pace and shape of the next 6-18 months, and no-one is sure about the resource levels they will need."

Dave Cauvin, Commercial Director, ABM Aviation

Aviation players from across the globe are hoping to see traffic revive as early as possible in the early months of 2022 to put the industry on the recovery path (photo: courtesy of Munich Airport).

Recovery signals

According to this in-depth analysis from Ascend by Cirium, long-term demand will bounce back as the airline industry recovers from crisis, say *Chris Seymour*, head of market analysis, and *Richard Evans*, senior consultant

Last year, the aviation industry began to repair the destruction wreaked by the Covid-19 pandemic. It still has some way to go, as airline traffic and aircraft production volumes remain significantly below pre-pandemic levels. But the long-term outlook remains positive, with 44,600 new passenger and freighter aircraft deliveries predicted in Cirium's latest 20-year forecast, published late last year.

The pandemic created an unprecedented crisis for the airline industry, causing an almost two-thirds reduction in global traffic and record industry losses after 10 consecutive years of net profits. As airlines parked aircraft in their thousands during early 2020 in response to the collapse in passenger demand, the original equipment manufacturers had to rapidly cut production. Although 2021 saw some recovery, the pace has been uneven across the regions amid the continuously changing travel restrictions across the world.

Domestic and short-haul markets have led the recovery, with long-haul international lagging due to those markets that remain restricted – particularly in Asia-Pacific. In terms of the in-service fleet, there have generally been more aircraft returning to service than predicted, which implies lower aircraft productivity (load factor and daily utilisation) than expected.

Ascend by Cirium constantly assesses the metrics around the restoration of global airline markets, adopting a scenario approach to our recovery forecast through to 2024 and this forms a cornerstone of our 20-year outlook. Our latest recovery scenario was established in Q3 2021, having been informed by the highly successful vaccine programmes globally and the influence these have had on the opening of travel markets – notwithstanding setbacks as new virus variants emerge.

Our current recovery scenario envisages global traffic levels reaching 2019 levels by mid-2023. China, Russia/CIS and Latin America will recover earlier, with Africa and the Middle East not bouncing back until 2024. Recovery of domestic markets is forecast to occur earlier (in 2021-2022) than for long-haul markets (in 2022-2024). The timing of when China's international markets will be restored is the big unknown, as there remains little sign of China changing its Covid-19 elimination strategy.

The supply of new and used aircraft will continue to exceed demand in the short term. There are also likely to be more airline failures. In 2020, deliveries to airlines fell by 43% over 2019. While there was some recovery in 2021, shipments were still down almost a quarter over 2019. However, the reduction was not entirely down to the pandemic: during 2021, deliveries were impacted by a lengthy hiatus in 787 deliveries due to quality issues and slower-than-expected shipments of the 737 Max.

