

ASIA-PACIFIC AIRPORTS

THE OFFICIAL MAGAZINE OF ACI ASIA-PACIFIC



IN THE SPOTLIGHT: CUSTOMER SERVICE

Issue 2, 2022

- Airport profile: Christchurch
- Review: ACI Asia-Pacific Board Meeting & Regional Assembly
- Plus: Investing in Sustainability & Green Shoots of Recovery



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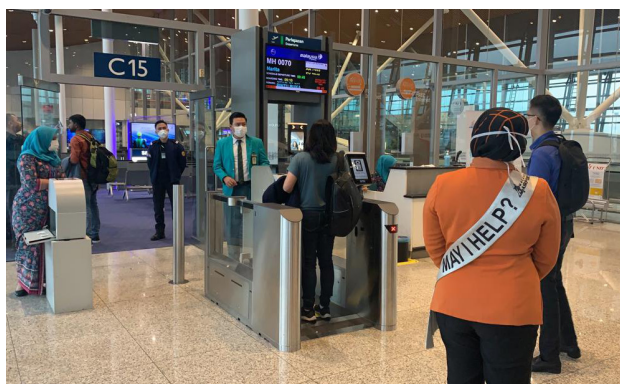
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Asia-Pacific is proud to be the voice of airport operators in two of the fastest-growing regions of the world, Asia-Pacific and the Middle East.

Our team of professionals work tirelessly to serve and lead airports in the region with a vision to shape the future of the aviation industry.

Based in Hong Kong SAR, ACI Asia-Pacific is one of five regions of the only global airport trade organisation, Airports Council International (ACI) World.

ACI Asia-Pacific key facts:



131
AIRPORT MEMBERS



5
AFFILIATE AIRPORT MEMBERS



617
OPERATED AIRPORTS



9
ASSOCIATE MEMBERS



49
COUNTRIES/ AREAS



80+
WORLD BUSINESS PARTNERS

In 2020, ACI Asia-Pacific airports handled 1.7 billion passengers and 47.9 million tonnes of cargo.



47.9
MILLION TONNES CARGO



1.7
BILLION PASSENGERS



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VIEW FROM THE TOP

Director general, Stefano Baronci, reflects on the appointment of a new Regional Board president, the need to focus on decarbonisation, plans for a Middle East office and ACI Asia-Pacific’s advocacy efforts during the first half of 2022.

In many ways, the summer of 2022 sparked a fresh lease of life for the aviation industry. COVID-19 cases are beginning to decline across the globe, travel restrictions and border controls are being eased, people are returning to fly like they used to, and as a result, air traffic is showing green shoots of recovery.

As the industry navigates its way back into the post-COVID-19 world, ACI Asia-Pacific successfully brought together industry leaders and stakeholders for an in-person Annual Board Meeting & Regional Assembly in Singapore, the first since the onset of COVID-19 pandemic.

For a few aviation leaders in the Asia-Pacific and Middle region, it was a refreshing break, meeting one another and sharing best practices, amidst the industry’s transition from COVID-19.

The meeting was significant in many ways as several key decisions were made. To begin with, Emmanuel Menanteau, representing Cambodia Airports, was appointed as our new president, leading the charge from June 1, 2022, until the end of 2024. He succeeded

Seow Hiang Lee, CEO of Changi Airport Group, who will continue to be part of the Board as Immediate Past President.

Asia-Pacific and the Middle East now have a strong voice at the ACI World Governing Board as the region is represented by Menanteau, ACI Asia-Pacific Regional Board director, Fred Lam (Airport Authority Hong Kong) as regional advisor, and Aimen Al Hosni (Oman Airports) as the chair of the Board.

The other members on the World Governing Board are Mohamed Yousif Al-Binfalah (Bahrain Airport Company SPC); Geoffrey Culbert (Sydney Airport); SGK Kishore (GMR Hyderabad International Airport Ltd); Nitinai Sirismatthakarn (Airports of Thailand Public Co. Ltd); Akihiko Tamura (Narita International Airport Corporation); and Seow Hiang Lee (Changi Airport Group).

FOCUS ON DECARBONISATION

The airports in our region are placing a greater emphasis on decarbonisation. Efforts toward reducing emissions have received a boost after our Board passed a resolution urging all members to voluntarily commit to net zero

carbon emissions and develop action plans to reduce emissions through the use of low carbon technologies in airport operations and infrastructure management.

This resolution is consistent with the United Nations' Special Report on Global Warming, which recommended all sectors to achieve net zero human-caused carbon emissions by 2050.

It is very evident that our airports are already making significant progress in their sustainability journeys. A total of 12 airports were recognised for their outstanding achievements in carbon management under our Green Airport Recognition 2022 programme. Participating airports demonstrated exceptional best practices in their respective decarbonisation journeys, specifically in Scope 1 and Scope 2 carbon emission reductions. We hope to see many more in the coming years.

FOCUS ON THE MIDDLE EAST

To strengthen co-operation and partnerships with airports and stakeholders in the Middle East, it has been decided to establish a sub-regional office in the Middle East. This will help further customise our programmes to efficiently serve our members in the Middle East region.

ENHANCING STANDARDS

ACI Asia-Pacific also entered into an important Memorandum of Understanding with our Associate Member, CAAS, and ACI World, to conduct research and jointly develop and deliver training programmes for aviation professionals.

As an immediate area of focus, ACI World, ACI Asia-Pacific and the CAAS will jointly develop and deliver the first global training programme on sustainable airport development and management by the end of this year.

FAVOURABLE POLICY KEY TO RECOVERY

The key to achieving a truly sustainable recovery for aviation will be the easing of international travel restrictions, increased vaccination coverage, health security and supportive policies from governments. At the same time, the sector will need to prepare for future shocks.

Having said that, most airports are optimistic about the recovery of passenger traffic. Indeed, passenger numbers are already growing in countries such as Cambodia, Singapore, India, Thailand, Vietnam and Malaysia that were among the first to withdraw the restrictions on international air travel.

However, border restrictions in some key markets, including China and Japan, and the subsequent renewed social restrictions and tightening border controls have cast a shadow over the recovery.

To prove the effectiveness of the travel restrictions, we commissioned a study, carried out by OXERA & Edge Health, which revealed that travel restrictions such as quarantine and testing would be, to a large degree,

ineffective in mitigating the spread of COVID-19. The key findings provide ample justification to review and withdraw restrictions on international air travel to bring the region back to its leading position for air travel and tourism.

Keeping this as a base, we engaged with the Government of Japan, recommending them to remove all restrictions by providing them with the evidence. The withdrawal of complete restrictions in Japan is likely to provide a significant boost to the aviation in the region.

ACI Asia-Pacific will continue to step up its effort in advocating for a pragmatic and risk-based approach to re-open borders as part of an effort to facilitate international air travel.

STRONG ADVOCACY

Addressing the ASEAN States at the Air Transport Working Group (ATWG) meeting in Singapore, we had the privilege of providing an overview of the significant progress achieved by nations to date with regards to the re-opening to international traffic.

To support the recovery process, we have utilised aviation and trade events to address the need to harmonise health protocols, reconsider travel bans and adopt a risk-based approach.

For example, at the Future Aviation Forum in Riyadh in Saudi Arabia, we emphasised the need for a policy and regulatory framework that is harmonised, promotes co-operation and provides solutions to emerging challenges of global importance.

LOOKING FORWARD

To assess the recovery of industry, *Industry Outlook*, a quarterly performance analysis of the industry, was launched. In the first quarter of the year (January to March 2022), the region witnessed signs of recovery, bringing cheer among members.

Although passenger volumes still remained low compared to pre-COVID, cargo proved to be a key revenue generator and now the stage is set for air cargo to grow. Despite an improving trend, airport financial margins, too, remained far below pre-pandemic levels and are economically unsustainable.

The next edition is scheduled in July 2022 and will include a focus on one of the challenges faced by the aviation sector, regionally as well as globally – the lack of adequate workforce to handle fast-growing volumes of passenger traffic with increased health protocol requirements.

Despite the subdued environment created by the pandemic, the future looks bright for air travel. I strongly believe that with the re-opening of the borders of some of the key aviation markets in the region, and removal of travel protocols in some parts of the region, we are likely to see more positive trends.

REGIONAL UPDATE

Senior manager for media and communications, Sunil Subbaiah, rounds-up the latest news and developments from ACI Asia-Pacific.



ACI ASIA-PACIFIC BOARD MEETING & REGIONAL ASSEMBLY HELD IN SINGAPORE

Hosted by Changi Airport Group, the 17th ACI Asia-Pacific Board Meeting & Regional Assembly held in Singapore from May 16-18, 2022, proved to be a productive and highly successful event.

Though scaled down significantly and different from our usual annual gatherings, the event saw an overwhelming participation with a turnout of around 100 in-person attendees and 50+ virtual participants from across the time zones, representing members from well over 20 countries in Asia-Pacific and the Middle East.

This helped ACI Asia-Pacific achieve its objective – bringing together airport leaders, business partners and government authorities for a fruitful exchange in this first hybrid event.

The Assembly was officially opened by Seow Hiang Lee, CEO of Changi Airport Group and ACI Asia-Pacific director general, Stefano Baronci.

The Board appointed a new president and four new board members. Emmanuel Menanteau was appointed the new president of the Regional Board. He officially succeeded Lee on June 1, 2022, and will hold the post until to end of 2024.

The Board also appointed four new Board members – Dato' Iskandar Mizal Bin Mahmood, managing director

of Malaysia Airports Holdings Berhad; Kyung Wook Kim, president and CEO of Incheon International Airport Corporation; Cheok Kuan Kan, executive director of Macau International Airport Company Limited; and Hyeong Jung Yoon, president and CEO of Korea Airports Corporation.

“We are excited to have this group of individuals join the Board and bring in their unique talents, expertise and perspectives to further our vision to promote excellence in airport management and operations,” said Baronci.

“We are truly grateful to our outgoing president Seow Hiang Lee for his outstanding contributions over the course of the last four years. We look forward to working closely with our Board to further strengthen ACI Asia-Pacific’s programmes across the region.”

ESTABLISHING A SUB-REGIONAL OFFICE IN THE MIDDLE EAST

With an aim to further strengthen the ACI Asia-Pacific international exposure, the Board has approved the proposal to open a sub-regional office in the Middle East, which will share services and interact with the Hong Kong office.

The move will help ACI Asia-Pacific to further customise programmes to better serve our members in the Middle East region.



KNOWLEDGE EXCHANGE AT THE REGIONAL ASSEMBLY

As a result of severe air travel restrictions implemented by practically all countries around the world, the industry lost over 6.1 billion passengers in 2020 compared to the projected baseline (pre-COVID-19 forecast for 2020), representing a decline of 64.6% of global passenger traffic.

Most industry experts see digitalisation as a key enabler to not only handle the pandemic, but also the restart and recovery period once restrictions are lifted.

During the opening panel discussion of the ACI Asia-Pacific Regional Assembly, leaders from various airports and ACI World Business Partners shared their perspectives on success stories, lessons learnt from the COVID-19, the importance of sustainability, and opportunities to improve aeronautical revenues.

ACI Asia-Pacific director general, Stefano Baronci, moderated the Leaders Forum (pictured above), which featured SGK Kishore, executive director, GMR Hyderabad International Airport Limited; Seow Hiang Lee, CEO, Changi Airport Group; and Emmanuel Menanteau, representing Cambodia Airports.

In the informative session, the leaders shared some thoughts on how the aviation industry, and specifically airports in Asia-Pacific and the Middle East, can continue to recover from the global pandemic and ultimately build back better.

KANSAI AIRPORTS TO HOST 18TH ACI ASIA-PACIFIC REGIONAL ASSEMBLY, CONFERENCE & EXHIBITION

Japan's Kansai Airports will host the 18th ACI Asia-Pacific Regional Assembly, Conference & Exhibition in Kobe, Hyogo Prefecture, in 2023.

As the host of this assembly, Kansai Airports will promote meaningful discussions for the further development of the aviation eco-system and strive to maximise the appeal of the Kansai region, including Osaka, Kansai Expo 2025.

ACI ASIA-PACIFIC REGIONAL BOARD

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Emmanuel Menanteau*
(Cambodia Airports,
Cambodia)

FIRST VICE PRESIDENT

SGK Kishore*
(GMR Hyderabad International
Airport Limited, India)

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Mohamed Yousif
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(Bahrain Airport Company
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IMMEDIATE PAST PRESIDENT

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Jean-Michel Ratron
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Polynesia)

Tan Sri Bashir Ahmad
Abdul Majid
(Regional advisor on WGB)

* WGB member

**Regional Advisor on WGB

ACI-ASIA-PACIFIC CONFERENCE HIGHLIGHTS



DISCUSSION ON DECARBONISATION

Each airport's decarbonisation journey is unique to their setting and circumstances, with some being further ahead in the process than others.

In this session, delegates heard from Videh Jaipurkar, CEO of [Delhi International Airport Ltd.](#), and Akihiko Tamura, president and CEO of [Narita International Airport Corporation.](#), about the decarbonisation journeys of their respective airports.

The CEOs also shared their views on green power resources and expanding sustainably through green financing and ESG.

The session was moderated by [Ruud Ummels](#), managing director of To70, the European representative on ACI WBP Advisory Board. All three are pictured above.

NEW RESEARCH AND DEVELOPMENT TRAINING INITIATIVE

ACI Asia-Pacific, ACI World and the Civil Aviation Authority of Singapore (CAAS) have signed a Memorandum of Understanding (MoU) to conduct research and studies to develop and deliver training for aviation professionals.

The training will equip aviation professionals with new knowledge and skills to help them rebuild their respective aviation sectors, which have been badly hit by the COVID-19 pandemic in the last two years.

The signing of this MoU cements our strong working relationship with the Civil Aviation Authority of Singapore and will help enhance aviation standards in the country. This partnership is vital to strengthen the existing programmes and will enhance collaboration on sustainability, aviation safety, security, and airport management.



DISCUSSION ON NON-AERONAUTICAL REVENUES, CONCESSION AGREEMENTS

The final panel session of the event (pictured above) was focused on non-aeronautical revenues and covered everything from the need to find new revenue streams to compensate for the decline in passenger volumes to whether it is time for airports to re-think the terms and conditions of their commercial contracts with concessionaires.

In the hot-seat were Peck Hoon Lim, Changi Airport Group's executive vice president for commercial; Gerald Ong, regional business development director for the Plaza Premium Group; Marvin von Plato, CEO of Heinemann Asia Pacific Pte Ltd; and Nagy Abu Zeid, vice president of corporate planning for Oman Airports Management Company.

This session was moderated by ACI Asia-Pacific's senior expert for economics and ESG, Iliia Lioutov.



Pictured above signing the MoU are ACI Asia-Pacific director general, Stefano Baronci; ACI World director general, Luis Felipe de Oliveira; and director general of CAAS, Han Kok Juan, observed by Singapore's Minister of Transport, S. Iswaran.

GREEN AIRPORTS RECOGNITION WINNERS

ACI Asia-Pacific continued to be vocal and active in promoting airport sustainability at different levels. This year, ACI Asia-Pacific recognised twelve airports in Asia-Pacific and the Middle East for their outstanding achievements in carbon management.

Participating airports (adjudicated according to the size of the airport) all demonstrated exceptional best practices in their respective decarbonisation journeys, specifically in Scope 1 and Scope 2 carbon emission reductions.

The recognised airports are:

OVER 50 MILLION PASSENGERS PER ANNUM

Platinum – Hong Kong International Airport

- Weather Forecast for Air-conditioning Control System (Weather FACTS) Project

Gold – Kuala Lumpur International Airport

- Embracing Green Energy of Ground Power Unit (GPU) for Sustainable Carbon Management

Silver – Beijing Capital International Airport

- Green Prefabricated Building

BETWEEN 15-50 MILLION PASSENGERS PER ANNUM

Platinum – Kempegowda International Airport

- ZERO Scope 2 Emissions at BIAL

Gold – Taoyuan International Airport

- Lean Power Consumption and Carbon Reduction Project

Silver – Rajiv Gandhi International Airport

- Sustainable Airport Operations for Efficient Carbon Management and Effective Reduction

BETWEEN 5-15 MILLION PASSENGERS PER ANNUM

Platinum – Christchurch International Airport

- Innovation and Aquifers

Gold – Queen Alia International Airport

- Heating, Cooling Systems Improvement

Silver – Bahrain International Airport

- New Passenger Terminal Building Project

LESS THAN 5 MILLION PASSENGERS PER ANNUM

Platinum – Hawke's Bay Airport

- 100% Renewable Carbon Zero Electricity

Gold – Nadi International Airport

- Terminal Modernisation Project - Carbon Emission Reduction Initiative

Silver – Darwin International Airport

- Aerobridge and Apron Upgrades

“We particularly appreciate the innovative processes shared by all participants this year, which can serve as best practices and leading examples to other airports in the region and beyond. This is particularly timely considering our industry’s commitment to attain net zero carbon emission by 2050. Congratulations to all recognised airports for demonstrating the leadership and commitment to decarbonisation,” enthused ACI Asia-Pacific director general, Stefano Barongi.



Green Airports Recognition 2022

Over 50 million passengers per annum

		
Platinum	Gold	Silver
Hong Kong International Airport	Kuala Lumpur International Airport	Beijing Capital International Airport

Green Airports Recognition 2022

Between 15-50 million passengers per annum

		
Platinum	Gold	Silver
Kempegowda International Airport	Taoyuan International Airport	Rajiv Gandhi International Airport

Green Airports Recognition 2022

Between 5-15 million passengers per annum

		
Platinum	Gold	Silver
Christchurch International Airport	Queen Alia International Airport	Bahrain International Airport

Green Airports Recognition 2022

Less than 5 million passengers per annum

		
Platinum	Gold	Silver
Hawke's Bay Airport	Nadi International Airport	Darwin International Airport

YOUNG EXECUTIVE AWARD 2022 – DEVELOPING THE NEXT GENERATION OF AVIATION PROFESSIONALS FOR THE INDUSTRY



Developing the next generation of aviation professionals has been a key focus of ACI Asia-Pacific and the quality of the entries for Young Executive Award 2022 show that the industry is in good hands.

This year's winner is Re kibuddin Ahmed (pictured on the right), an environment manager for Delhi International Airport Limited, who was adjudged to have submitted the best overall paper on the theme of 'Adapting Airports to a Changing Climate in the Region'.

According to the judges, Ahmed "demonstrated exceptional research, analysis and appropriate interventions" in his submission, which it is hoped will contribute towards the aviation sector becoming a more sustainable and resilient mode of transportation.

Emily Chan (pictured on the left), an assistant manager for standards and service delivery at Airport Authority Hong Kong, received an Honourable Mention from the judges for her submission.

Established in 2009, the Young Executive Award programme continues to encourage the promulgation of innovative ideas and best practices from young professionals from the Asia-Pacific and Middle East airport community.



ACI ASIA-PACIFIC ATTENDS ACI WORLD SECURITY STANDING COMMITTEE MEETING IN MONTRÉAL

The 54th meeting of the ACI World Security Standing Committee held in Montréal in May attracted over 20 security professionals from airports, World Business Partners and, of course, staff from ACI World and ACI's regional offices.

Global security experts from ICAO, IATA and the United Nations Office of Counter-Terrorism (UNOCT) were invited as guest speakers in the respective sessions of the meeting.

A considerable amount of time was spent at the meeting discussing the foreseeable challenges for airport security operations post pandemic, one of which is addressing the current shortage of security screeners due to the extensive layoff or furlough of staff during the pandemic.

A number of short-term and long-term mitigation measures were shared among the group, such as improving working conditions for security functions, recruiting new talent as well as expediting the adoption of technologies to relieve the constraint on manpower.

During the meeting, committee members shared and exchanged best practices for various emerging security threats, including the rising number of drone attacks worldwide.