CHART 1 New passenger aircraft delivery forecast 2021-2040

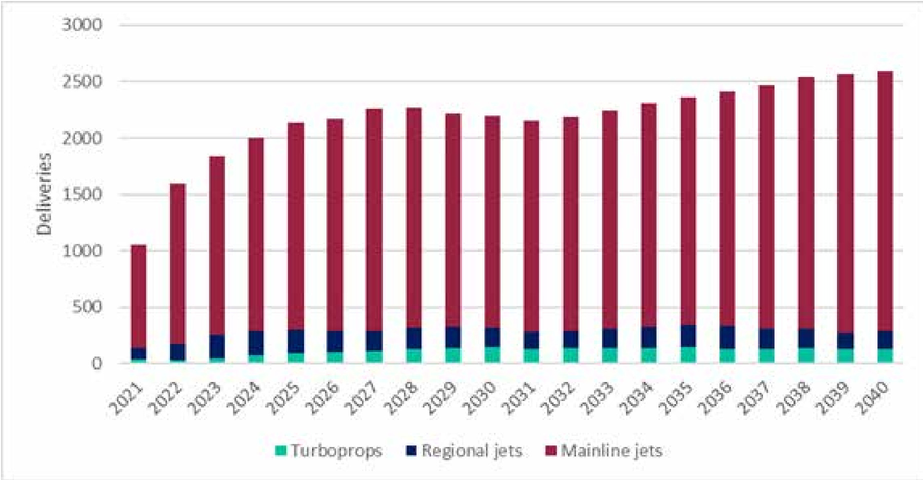
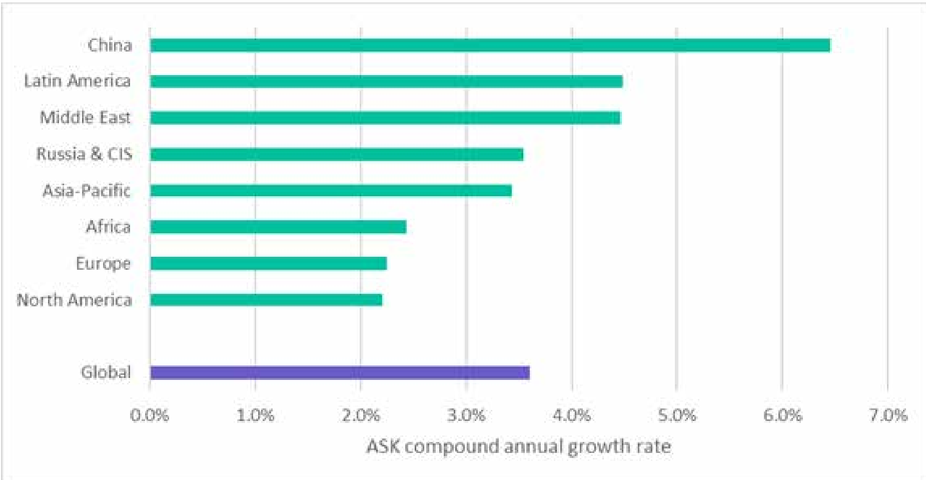


CHART 2: Passenger capacity growth forecast by region 2019-2040



Source: Cirium Fleet Forecast 2021

Recovery record

The aviation industry has a good record of recovering from downturns and external shocks – albeit none have come close to the effects of the Covid-19 pandemic. Transportation of people and goods by air is a key element of economic development. Beyond 2024, we therefore expect a return to more traditional growth paths, but perhaps starting from the structurally different industry we may find at the end of 2024.

In total, Cirium forecasts that 43,550 new passenger aircraft will be delivered through to 2040, worth an estimated US$2.8 trillion. Deliveries of around another 1,000 new freighters will take total shipments to some 44,600 aircraft. Airbus and Boeing are expected between them to account for around four-fifths of all new aircraft deliveries through 2040.

> **"The timing of when China's international markets will be restored is the big unknown, as there remains little sign of China changing its Covid-19 elimination strategy"**

In the passenger market, single-aisle jets will make up 70% of deliveries. Across all size categories, over the duration of the 20-year forecast, just under half of all passenger aircraft deliveries will be to replace existing types.

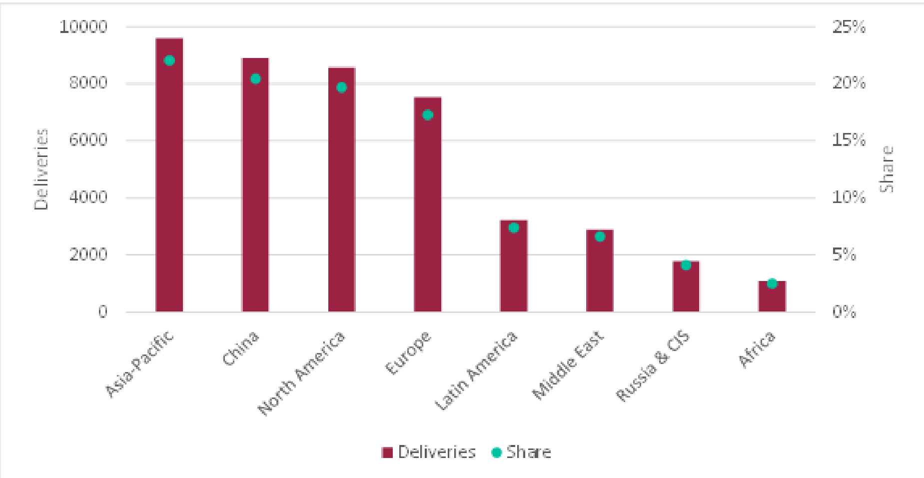
In terms of new aircraft development, our forecast encompasses several programmes expected to be introduced during the 2030s. These include a new large single-aisle family from Boeing sized close to the 757, but with increased range. From this platform, Boeing is expected to develop a replacement for the 737 Max by around 2035. Airbus will likely respond with upgrades of the A321neo as well as a stretched 150-seat version of the A220, before developing an A320neo family replacement in the mid-2030s.