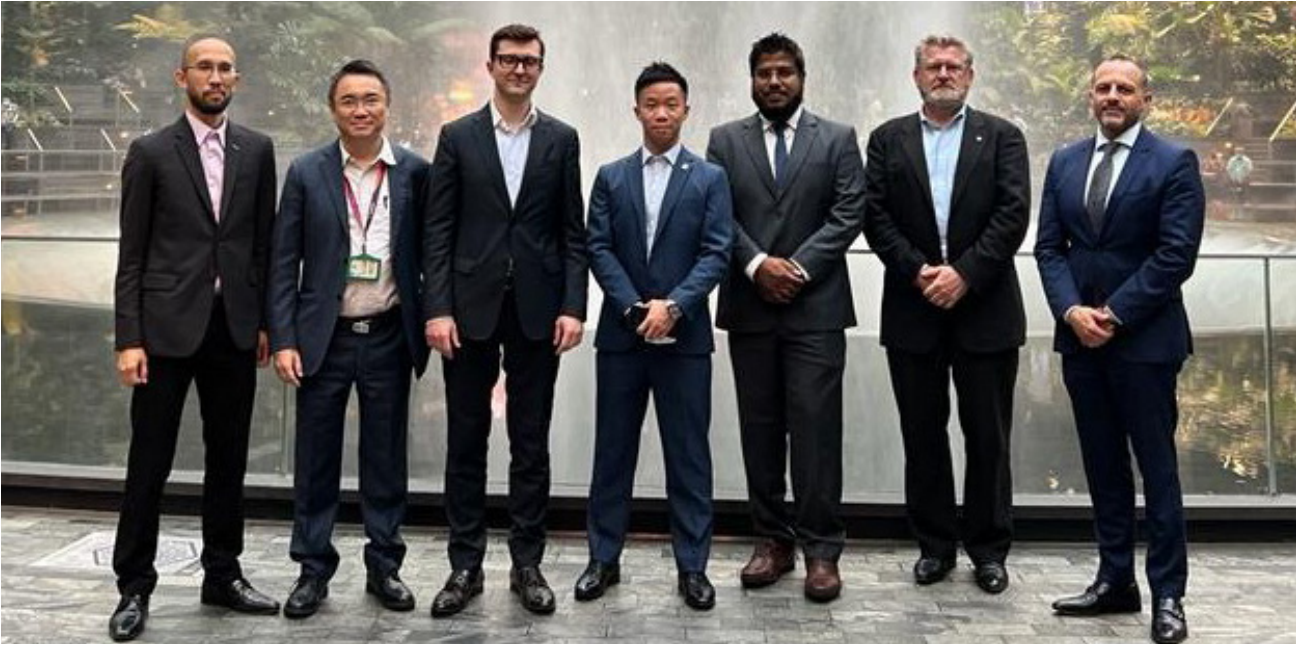
Indeed, the secretary took the opportunity to officially launch the newly developed online Counter Drones Knowledge Centre, which is designed to provide a 'one stop shop' reference for airports on drone risk mitigation.

Moreover, three new sub-working groups of the World Security Standing Committee (WSSC) were formed with the aim of developing practical solutions or guidance on issues for: Devising advocacies to policy makers and ICAO; The implementation of security management systems; and The wellness and mental health of security staff.

Gary Leung, ACI Asia-Pacific's manager for security and facilitation, delivered a presentation on One-stop Security (OSS), a topic that has been of interest to many airport hubs, especially those in the Asia-Pacific region.

The committee acknowledged the progress over the past few years on OSS, and agreed that ACI should continue to advocate OSS across the world, in a wider adoption.

The next World Security Standing Committee Meeting will be held in October or November this year with the exact date and location to be confirmed shortly.



ACI ASIA-PACIFIC ECONOMICS COMMITTEE MEET IN SINGAPORE

The 17th Meeting of the ACI Asia-Pacific Economics Committee took place in Singapore on May 19, 2022, the first physical meeting since the onset of COVID-19.

The hybrid meeting also offered an opportunity to join virtually for those who could not make it. The meeting had nine in-person attendees and 22 dialling in from around the region.

The meeting featured extensive discussions around recovery, expectations of future growth and the development of the airport industry in the region.

As part of the effort to 'build back better', the Committee affirmed that ESG and sustainability should be one of our top priorities as the industry prepares for recovery.

In collaboration with the Regional Environment Committee, ACI Asia-Pacific will continue to educate members on the importance of ESG and sustainability in the context of

airport business, extending the focus of our association beyond the pressing issues of decarbonisation and other dimensions of environmental sustainability to the broader range of topics encompassing social responsibility and good corporate governance.

In addition, engagements with financial institutions, as well as credit and sustainability rating agencies, will be arranged in order to better understand the links between ESG and finance.

Another key topic that was discussed in the meeting was the development of non-aeronautical revenue.

Members were keen to learn about the best practices and recommendations shared at ANARA (<https://bit.ly/3ObrkYN>), ACI World sub-committee, covering the themes of digital transformation, concession agreements, retail including duty free, ground access, food and beverage, and sustainability.

ACI ASIA-PACIFIC PARTICIPATES IN KOREA AVIATION NOISE POLICY FORUM

Aircraft noise management continues to be a high priority for airports as part of their sustainability plans, with most actively engaged with local governments, aviation authorities and other stakeholders to find solutions that are satisfactory for everyone.

ACI Asia-Pacific, as one of the key stakeholders in the industry, has been helping its members to address aircraft noise.

Indeed, on May 25, 2022, the organisation's senior manager for the environment and airport information technology, Ken Lau, participated in the Korea Aviation Noise Policy Forum hosted by Korea Airports Corporation and Incheon Airport.

The forum discussed the best practices and mitigation measures for aircraft noise management in our region and how this could be referenced in South Korea. The event saw participation of experts from France, Japan, Singapore, South Korea, Spain and the UK.

During the event, ACI Asia-Pacific shared ACI guidance documents on aircraft noise management and the findings of the Aircraft Noise Management Survey developed by the Aircraft Noise Management Working Group under ACI Asia-Pacific's Regional Environment Committee.

The key objectives of the survey was to develop a database of aircraft noise management at airports in the region and to identify and analyse measures to reduce the noise.



LEAN AND GREEN

Christchurch Airport has never lost sight of its sustainability goals and is now arguably the greenest gateway on the planet, writes Joe Bates.

Christchurch Airport has set a new sustainability milestone by going beyond being carbon neutral and becoming climate positive.

Its general manager for planning and sustainability, Nick Flack, believes the move is an important step in the transition of airports and aviation to a lower carbon future.

“Achieving this next level in our journey is critically important because airports and aviation support economic activities that earn the most export dollars per tonne of carbon and support improved wellbeing for future generations,” enthuses Flack.

Christchurch Airport has had its greenhouse gas (GHG) footprint independently measured and audited since 2006.

Taking immediate action to reduce Scope 1 (onsite operational) emissions was the first step and has resulted in close to a 90% reduction in Scope 1 emissions to date.

This, explains Flack, is 14 years ahead of where the airport’s science-based targets pathway requires them to be.

The airport was recognised as world leading in airport decarbonisation late 2020, when it became the first gateway on the planet to achieve Level 4 status in ACI’s Airport Carbon Accreditation programme.

As a result, it now mentors and collaborates with airports around the world, including Brisbane and Perth in Australia, and New York’s JFK, Newark Liberty and LaGuardia airports in the US, on how to reduce emissions.

“We have an open-source policy in relation to our sustainability work,” says Flack. “There is no future for aviation if we don’t transition to low emissions, and that involves the whole sector. The great thing is the sector is forward looking and collaborative, with a proven history of innovation.”

Flack insists that Christchurch Airport will continue to work on a reducing its emissions, ahead of science-based targets aligned with the Paris Agreement target of limiting global warming to below 1.5 degrees.

“This includes working with airline partners to accelerate the decarbonisation of the aviation sector,” he notes.



“Emissions by aircraft while in the air are a big part of the remaining challenge. Airlines and aircraft manufacturers have plans to accelerate the development and deployment of lower-carbon technology.

“As an airport, our focus is to ensure we are leading the development of the necessary infrastructure so we can be early adopters of new technology. New Zealand’s first electric passenger aircraft was launched at Christchurch Airport and leading technological contenders are hydrogen and battery electric power for short-haul aircraft.”

Last December, the airport announced that Kōwhai Park – described as a new concept for generating renewable energy located on 400 hectares of land on the airport campus – would house New Zealand’s largest solar energy array.

Phase One of the project includes plans for a 220-hectare solar array capable of generating 150 megawatts of energy – enough electricity to power 30,000 homes for a year while providing the same carbon benefits as planting 1.25 million native trees and shrubs.

“By developing renewable energy, we will have the potential to provide 100% renewable electricity or hydrogen for aviation in Christchurch, and a renewable energy source to power low carbon ground transport and industry for Christchurch,” says Flack.

“We see Kōwhai Park as a step beyond carbon neutrality and a way we can catalyse the low carbon future of the Canterbury region.

“To progress this work, we are working with Hamburg International Airport. We view Hamburg as the European leader in applying hydrogen within airport operations, working with Airbus to assist the transition of aviation to more sustainable energy.

“The two airports now work together with regular meetings in the wee small hours to combine our knowledge and accelerate adaptation.”

What’s more, Flack insists that his gateway is not stopping there, noting that in addition to this work, operator Christchurch International Airport Limited (CIAL), is voluntarily supporting permanent New Zealand native forestry restoration that removes GHG emissions from the atmosphere.

He says: “We have followed best practice as set out by the Ministry for the Environment’s ‘Interim Guidance for voluntary climate change mitigation’.

“It means that before making claims of voluntary climate change mitigation, organisations should first measure their emissions, commit to an emissions reductions plan, and continue to take action to reduce their emissions in accordance with the plan.

“Our ambition is to go beyond ‘neutral’. We want to have a positive net benefit on our environment, so we are aiming at removing 125% of our remaining emissions. We achieved 90% reductions in our Scope 1 emissions, but at the moment, there is no technology available to reduce the final 10%.



“So, we are investing in New Zealand based permanent native forestry restoration to remove carbon from our atmosphere beyond our own footprint. This will also actively assist biodiversity, habitat restoration, landscape resilience improvements, soil health and water quality.”

This work sees Christchurch Airport partnering with Carbonz to support permanent native forest restoration in the Lake Hawea region in Otago, including Manuka, Kanuka and Mountain Beech reforestation.

SUSTAINABILITY LINKED LOAN FACILITY

And it seems that the airport’s sustainability drive also extends to its funding, as in late December 2021, CIAL successfully completed the re-financing of an existing debt facility with Westpac, at the same time converting it into its first sustainability linked loan.

Chief financial officer, Tim May, says signing its first Sustainability Linked Loan (SLL) with Westpac is a milestone achievement that financially incentivises the airport to meet agreed sustainability targets.

“This is not a new loan, but the first step in CIAL taking the opportunity to incorporate its ambitious sustainability targets into its financial strategy, with conversion of other existing facilities considered as they mature over time,” says May.

“This is another way Christchurch Airport is demonstrating a sincere commitment to sustainability. Rather than just rolling over some maturing facilities on the same terms, we’re putting our money where our mouth is.”

The Sustainability Linked Loan means the financial terms of the Westpac loan are linked to whether the airport achieves its ambitious goals for carbon reduction, renewable energy generation on its campus and energy efficiency.

The airport’s progress will be subject to independent scrutiny and, if it achieves its targets, it will receive lower funding costs in respect to this facility. If it doesn’t, this facility will be charged at a higher interest rate.

“Yes, they may be ambitious, but we back ourselves to achieve our agreed SLL targets – alongside the many goals we’ve set and achievements we’ve made in sustainability,” says May. “That includes being the first airport in the world to achieve the highest level of carbon reduction for an airport.

“We know many stakeholders are becoming increasingly interested in companies demonstrating commitment to sustainable outcomes. Converting this facility with Westpac allows us to join several other leading businesses who’ve already shown their focus on championing sustainable finance practices in New Zealand.

“Our airport team daily demonstrates best practice in sustainability, so has made it possible for us to commit to this refinancing. Every member of our team has an impact on sustainability outcomes. That has given our finance team the confidence to sign up to the Sustainability Linked Loan, and we’d like to thank Westpac for their support of this re-finance move.”

TRAFFIC TRENDS

Prior to the global pandemic, Christchurch Airport was handling close to seven million passengers per annum as 12 airlines operated non-stop services to 16 domestic, four trans-Tasman and six international destinations.

However, New Zealand’s border closures in support of some of the world’s toughest COVID related travel restrictions means that international travel has basically been off of the agenda for the past two years.



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While admitting that there is still a long way to go until normal services are resumed, the airport’s chief aeronautical and commercial officer, Justin Watson, has no doubt that the gradual re-opening of New Zealand’s borders in 2022 will ensure a better year for Christchurch.

Indeed, he notes that airline bookings have been growing steadily since the government started a slow, phased re-opening of New Zealand’s borders earlier this year.

“We are more than ready to welcome the increasing numbers we are already seeing arriving here,” enthuses Watson.

“As international borders re-open to passengers, we have seen our airline partners such as Air New Zealand, Qantas, Fiji Airways and Singapore Airlines reinstate or increase their services to the key international destinations of Sydney, Melbourne, Brisbane, Nandi and Singapore.

“In addition, we are encouraged by conversations with our other airline partners about resuming their flights in time for our summer peak. Re-starting air services can’t happen overnight, and airlines will take some time to get their crew and aircraft back into service.”

FUTURE DEVELOPMENT

With the global pandemic still making it almost impossible for airports to accurately project future traffic growth, Christchurch Airport has, for now, decided to focus on three ‘mega-trends’ going forward.

Nevertheless, Watson believes that it is time to look beyond the pandemic to the world we will operate and live in over the next decade or two.

He says: “There are three big trends which have accelerated during the past two years and will shape the future.

They are climate change, digital transformation and the future of work.

“All three trends require us to understand their impact on our business and our surroundings.”

CENTRAL OTAGO AIRPORT

Controversial to some, CIAL has revealed interest in building a new Central Otago Airport at some point in the future to ensure that Christchurch and the South Island don’t become a victim of their success and run out of capacity to meet demand.

It insists that in line with its sustainability goals, if it happens, on land it has already purchased, Central Otago wouldn’t be just any airport as it would be built to the highest sustainable standards and enable decarbonised aviation.

Indeed, CIAL feels that it could be an exemplar of the more environmentally friendly airports of tomorrow.

Project director, Michael Singleton, has previously gone on record as saying that a potential site identified in Tarras could support a single runway airport capable of handling both domestic and international short-haul traffic.

“A single 2.2 kilometre runway would be able to serve all of New Zealand’s domestic routes and some short-haul international destinations such as Australia and parts of the Pacific,” he says.

“In general, a longer runway creates more opportunity for the region it serves because it enables businesses and people to connect with more destinations. Our job is to think long-term and identify what opportunities this site could deliver well into the future.”



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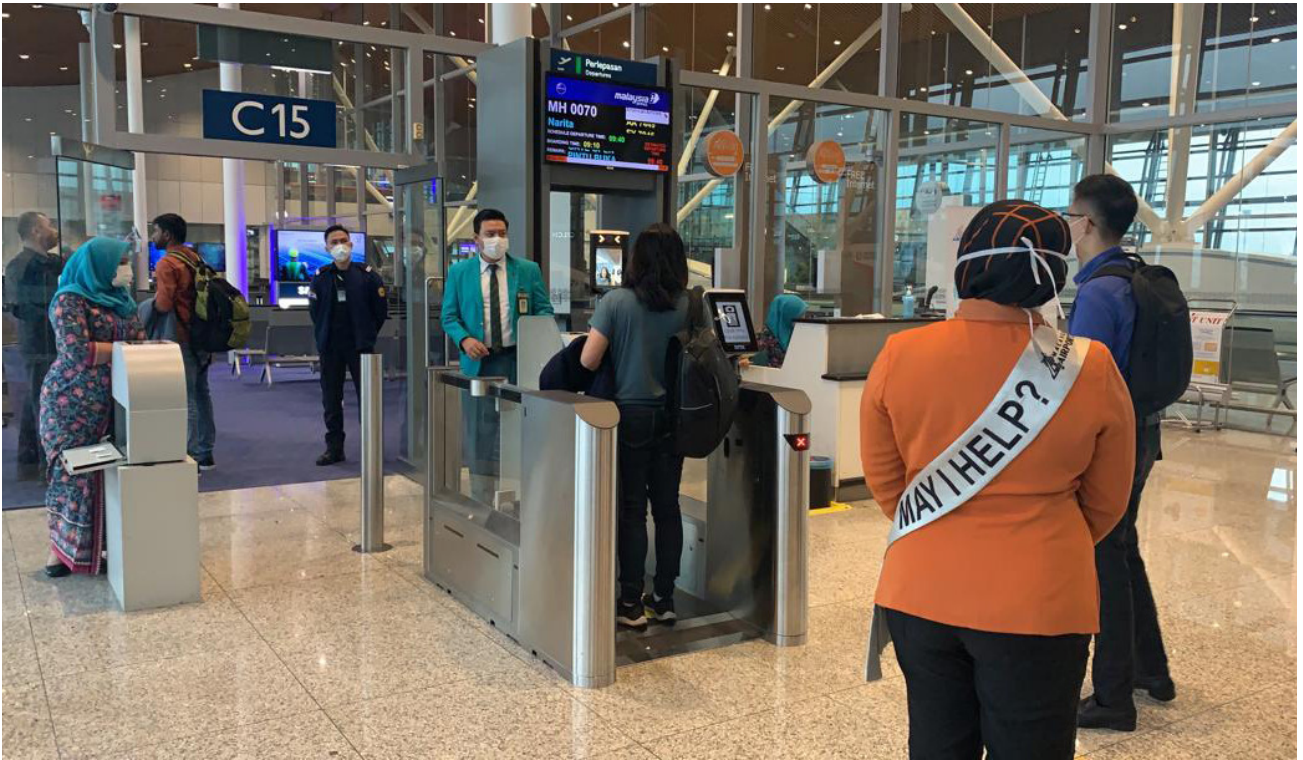
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New smartphone app which provides passengers with information about the health measures in place at individual airports around the world.

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The Check & Fly app is available on the Apple App Store.
aci.aero/checkandfly



HOSTING JOYFUL CONNECTIONS

Dato’ Iskandar Mizal Mahmood, managing director of Malaysia Airports, talks to Joe Bates about his company’s customer service strategy, ASQ successes and recovering from the global pandemic.

Anyone who has ever visited Malaysia, particularly those lucky enough to have been there on holiday, will know that they can expect a warm welcome and, more often than not, excellent customer service levels.

Indeed, at an ACI customer service conference held in Kuala Lumpur over a decade ago, it was suggested to me that good customer service is very much in the DNA of Malaysians.

Therefore it shouldn’t come as a surprise to learn that Malaysian airports have traditionally performed well in ACI’s annual Airport Service Quality (ASQ) customer experience survey.

The success continued this year with Kuala Lumpur (KUL) and Langkawi (LGK) finishing joint top in their respective Best by Size and Region categories for airports handling Over 40 million and 2 to 5 million passengers annually.

Malaysia Airports’ managing director, Dato’ Iskandar Mizal Mahmood, believes that the company’s commitment to “hosting joyful connections” for those passing through its airports, effectively means that it constantly strives to find ways of doing things better to be more operationally efficient and enhance the airport experience for visitors.

“Malaysia Airports values our guests more than anything else, and even more so during these demanding times, so yes, customer-centricity is one of our company’s core values,” reveals Mahmood.

“Indeed, when you put the four core values together – Integrity, Customer centricity, Accountability and New ideas, it abbreviates to I CAN, which helps motivate us to do everything in our ability to ‘Host Joyful Connections’ with all our stakeholders.

“This philosophy means that good customer service is always high on our agenda, and even more so as ASQ is part of our corporate scorecard.”

How important is new infrastructure, such as new terminals or the modernisation of existing ones to enhancing the airport experience for passengers?

Mahmood says: “Part of improving the passenger experience involves the modernisation of existing infrastructure which, at Kuala Lumpur International Airport, will include the refurbishment of our washrooms, and replacement of the baggage handling system and our iconic Aerotrains.

“I believe the projects show that we empathise with our passengers and prioritise essential services at the airport.



“That being said, in line with our Airports 4.0 initiative, we are also innovating the airport experience through EZPaz, our very own biometric identification, self-service bag drop system and upgrading our mobile MYAirports App in addition to introducing initiatives such as Airport Collaborative Decision Making [A-CDM] and 3D Internet of Things at Kuala Lumpur International Airport.

“Embracing digitalisation and new technology is part of our Airports 4.0 initiative in which we seek to provide a safe and world-class passenger experience through a fully integrated digital ecosystem.”

As previously reported in *Asia-Pacific Airports* magazine, Malaysia Airports’ pioneering travel retail e-commerce platform, shopMYairports, is designed to make shopping easier and more convenient for passengers at its Malaysian airports by allowing passengers to order retail items on their mobiles and have them delivered to their departure gate or aircraft seat.

Mahmood notes that a similar initiative called shop@saw has been rolled out at the Malaysia Airports Holdings Berhad (MAHB) owned and operated Istanbul-Sabiha Gökçen International Airport in Turkey.

Having admitted that digitalisation remains a key priority going forward for Malaysia Airports as it bids to increase the operational efficiency of its airports and ease of use for today’s more tech-savvy travellers, Mahmood is quick to note that he hasn’t forgotten about the important role people play in the provision of customer service excellence at airports.

“Our people are important to us and play a key role in the delivery of excellent customer service, and this is something

that is demonstrated to us every year by the positive feedback we get from passengers in the ASQ survey,” he says.

“I would go as far as stating that the people element has always been recognised as the strength of Malaysia Airports in delivering customer service excellence. This is perhaps best reflected by the continued improvement of our ‘courtesy’ and ‘helpfulness’ scores in the ASQ survey.”

Malaysia Airports’ certainly prides itself on its training programmes that remind staff of the importance of good customer service, and of the need to maintain a sharp focus on service quality and high-standards to ensure a good experience for all passengers across its airport network.