Cirium forecasts that passenger capacity (available seat-km, ASK) will grow at 3.6% per year compared with the pre-pandemic level in 2019, but we believe the industry has essentially lost about four years of capacity growth. This means that the level of ASKs in 2040 will only be at the level previously predicted for 2037 in our last pre-Covid fleet forecast published in 2019. Passenger traffic (revenue passenger-km, RPK) is forecast to rise slightly ahead of ASKs, at 3.7% annually.

From the perspective of world regions, over the next 20 years Asia will be the engine for growth with China forecast to see the highest rates in passenger traffic increases, at over 6%. This will make it the largest single country for airliner deliveries with a 20% share, ahead of all its Asia-Pacific neighbours (which will have a combined 22% share). North American airlines follow with 20%, and Europe with 17%. The Middle East will take a 7% share, rising to 11% in value terms by virtue of the large number of higher-priced twin-aisles delivered there.

"Whichever way you look at it, the era of cheap air travel is under increasing threat"

CHART 3: New passenger aircraft delivery forecast 2021-2040



Source: Cirium Fleet Forecast 2021

The air cargo sector has been the major beneficiary in the pandemic, due to a combination of factors. These include the huge capacity cuts by passenger airlines through their network cutbacks, which considerably reduced belly freight volumes, and changes to consumer behaviour which have driven strong growth in online sales.

Cirium expects freight capacity (available tonne-km, ATK) will increase at 3.5% and traffic (freight tonne-km, FTK) at 3.7% annually, relative to 2019. Over 3,500 freighter aircraft will enter the market through to 2040, around a third of which (1,050 aircraft) will be delivered new; the balance be made up of 2,510 conversions from passenger aircraft. The number of freighter aircraft in our latest forecast has been increased by around 5%, mainly due to the short-term boom in conversions driven by the growth in e-commerce during the Covid-19 lockdowns.

Fleet growth

Covid-imposed cutbacks resulted in the stored passenger jet fleet mushrooming to over 60% in April 2020, but this has progressively been decreasing, reaching around 15% by the beginning of 2022. However, the number of in-service aircraft is not expected to return to 2019 levels until the end of 2023; thus four years of 'normal' fleet growth will have effectively been lost. In the long term, the forecast traffic growth will require the global passenger fleet to increase by almost 22,000 units, which equates to a 3.2% annual growth rate. This will take the fleet to some 47,200 aircraft at the end of 2040.

About 80% of the passenger fleet is forecast to be retired from passenger service over the next 20 years. The proportion of freighter retirements will be slightly lower, at 76%, as they have longer useful economic lives.

Overall, some 19,000 aircraft will be retired from the passenger fleet. The Covid-19 crisis has already led to the early phasing out of some relatively young aircraft, while many older aircraft may languish in storage until eventual scrapping. Average economic life is forecast at 22 years for single-aisles and 20 years for twin-aisles.

Over the next 20 years, the Chinese passenger fleet will have the highest

Left: Chris Seymour, head of market analysis, Ascend by Cirium (photo: Cirium).
Right: Richard Evans, senior consultant, Ascend by Cirium (photo: Cirium).

annual growth rate – almost 5% – increasing its overall share from 15% to 20%. Asia-Pacific will lead with a 23% share, while the more mature North American and European markets follow, at 21% and 17% respectively.

The fleet of freighters will rise by 2.6% annually to reach over 4,000 aircraft over the two decades. Although the current conversion boom driven by factors linked to Covid-19 may not persist, it is enabling the replacement of older, less efficient aircraft as well as catering for e-commerce growth. North America, home of the largest integrators and e-commerce providers, will maintain its leading share of the cargo fleet.

Environmental challenge

In parallel with the industry's path to recovery and return to growth from 2024, airline and aerospace companies will be attempting to make good their commitments to address environmental issues. Many airlines announced targets to reduce CO_2 emissions last year, with most also declaring their commitment to Net Zero, either by 2050 or earlier.

Last year's increasing activity around the environment culminated in IATA committing its members to Net Zero by 2050 at its AGM in October 2021. This was a major leap over and above ICAO's current targets, which are consistent with the Paris Accord target of 50% reduction of CO_2 by 2050, relative to 2005.