Referring to one particular initiative, Mahmood says: “Our special ‘Host Culture’ programme is geared towards service operational excellence. It is designed to further internalise the customer-centricity mindset and skillset of our staff to ensure that meeting the needs of our guests remains a top priority.”

How big a thrill for him is it that Kuala Lumpur International Airport finished joint top in the ASQ category for Asia-Pacific airports handling over 40 million passengers per annum in 2021?

“All of us at Malaysia Airports were thrilled by this result, but beyond the recognition received, it shows that every effort – no matter how big or small – matters, and that if we all work together on a united front, anything is possible,” enthuses Mahmood.

“Our customer service strategy and focus makes me confident in the ability of our staff to make a difference every



time, and in the case of Kuala Lumpur and Langkawi, make them two of the best airports in the Asia-Pacific region.”

Any suggestion that KUL and LKG’s 2021 ASQ success means that they can now sit back and rest on their laurels is, however, quickly dismissed by Mahmood.

“Visitors to both airports, and indeed all our airports in 2022 and beyond, can be assured that our efforts to improve our customer service levels will continue as we seek to enhance the passenger experience and aspire to host joyful connections for all our stakeholders,” he says.

When asked if he can provide some examples of customer service excellence at KUL that might have contributed towards its most recent ASQ success, Mahmood suggests that its triumph was more likely due to the overall effort to enhance the airport experience for visitors rather than any individual action.

“Fundamentally, it’s about focusing on the most important elements of the Voice of Customers feedback derived from ASQ surveys, and being agile enough to adapt to industry changes,” he replies.

“One example of this was our decision to use our ‘Host Culture’ programme to enhance the courtesy and helpfulness levels of all frontline staff. Of course many other elements come into play, such as the modernisation and upgrade of existing infrastructure.

“We also believe that we have actively enhanced the airport experience by engaging more with our

passengers through initiatives such as cultural performances, and putting a greater emphasis on hygiene, health and safety by ensuring operational excellence in all our airport services.”

Talking about Langkawi International Airport, Mahmood says that its ASQ Awards success was very gratifying for Malaysia Airports, which continues to invest in enhancing services and the key infrastructure at the country’s six largest gateway.

“The success of Langkawi International Airport was, in part, due to infrastructure upgrades, but it is also a combination of the people, processes and changed perceptions of the airport that resulted in it achieving the No.1 spot last year,” notes Mahmood.

Mahmood certainly has a high regard for ACI’s ASQ programme, which he considers an invaluable tool for Malaysia Airports in its quest for customer service excellence.

“Other than the fact that it is highly reputable recognition from ACI, the ASQ programme provides the global benchmark for Malaysia Airports to continuously improve our services. It also provides the Voice of the Customers feedback so that we can always prioritise what’s important for our passengers,” he says. “The programme also instils confidence in potential investors, partners and future businesses towards Malaysia Airports.”

Good customer service is, of course, subjective and open to interpretation meaning that it often means different things to different people.



In reply to what it means to him, Mahmood says: “As an airport operator, good customer service is expected to be delivered perfectly while also finding ways to delight passengers beyond their expectations. To put it simply, it is a perfect blend of people, process, place and perception.”

Like everywhere else in the world, the last two plus years of pandemic related travel restrictions have made for a difficult time for one of the world’s largest airport operators.

In 2019, a record 141.2 million passengers passed through its network of 39 Malaysian airports and Istanbul Sabiha Gökçen International Airport (SAW) in Turkey.

Kuala Lumpur International Airport (KUL) handled 62.3 million passengers on its own in 2019 and Malaysia’s next biggest gateways – Kota Kinabalu, Penang, Kuching and Langkawi – all recorded all-time high traffic figures that year as did SAW, which welcomed 35.4 million passengers.

Those figures dropped sharply in 2020 and 2021, but rather than dwell on the past, Mahmood notes that the demand for air travel has been encouraging since the April 1, 2022, re-opening of Malaysia’s borders to all international visitors and the further easing of travel restrictions from May 1.

“Though international passenger movements are only just beginning to pick up, it is worth noting that the number of international passengers handled at our Malaysian airports instantly jumped by 53%, compared to March, when the country’s borders re-opened to all travellers,” enthuses Mahmood.

“It should also be remembered that this significant upturn from the previous month happened despite a very mixed backdrop of international travel and border restrictions across the Asia-Pacific region, with some countries only slowly beginning to relax their requirements and restrictions still in place in others.

“The latest preliminary figures up to the third week of May show that international passenger numbers was 65% up on April 2022, so growth is finally back on the agenda and, hopefully, here to stay.”

The return of international traffic has also boosted the number of passengers flying on domestic services as many visitors choose to travel to more than one destination while in Malaysia or travel onwards to a final destination via KUL or any of the country’s other international airports. The knock on affect of this resulted in overall passenger numbers at KUL soaring by 89% in the first few weeks of May 2022 compared to the entire month of April.

Mahmood remarks: “Is it possible to say when passenger numbers could return to 2019 levels? I know it’s not what you want to hear, but I believe that it is too early to make any predictions as there is still much uncertainty surrounding the recovery of the aviation industry. The factors that could facilitate the lifting of travel barriers are also still fluid.

“However, what I can say is that we are humbled by recent traffic developments, and although this is just the beginning of a gradual recovery, all the signs are positive that it will continue for the rest of year, making me optimistic for the future.”



THE PURSUIT OF EXCELLENCE

Kyung Wook Kim, president and CEO of long-time ASQ champion, Incheon International Airport, tells Joe Bates more about his gateway’s customer service focus and ambitions.

WHY DO YOU TAKE GOOD CUSTOMER EXPERIENCE SO SERIOUSLY?

Because customer feedback touches on many different areas and sheds light on what we have to do to do even better.

Good customer service isn’t just about the helpfulness of frontline staff. It’s also about everything from the facility itself, Wi-Fi speeds and retail and dining offerings to the driving habits of airport shuttle buses. We typically do well when it comes to operations, so knowing about things we can improve upon gives us the tools to raise the customer experience bar even higher.

The fact that we are striving to become a destination in our own right through projects such as the planned 380,000 square metre Landmark Complex commercial area that will connect the airport with the larger Airport City – with tourist and business attractions – only serves to strengthen our customer service focus.

CAN YOU TELL US A LITTLE MORE ABOUT YOUR CUSTOMER SERVICE PHILOSOPHY AND ITS MAIN GOALS?

Perhaps the best way to summarise our customer philosophy is to say that we believe in constantly and consistently making improvements so that we effectively pioneer change and walk to the next level of customer service instead of playing catch up.

I believe that this relentless effort to do things better since the day the airport opened means that we have now matured in terms of our customer service offerings and performance, and as a result our service basics by standard are known and recognised by the airport industry.

Now, we would like our guests to think of the airport as a stress and hassle-free destination, and in this respect, new technology will definitely play a part. I am specifically thinking of document less, baggage-less, hands-free travel. Ultimately, we want our guests to be able to just simply enjoy being here. That is the experience we wish to deliver.



GOOD CUSTOMER SERVICE IS, OF COURSE, OPEN TO INTERPRETATION. WHAT DOES IT MEAN TO YOU?

I think it is about building an Incheon International Airport that brings a smile to the face of every guest – from frequent flyers to those arriving here for the first time after the longest of flights. In my opinion, it is about the combination of everything – the smooth surfaces, friendly smiles, and the unexpected music that catches your ear – as together they all add up to an experience that will linger long in the memory and make you want to visit again.

HAVE YOU MANAGED TO RESUME YOUR POPULAR LIVE PERFORMANCES YET SUCH AS THE WALK OF THE JOSEON ROYAL FAMILY?

We ran the daily Walk of the Royal Family procession throughout the pandemic as it's an important programme for the airport as its showcases a Korean Sense of Place with a carefully reconstructed royal walk jointly run with the Korea Culture Heritage Foundation [the public institution working for preserving valuable cultural heritage]. The usual music performances will be rolled back step-by-step with the passenger recovery.

Meanwhile, we opened the Museum of Korean Culture in 2021. The pandemic did little to stifle our art-airport dreams. Since 2020 we have a team devoted to Culture & Art with art experts on board. Now at the centre of T1, we are

having an exhibition called 'Transformations – Experiments in Hangeul Design', which shows how the Korean letters (Hangeul) can be applied to fashion and craft.

We are also looking into opportunities to accommodate a museum storage and satellite site for a globally renowned museum.

CAN YOU GIVE US SOME EXAMPLES OF CUSTOMER SERVICE EXCELLENCE THAT MIGHT HAVE HELPED ICN DO SO WELL IN THE ASQ SURVEY LAST YEAR?

We believe that with basic facilities and processes for passenger convenience in place, the thing that customers respond to most is caring service providers. In particular, when a passenger is lost, in a hurry, or in an uncomfortable state, the experience is greatly improved when a member of staff provides service that goes beyond expectation.

Here at Incheon, such behaviour is consistently displayed. Two recent examples that spring to mind include the member of the Lost & Found team that went all the way to the boarding gate to reunite a passenger with his lost mobile phone, and the worker who offered a helping hand, and directions, to an expectant mother overloaded with luggage and heading to the wrong train!



We believe that these real examples from 2021, and instigated by the employees' own initiative, demonstrate how staff have bought in to our prolonged efforts to create a culture of hospitality.

SO, IT IS SAFE TO SAY THAT INCHEON HASN'T FORGOTTEN ABOUT THE KEY ROLE PEOPLE PLAY IN DELIVERING CUSTOMER SERVICE EXCELLENCE?

People are our most valuable asset. In our case, we could not run the airport without co-working with many different entities and their staff. We, of course, require them to meet our high service standards and encourage a sense of belonging.

I also think that it is important to recognise, and in some cases reward, the effort of those that perhaps excel at what they do or go out of their way to help others. One such programme that does this is our 'King of Hospitality' initiative, which I have run since the airport's 2001 opening. Under this programme, the friendliest staff from all airport sectors are selected by directors experienced in customer service and awarded a trophy by the CEO of the company. To instill a sense of pride, their photos and interview videos are displayed prominently in the staff passageways of all terminals.

WITH TRAVEL HABITS CHANGING, HOW IMPORTANT IS IT FOR INCHEON TO EMBRACE NEW TOUCHLESS TECHNOLOGIES TO HELP ENSURE HIGH CUSTOMER SATISFACTION LEVELS?

As already mentioned, new technology will inevitably play a key role in the future development and transformation of air travel at Incheon and across the world. Imagine this future scenario. You are planning a holiday on a beach far away and your luggage will be picked up from your

doorstep. You go to the airport, and the usual processes are done with facial recognition technology ensuring that your hands are free from bags and travel documents until you board. This touchless, hassle-free experience ensures that you feel lighter to relax and enjoy the unique dining or taking in the shade of red of the royal robe of the Walk of the Royal Family procession at Incheon International Airport. This is the technology implementation we are working on now, and it is closely linked to our plan to make our airport a destination in its own right.

CAN YOU TELL US WHY YOU CONSIDER ACI'S ASQ AND AIRPORT CUSTOMER EXPERIENCE ACCREDITATION PROGRAMMES SO HIGHLY?

ASQ is a comprehensive customer satisfaction survey that breaks down the components of satisfaction very well and allows for objective comparisons with similar-sized airports.

We have participated in ACI's service evaluation programmes since 2006, and were fortunate enough to be named the world's best airport for 12 years straight, and became one of the first airports to be inducted into the ASQ Hall of Fame. I, and everyone at Incheon International Airport Corporation, are very proud of our achievements.

We are currently striving to achieve the next level of Airport Customer Experience Accreditation (Level 5, the highest level). We are doing this because we have also found it to be a good source for methodically assessing what we are doing, and in some cases, learning about areas in need of more attention. It is important that nothing is left out when it comes to enhancing the airport experience for passengers.



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FORWARD THINKING

As borders begin to re-open, is it time for APAC airports to reconsider how they will look and digitally interact with passengers in the future? Amadeus' senior vice president of airport and airline operations for the region, Sarah Samuel, investigates.

When the pandemic emerged in 2019, Asia-Pacific was the first to feel its impact. And now as recovery occurs around the world, it seems Asia-Pacific will be the last to shed those impacts.

Yet, over the past few months, there have been signs of recovery in the Asia-Pacific market, and as border controls begin to ease, pent up demand for travel is being unleashed.

There are priorities we need to look at as we re-open. Like many industries, we must combat the reduction we've seen in our workforce and reduce friction for the traveller wherever possible.

However, we must also look further forward beyond these initial priorities. In my view, we must find our 'big vision', by stepping back to consider the full travel journey, before zooming in on airports within the context of a more connected overall passenger experience. There's a wealth of value to create for the traveller.

THE IMMEDIATE PRIORITY: GETTING BACK OFF THE GROUND

Rehiring will be a key element of this, but the reality is that workforces cannot be built back up immediately. Whilst the importance of maintaining operations, reducing queue time, and ensuring an overall positive passenger

experience is clear, many workers have stepped into permanent roles in other industries. This necessitates a drive for innovative solutions using technology. And we're already seeing airports in the region respond by turning to automation.

At present, automated immigration is often only available to citizens, permanent residents and long-term pass holders meaning all other travellers must queue to be manually processed by an agent at a counter.

Yet, with an increased focus on chipping passports, airports are looking to auto-gates to deliver the majority of passenger processing at immigration, leaving agents to deal with any exceptions.

The same goes for all areas of the airport. There's a real drive for auto-bag drop units and biometrics, for example, to remove manual touchpoints and enable passengers to transit seamlessly from check-in to boarding despite staff shortages.

STREAMLINING HEALTH CHECKING PRACTICES

One of the crucial lessons of the pandemic has been the need for preparation and standardisation. Whilst automation has the potential to reduce friction for the passenger, it must extend beyond visas and passports to also become viable for health documentation.



Amadeus Traveler ID – a platform that digitalises identity and health documents – is an important technological evolution within this context. It’s interoperable and can be integrated into other digital health passes such as the EU Digital COVID certificate. And, in April 2022, it passed the milestone of 10 million documents verified.

So, from a technological standpoint, this is already possible, but complexity is added when different countries, and in some cases different states within countries, have varying rules regarding the vaccinations and health documentation required in order to travel.

During the pandemic, health checking processes had to happen manually as a result. Looking to the future, agreeing upon a single standard would be ideal. This would also create a more fluid airport environment where agents are able to roam with mobile devices and ensure fast processing rather than being tied to a desk.

If we look at a previous example, it took considerable time to get all stakeholders to agree upon the 2D barcode which is now commonplace on our boarding passes. Yet, once these sorts of standards are in place, operations become far simpler and more efficient.

MOVING TOWARDS THE BIGGER PICTURE

With a move towards automation and standardisation in motion, it’s important that airports connect these evolutions to the bigger picture. In essence, digital progression must be designed at the strategic level instead of individual projects.

At present, technological innovations are adopted with the short-term in mind. An airport is experiencing problem ‘X’,

and therefore looks to solution ‘Y’ to fix it, before moving on to the next priority.

Almost all airports will be looking to reduce the number of desks and kiosks in their departure halls, and automation will be part of this journey. But there will also be significant differences.

Larger airports, for example, may see themselves transitioning into big entertainment centres and destinations whilst others may envisage becoming streamlined, bus-stop, style airports. It is generally understood that the departure hall of the future will be different, but it’s important to consider how that looks for your airport and choose a technological strategy accordingly.

CONNECTING AIRPORTS TO THE WIDER TRAVEL ECO-SYSTEM

To really take a long-term strategic view, I argue we need to consider the future needs of travellers and how the end-to-end passenger experience can be enhanced. For airports, a clear opportunity is increased personalisation.

This personalisation is in part made possible by the ‘super app’, which airports are now using for steps like check-in and retail, as a means of forming a direct relationship with the traveller.

Let’s look at an example of the personalisation made possible once a traveller has agreed to sharing data when interacting with an airport’s super app. Let’s say a large family with young children is travelling and will be transiting via Singapore Changi for a connecting flight. Traditionally, Changi (in this example) wouldn’t know this group was due to be at the airport.



Leveraging traveller insights, the airport may decide to offer the best possible experience via personalisation.

Pre-arrival, the airport reaches out to offer the family friendly lounge at a charge. This information is welcome as the family would be far more comfortable in this family lounge as opposed to one filled with business travellers. Over time, this kind of personalisation helps to build loyalty.

Airports have never been afforded the visibility of arriving passengers, but if we think about the traveller journey, the airport represents a critical part of the trip. People spend hours inside the terminal. In addition, other elements of the journey – such as inside the airline cabin or the hotel – have already been highly personalised.

Connecting the airport element of a passenger's journey to the bigger picture has the potential to revolutionise non-aeronautical revenues for airports and greatly improve the passenger experience.

It extends well beyond the travelling family example, too. Recently, our work with a Japanese airport revealed that Chinese passengers tend to arrive far earlier than average to a flight.

By joining the data together an airport can ensure they have enough check-in facilities open early when dealing with Chinese travellers. They can also personalise their merchandising displays to prioritise luxury products at the right time. Airports could also leverage their dynamic signage with relevant Chinese language messaging.

If we combine advances in data enabled personalisation, automation, the move of check-in processes off airport, and touchless biometric processing, it's clear that the traveller experience is headed for big change. And with it, the airport is set to evolve, too.

In my opinion, we have reached a tipping point in airport technology where products no longer only perform a discreet function (e.g. self-service check-in), but are in fact just a spoke connected to a broader hub of intelligence.

This 'hub', or single source of data and insight, means airport touchpoints perform their core function like check-in, but they should also be a means to deliver meaningful personalised offers and experiences to the traveller based on the unique context of the passenger and the trip.

The past few years have shown how complex travel can be in the context of a pandemic. Combined with changing passenger needs, route changes, cancellations, and other disruptive factors, it's clear that a single platform approach is more important than ever before.

Airline and airport collaboration is crucial to achieving this and shifting from a product to a value mindset. For example, a single platform would help remove friction with a single system for automated document checks, bag tracking could be improved with more regular updates, and predictive flight operations could help to better optimise landing and take-off slots.

Overall, as an industry, it's time we realised the value in collaborating. The pandemic forced us to break silos between airports and airlines, and looking forward, it's essential that we continue to come together.

With APAC beginning to enter recovery, airports also need to move away from a transactional approach to finding the right partners.

Rather than airports looking to continue buying individual IT products designed to iteratively improve existing processes, it's time for APAC to think big and find its strategic vision, decide what the airport of the future could look like, and plan a technological roadmap needed to get there.

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GREEN SHOOTS

New ACI data reveals ‘green shoots of recovery’ for airports in Asia-Pacific and the Middle East.

The aviation industry in Asia-Pacific and the Middle East is experiencing green shoots of recovery, according to the first edition of *Airport Industry Outlook*, a new quarterly report by ACI Asia-Pacific.

The report, developed in partnership with Mott MacDonald, provides a snapshot of how airports in the region have performed during the first quarter of 2022 (January to March).

This analysis also sheds light on two recurring themes which are currently impacting the industry — COVID-19 pandemic and the geo-political conflict.

OVERVIEW

The industry showed encouraging signs of recovery in the first quarter of 2022 – capacity was rebuilding in many parts of Asia-Pacific and Middle East region; domestic passenger traffic made considerable progress; cargo growth has proven to be resilient and is above pre-pandemic levels. Despite the subdued pandemic environment, airports in the region continued to provide a safe and high service quality for the benefit of their passengers.

However, travel restrictions ranging from mandatory quarantines in designated facilities to pre-departure testing and on-arrival; suspension of international air travel in some parts of the region; geo-political conflict and subsequent impacts on macro-economic factors, have proved to be detrimental to the overall growth of aviation.

“Analysis shows that travel restrictions have, to a large degree, failed to prevent the spread of COVID-19 mainly due to the high infectious nature of the omicron variant and have turned out to be a deterrent for the recovery of aviation, impacting the economy of the region,” said ACI Asia-Pacific’s director general, Stefano Baronci.

“Cargo business proves on the contrary the leading role that Asia-Pacific plays in the global economy. Despite an improving trend, airport financial margins remained far below pre-pandemic levels and are economically unsustainable. It is therefore time to remove ineffective restrictions and enable nations to accelerate their economic growth.

“To achieve a truly sustainable recovery from the slump caused by COVID-19, co-operation and the establishment of standards that harmonise the processes for international travel between states are crucial. The global recovery will only be realised with the escalation of vaccination campaigns, development of digital health passes, and supportive policies from governments.”

OPENING BORDERS AND EASING RESTRICTIONS

Boosted by high rates of vaccination (70% or above in the six largest aviation markets), since early 2022, many countries have been easing entry requirements, but parts of Emerging and Developed East Asia (Japan, Republic of Korea, Chinese Taipei, Hong Kong, Macau, China, Mongolia and Democratic People’s Republic of Korea) have kept quarantine requirements in place. In Asia-Pacific and the Middle East, currently 20 countries have no significant entry restrictions.



China plays a key role in the region as most of South East Asian airports and Australia are largely dependent on Chinese travellers. The re-opening of international air travel to and from China will not only accelerate growth in the region, but also provides a thrust to the industry across the globe.