It might be argued that 2050 is a long way off, and the roadmaps to achieve Net Zero rely largely on unproven technology. Nevertheless, airlines are making commitments to modest reductions in CO_2 over the next 5-10 years.

The cornerstone of many airlines' commitments to Net Zero is to progressively increase the use of sustainable aviation fuel (SAF). But some Net Zero plans outlined by airlines highlight the nuances between gross and net emissions, different measures, and between absolute and specific measures of CO_2. If an airline doubles in size and reduces CO_2/RPK by 20%, it still emits 60% more. Net emissions can be reduced through offsetting, but this is controversial, and probably a near-term solution only. Most airlines are benchmarking emissions to 2019 levels, which can be readily assessed with Cirium's new Global Aircraft Emission Monitor.

The European Union announced its 'Fit for 55' (European Green Deal) plan in 2021, aiming to reduce greenhouse-gas emissions to 55% below 1995 levels by 2030. As part of this, free allocation of allowances to airlines under the EU Emissions Trading System (ETS) will be phased out between 2024 and 2027, with these allowances being added to those auctioned instead. This implies airlines will have to buy 100% of their EU ETS allowances on the open market by 2027, even as the cost of allowances continues to reach record levels today.

There were many announcements last year in the field of green propulsion and aircraft technology, following on from the Airbus ZEROe launch in 2020. Plans include electric and hybrid-electric powered designs, hydrogen- and hydrogen-electric powered regional aircraft programmes and the proposed re-engining of an in-service regional jet type. Another important step is the plan by all major engine and aircraft makers to certify current production types to run on 100% SAF by 2030, up from today's maximum of a 50:50 blend of SAF and kerosene.

For all airlines, and particularly those in Europe, cost pressures are going to increase. New propulsion technologies, hydrogen, SAF production ramp-up, and ETS allowances will all need huge investment. The cost of abating CO_2 by moving to alternative fuel sources or propulsion technologies is currently far above the total cost of burning kerosene, or the cost of carbon offsets. This cost gap will narrow, both in terms of new technology becoming cheaper, but also as costs for emitting CO_2 increase. Whichever way you look at it, the era of cheap air travel is under increasing threat.

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Freedom for bags

The role of technology in the transformation of airports and travel is critical to revolutionise the world of baggage, argues *Randel Darby*, chief executive and founder of AirPortr, a baggage collection service provider

Randel Darby, chief executive and founder of Airportr, an baggage collection service provider (photo: Airportr).

For much of the pandemic, airports were closed and planes were grounded, so to say that that the pandemic has been challenging for the travel industry would be an understatement. And yet, the long-awaited 're-start' of international travel has presented its own challenges. Airport passenger processing times have often doubled to nearly three hours – an inconceivable amount of time pre-Covid.

Airlines and airports are now thinking strategically about how to handle this challenge – as well as ongoing and renewed pressure to become more sustainable. Is now the time the industry finally tackles digitisation head-on?

The big issue: legacy infrastructure

Despite being stunted and delayed by the mammoth task of addressing legacy infrastructure and a regulatory environment that is not conducive to innovation, the appetite to digitise and innovate has always been present. In fact, the industry is discussing – and in some cases implementing – a raft of customer-centric technologies that will help air travel get back on its feet more sustainably, whilst simultaneously streamlining the passenger experience.

Baggage is an area that always seems to fall to the bottom of everyone's list. It has been historically neglected as part of the airport and airline 'underbelly', but this way of thinking has led to the creation of unsustainable business models and gaps in the customer experience that can no longer be ignored. Earlier this year, a number of strategic partners along with Future Travel Experience launched an industry-wide set of working groups to help process pioneering ideas and visions into reality.

The truth is, getting baggage from doorstep to plane is still a very manual process – especially for passengers. Baggage still comes through the front door and is handled through the same system; it is still being rolled in cages at airports or delivered airside using vans as it was decades ago. Add to that the cost and space implications of these processes and you suddenly have a very un-sexy product offering.

Terminals are built to handle passengers and bags together in one vertically integrated space, but with this come enhanced security requirements and huge fluctuations in demand depending on the time of day and time of year. Baggage infrastructure consumes valuable space and energy in terminals, and a significant footprint is built and maintained to handle peak baggage volumes – often costing an airport tens of millions of dollars.