PASSENGER TRAFFIC PERFORMANCE

While domestic passenger traffic has made considerable progress, with the easing of restrictions within some countries, international traffic, which is the key revenue driver for airports in terms of passengers' commercial spend, has remained largely stagnant due to restrictions and geo-political tensions in and around the region.

Considering airline seat capacity as a proxy to measure the flow of passengers, as compared to 2019 Q1 data, domestic traffic has made a recovery of 92% of pre-pandemic levels, but international seat capacity was still down 67% during Q1 as travel restrictions, quarantine and testing requirements continued to hamper the growth of air travel.

The total domestic seat capacity is expected to recover to levels exceeding 2019 by Q2 2022 by approximately +4%. This is driven largely by Emerging East Asia (notably China), which has 15% more departing seats scheduled in 2022 than in 2019.

Middle East domestic capacity remains below 2019 levels. In contrast, total international seat capacity in 2022 is 49% below 2019 levels, with significant variation between sub-regions. South Asia and the Middle East are only down about 15% on 2019 levels, while Emerging East Asia (China, Mongolia, Democratic People's Republic of Korea) is still down by 81%, and is once again experiencing stringent travel restrictions.

ROBUST TRAFFIC GROWTH

Cargo growth has proven to be resilient in comparison with passenger traffic, and remains significantly above pre-pandemic levels. As passenger airlines return providing more belly capacity, air cargo is expected to continue its growth trajectory.

The sub-regions with the largest cargo shares are Developed Asia (Japan, Republic of Korea, Chinese Taipei, Hong Kong, Macau) with 32%, followed by Emerging East Asia with 29% and Middle East 16%. Developed East Asia was the only region in Q4 2021 that recorded traffic levels above 2019 pre-COVID level. All other regions reported levels around 0.85% or above compared to 2019.

AIRPORT ECONOMIC PERFORMANCE

The EBITDA and Net profit margins, based on a selection of sampled airports handling 30% of total annual regional traffic volumes in 2030, indicates improving conditions in Q4 2021, driven by an increase in passenger traffic and optimisation of operating costs. However, the margins remained far below pre-pandemic levels and are economically unsustainable.

Quarterly revenues remain 58% below the same period last year. Although revenues are improving slowly with traffic recovery, they remain at low levels, leading to large operating losses for airports. Total operating expenditures have declined since the start of the pandemic, with the decline having halved in percentage terms in Q4 2021 compared to the same quarter in the previous year.

AIRPORT SERVICE QUALITY

Overall satisfaction scores for airports have increased continuously throughout the pandemic up to Q4 2021, and were around 5% higher compared to the same period in 2019. Similarly, Middle East performance is also above 2019 levels.



COME SHOP WITH ME

Fluent Commerce's senior vice president of global sales, Rob Shaw, suggests some potential solutions to create a seamless airport shopping experience.

The COVID-19 pandemic disrupted the globe in ways that could not have been predicted – hitting the travel industry especially hard.

And it goes without saying that the lack of travellers has had a huge impact on the retail stores in airports around the world, forcing them to figure out how to best maximise revenue in other ways.

But, as countries begin to relax travel restrictions, many airports are seeing a gradual recovery in passenger numbers, and with them, a return to in-person shopping. These are competitive retail environments and airport operators are increasingly focused on providing customers with a unified, cross-brand shopping experience. At the heart of this approach are a range of key considerations, including:

GETTING ACCURATE INVENTORY DATA FROM TENANTS

An airport is like a marketplace. Each store is independently managed, and tenants have their own back-end systems (or sometimes no system at all). This means the first challenge is to get accurate inventory data from all stores.

To do this, all stores should use one channel – for example, a marketplace platform. That way each store can manage its own inventory, either through integration or an online portal. This data can then feed into an Order Management System, so you have a single view of inventory across all stores.

PROVIDING A CROSS-BRAND SHOPPING EXPERIENCE

Shoppers everywhere are getting more discerning. They expect more from their travel experience – and that

means their expectations are high when it comes to airport shopping. This is particularly true for the issue of convenience, and customers need a way to shop all stores easily.

Part of the fun of airport shopping is the myriad of stores to choose from. So, make sure you give customers the same experience online. Let them shop all the stores across all your terminals.

The added bonus? They get to shop in stores that aren't in their departure or arrival terminal. This cross-brand shopping experience can elevate your airport above the rest.

OFFERING CUSTOMERS GREATER CHOICE

When customers shop at traditional retail stores online they have lots of fulfilment options. Airports can do the same. Travellers may want to collect their order on the way to their flight, leaving the airport, or even have it delivered to their home.

But when you let customers choose how they collect their order it can add a layer of complexity to the fulfilment process, so requires technology that is flexible enough to handle it.

Travellers buy their airline tickets in advance, so why not let them shop in stores a few weeks ahead of time too, even as soon as flight schedules are released?

If they can shop at tenant stores well ahead of their departure or arrival it makes for an exceptional customer experience. The challenge is managing those orders.

Do you have stores set aside inventory as soon as an order comes in? Or do you process the order and stage it at a pick-up location? That's where a robust Order Management System can really help.

ENFORCING LIMITS FOR RESTRICTED ITEMS DURING CHECKOUT

Duty-free purchases are a big draw for many airport customers around the world. But each country has different limits on restricted items like alcohol, tobacco and perfume. And some, like the United States, prohibit the sale of tobacco online altogether. So, you'll need the ability to control those limits for duty-free sales based on the rules in your location.

However, when a family travels together, they may wish to make a single purchase of duty-free items using the combined allowance of all passengers. This means tying the purchase not to an individual ticket holder, but to the reservation.

Likewise, depending on where a passenger is travelling to or from, not all purchases will be duty-free. Some will need tax applied. So, it's important you have a system that can manage taxes at both the order and the line item level.

MANAGING PICK AND PACK AND ORDER CONSOLIDATION

Airport stores weren't typically designed to fulfil online orders, and staff are focused on sales and customer service. So, when staff need to pick and pack orders, reducing the amount of time and friction within the process is key.

If you can optimise the in-store pick and pack user experience to solve staff challenges, it will help increase efficiency and keep stores – and staff – happy.

Once an order has been picked by store staff, you'll need to manage moving those items from the stores to a central pick-up location in the appropriate terminal. Typically, many orders will be collected from the stores at the same time. They then have to be sorted and consolidated. That means you'll need a storage area that can accommodate both orders that are still in process, and those that are ready for pick-up or delivery.

But the benefit to customers is huge. It lets them shop all your stores, not just those in their nearest terminal. So, you'll not only save them time and hassle – imagine someone running between terminals trying to collect their orders – but offer a better experience to your customers.

Offering this service means that agile systems must be in place to do the work – alerting staff that orders are ready to be picked up, bringing orders to a central collection location within the appropriate terminal, and ultimately alerting the customer that the order is ready. Or in the case of restricted items like tobacco and alcohol, routing them directly to the specific boarding gate.



MANAGING ORDER SOURCING AND SPLITTING

With hundreds of stores across several terminals – and with some brands having multiple stores in one airport – airports need to have a system that can ensure they source each item from the best location.

Fulfilment logic needs to be able to prioritise one location or the other based on specific parameters, such as proximity to the pick-up location or customer's terminal.

Or what if there are two items from the same brand but they are in two different stores located in two different terminals? What's more, a single order may need to be split so it can be fulfilled from multiple stores.

Flight schedules change constantly. But customers still want their order – and in the easiest manner possible. When there is a change in flight schedule that results in a flight coming into a different terminal, you need to be able to quickly pivot.

Utilising a fluid Order Management System that can automatically trigger a transfer of orders to a new terminal pick-up location – and notifies the customer about the update – makes for delighted customers.

Clearly, the issues which go to make up the airport shopping experience are highly nuanced. And, while not everything is in an airport's control, offering an easy, seamless shopping experience is more likely to catch consumers' attention.

Furthermore, by adding the ability to sell to non-travellers and deliver goods to their homes, airports can increase sales while expanding their customer base.

And, as tenant sales increase, this not only makes for happier tenants but if an airport has employed a revenue-sharing model, you will benefit twofold.



INVESTING IN SUSTAINABILITY

Carlos Kaduoka, SITA’s head of business strategy for airports, considers how new technology will play a key role in helping airports respond to the demands for a greener industry.

The travel recovery is well underway. As the summer travel season approaches, airlines and airports have been caught off guard by the speed of recovery. Airports are struggling to deal with the spike in passenger volumes due to staff shortages, leading to disruption, including flight delays and cancellations.

While the industry battles to manage this unexpected boom, another challenge is looming on the horizon.

As air travel rebounds, emissions are inevitably rising and set to increase as demand for travel is anticipated to grow beyond pre-pandemic levels. Having, in 2021, committed to an ambitious carbon net-zero goal by 2050, airports need to address how they make their existing and future operations sustainable. The faster the growth, the bigger the challenge.

At the same time, passengers are also demanding more sustainable IT approaches and choices for travel.

The good news is that the industry has already taken steps to reduce its emissions. According to the findings of SITA’s [‘2021 Air Transport IT Insights’](#), a global benchmarking survey of IT trends in air transport, airports are prioritising technology investments to help them operate in an environmentally responsible way, now and in the future.

ENVIRONMENTAL CONSIDERATIONS IN IT MANAGEMENT AND GOVERNANCE

SITA’s report states that by the end of 2024, 62% of airports will have an overall IT management policy or framework in place that includes the environmental impacts. It also reveals that airports will concentrate on getting the most value from IT equipment through IT lifecycle management controls and including environmental considerations in the selection criteria for IT purchases.

THE SHIFT FROM PAPER TO DIGITAL

The study also reveals that behavioural policies or controls to discourage printing and reduce paper consumption to favour environmentally responsible

print materials will be commonplace in airports by 2024. This appears to be consistent with the industry shift to greater digitalisation for more efficient operations and faster, automated journeys.

SUSTAINABLE DESIGN

Major airports worldwide are adopting digital and mobile technology – self-service, biometrics, and touchless solutions – to process passengers quickly and efficiently, replacing paper-based processes.

More eco-friendly passenger processing hardware, kiosks like SITA's new TS6 Kiosk, are likely to become more prevalent with the trend of environmental impacts influencing IT decision-making and management.

Frankfurt Airport and Václav Havel Airport in Prague are two airports that have upgraded their passenger processing with the award-winning SITA Smart Path TS6 Kiosk, which incorporates sustainable design features including modularity, longevity, durability, and energy efficiency.

ENERGY EFFICIENCIES USING IT

Unsurprisingly, energy efficiency is a key area being addressed by airports today because they consume significant amounts of energy to operate their buildings and services. It includes energy consumption in the heating, lighting, and cooling of a terminal and for powering IT systems that support the day-to-day operations of an airport, including passenger services, ground vehicles, and airside services.

This focus on energy efficiency is consistent with SITA's report findings that 73% of airports will have policies or physical systems that promote energy savings in place by 2024.

The report confirms that many airports have already implemented greener building infrastructure – an area also most favoured by passengers according to SITA's 2020 passenger-focused report: '[Passenger IT Insights](#)'. Greener infrastructure covers areas like natural lighting, green spaces, the use of renewable energy, as well as smarter building controls.

As part of this trend for energy-efficient infrastructure, there is a continued focus by airports on their physical data centres. Around 63% of airports will have shifted their physical data centres to energy-efficient cloud-based facilities by the end of 2024, according to SITA's 2021 Air Transport Insights.

The onsite power consumption and ongoing maintenance of dedicated onsite data centres appear unsustainable for many airports favouring cloud-based data centres.

Another example of how IT is helping airports to drive greater efficiencies in energy use is at the airside. ACI's

Aircraft Ground Energy System Simulator (AGES-S) is a simulation tool that helps airports calculate the reduction of fuel consumption by replacing the use of aircraft Auxiliary Power Units (APUs) with more efficient aircraft ground energy systems (AGES). AGES provide both pre-flight electricity and pre-conditioned air for aircraft on the ground.

NEW IT TO PROACTIVELY CUT EMISSIONS

Looking forward, a key area of focus will be how airports can make their operations more efficient – efficiencies that can help save the aviation industry 10% in carbon emissions, according to ATAG's *Waypoint 2050* report.

SITA's IT Insights reveals that while airports are clearly focusing on the environmental impacts of the technology they buy and use, many plan to implement business and artificial intelligence solutions to enhance their overall operations. Greater intelligence will drive greater efficiencies supporting airports' decarbonisation efforts.

These innovative technologies utilise data analytics – combining big data, artificial intelligence, and machine learning technologies – to reduce fuel use, CO2 emissions, and pollution. New IT to support sustainability is a highly valued area among passengers, as reflected in SITA's 2020 passenger-focused research.

Landing and take-off cycles represent the largest source of local emissions at an airport. Categorized as 'Scope 3' greenhouse gas emissions because they are not under the direct control of an airport, they are the most challenging scope of emissions to measure, report, and address.

This reinforces the importance of collaborative-decision making among airport stakeholders, including airlines, ground handlers, and many others. The introduction of the Airport CDM (A-CDM) solution to some airports in Europe has demonstrated environmental and operational benefits, including a reduction in fuel burn and greenhouse gas emissions.

New emission calculation technologies, like SITA Emissions Manager, are also being trialled by airports today to help improve their understanding of the source and extent of emissions, in order to implement a more effective mitigation plan.

Becoming carbon net-zero by 2050 will be no easy feat for airports; after all, the [solutions](#) to support the net-zero journey are not all readily available or affordable today. However, airports are underway with infrastructure and operational efficiencies using technology, underpinned by more robust controls and governance, to deliver a more seamless and sustainable travel experience.

WBP NEWS

The latest news and views from ACI Asia-Pacific's World Business Partners.



AIRBIZ WORKS ON PROJECT TO EXPAND GOLD COAST TERMINAL

Airbiz says that it is proud to have had the opportunity to work with Queensland Airports Limited (QAL) on a project to increase the size of the Gold Coast Airport terminal to three levels, with new facilities for both international and domestic passengers.

From concept through to the construction and delivery of the project, Airbiz worked with QAL and the design team on forecasting, demand analysis, terminal facility requirements and simulation modelling, passenger and staff flows, facility safeguarding, stakeholder engagement, design layouts and operational overlays for the expanded terminal.

“With a significant increase in demand seeing Gold Coast Airport become Australia’s first major airport to recover from COVID-19 impacts to passenger numbers and flights, the opening of the expanded terminal will be perfectly timed,” says Airbiz.

On its website, QAL states: “Set to open 2022, this three-level 30,000 square metre game-changer doubles the terminal’s current size – giving us the space we need to better connect our region to the world.

“Seamlessly connecting with the existing terminal, there’ll be room for 19 additional large aircraft to touch down or take-off.”

WBP PROFILES



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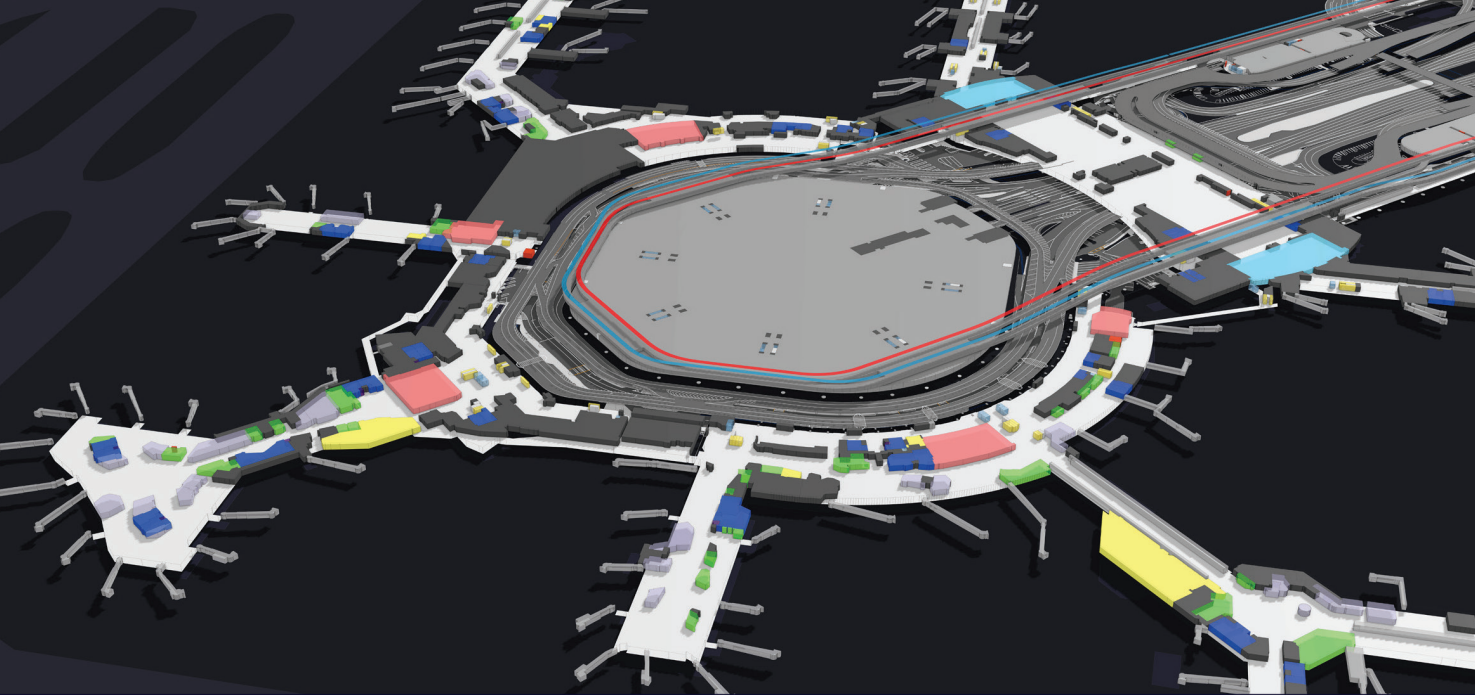
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SPS offers expertise and strategic planning for large scale airport/aviation project development in international markets. Its leadership team of consultants share decades of professional collaboration providing strategic and technical guidance on the development and operations of major world airports, associated ground transportation and collateral development projects.

APA Issue 2, 2022





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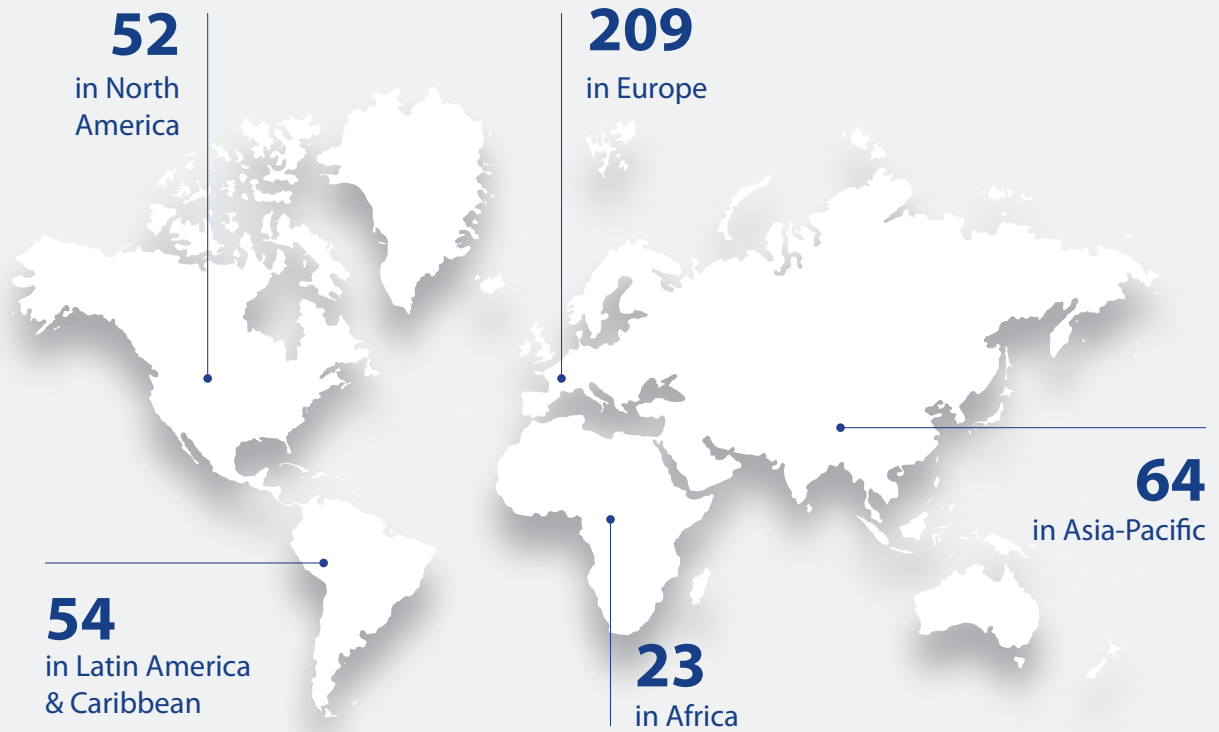
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