By digitising baggage in the same way as other parts of the traveller's journey (think online check-in), airlines have the opportunity to turn baggage processing from a cost to a profit centre, and from a pain-point to a seamless customer experience. Airlines and airports can drive operating and cost efficiencies, open new revenue streams, and reduce the impact of loss and damage claims which are estimated to cost the industry billions of dollars each year.

The off-site processing of baggage, where bags are collected from passengers' homes and then processed through Amazon-style fulfilment centres for instance, will enable airport terminals to have significantly fewer baggage drop-off points and on-site processing units. Not only will this allow for the reduction of real estate and contributions towards net zero strategies, it will also enhance the passenger experience in terminals.

The off-airport baggage market is undoubtedly developing at pace, but the industry has become something of a graveyard for failed off-airport baggage proofs of concept (PoCs). At the heart of any off-airport proposition, there needs to be a customer focus to drive success, and this is arguably where previous PoCs have failed. Communicating the product offering clearly, and building customer awareness and trust in these products, is critical if off-airport propositions are to become commonplace.

A vision for the future

If we have learned anything through these uncertain times, it is that technology will become an increasingly integral part of the passenger journeys of the future. For instance, up until two years ago, the use of biometrics in airports, for example, was in its infancy. But with the need to digitally verify identities tied to Covid test results or health passports, and contactless processes now critical to preventing the transmission of Coronavirus, biometric technology has gone mainstream: 73% of passengers are now willing to share their biometric data in order to improve airport processes. Recently at Istanbul Airport, biometrics were introduced to enable passengers to scan their faces at every step of their journey without having to touch any surfaces, which led to a 30% reduction in passenger boarding times.

Introducing self-service baggage tracers, such as those introduced with the Lufthansa Group, will allow passengers to file a missing bag report in moments by submitting their flight, baggage and passenger details into an app on their smartphone, eliminating the need for lengthy queues in terminals when a bag does go awry. If passenger and baggage identity data can be tied together, suddenly you unlock concepts that remove the need for lost bag reports, such as: tagless bag identification and tracking; bag image sharing; notification to passengers when a bag is mishandled; and automated service recovery.

Creating convenient and fast bag drop zones, either kerbside or outside key transportation hubs, will allow customers to drop off their luggage securely before travelling bag-free through to security, again eliminating the need for lengthy queues at check-in desks.

However, this vision involves changing customer behaviour and building trust in these reliable alternatives. A seamless, consistent digital experience, comprehensive tracking, and brand-authority all help to achieve this.

Benefits beyond the airport experience

Industry leaders may have been given brief respite from the green agenda over recent years, with various lockdowns temporarily curbing emissions and taking the world's attention elsewhere. However, as travel has reopened over the past weeks, the sector is once again under intense scrutiny.

Great strides are being made with sustainable aviation fuels and reducing the contribution flights make towards pollution, but what about on-the-ground operations? One idea currently at the top of industry minds is the use of electric vehicles for baggage pickup and delivery in urban areas. Pair this with the creation of baggage hubs and transportation networks which use autonomous vehicles or rail to link cities and airports, and you can unlock super low-cost and low-footprint delivery models.

The industry is also considering systems where baggage is delivered from cities and other on-airport locations (ie car parks and hotels) into fulfilment centres that will have a high degree of automation, with workflows for the screening and processing of departing and arriving baggage. Robotics can pre-build ULDs which are 'called' for flights when loading commences. This may all sound futuristic, but it is within our grasp.

One of the most stringent, tangible and immediate benefits is to change the way passengers get to the airport. Without baggage in tow, passengers can travel hands-free to and through airports, with terminals becoming increasingly passenger-only spaces. More ride-sharing or intermodal journeys into airports will become available. For example, 66% of AirPortr users say they switched from car usage to public transport as a result of travelling bag-free.

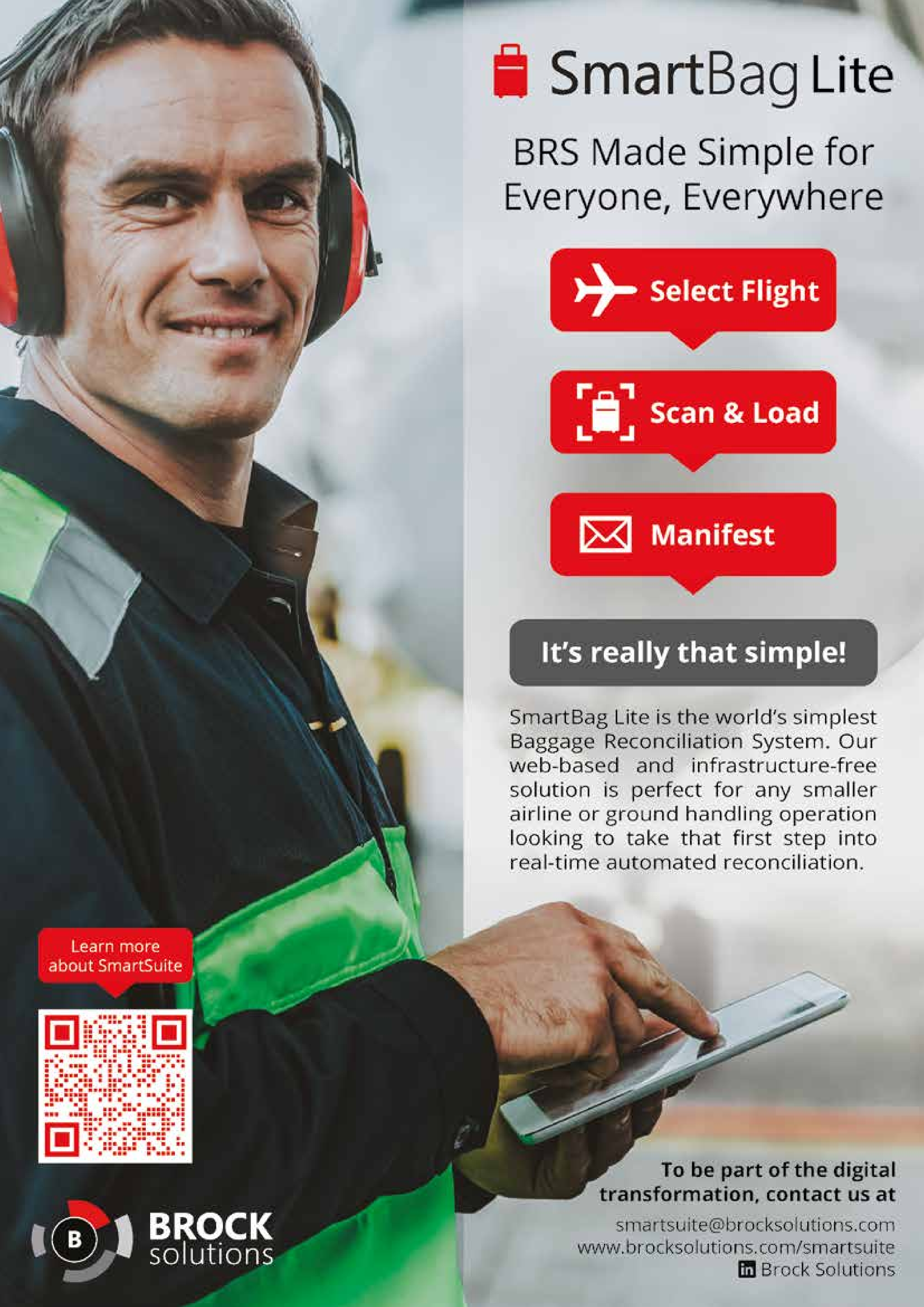
By making technology the bedrock of operations, airlines, airports and the various organisations that make up the aviation ecosystem are unlocking a world of opportunity.

But the question of how transformative the next decade will be for baggage will be determined by the actions of the industry; airports need to get ahead in providing infrastructure for these services or risk falling behind, while airlines need to integrate these ideas into their digital and ancillary strategies now. And governments and authorities like IATA need to build standards – from vetting and training to security and data collection – in order to help products evolve fast. ■

Is it time for the baggage experience to be re-visited? (photo: courtesy of SITA).

About the author:

Before starting AirPortr, Randel Darby spent years working in private equity in London and overseas. His only prior experience of the travel and transportation industry was as a passenger. High-frequency business travel led him to become increasingly frustrated with the whole experience, particularly when it came to baggage. Lugging bags to and from airports and around city centres was both stressful and time-consuming. It seemed outdated, in an age where we have convenient services at our fingertips. So he created AirPortr, a baggage collection service the customer controls via a mobile phone app.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