

ASIA-PACIFIC & MIDDLE EAST AIRPORTS

THE OFFICIAL MAGAZINE OF ACI ASIA-PACIFIC & MIDDLE EAST



IN THE SPOTLIGHT: INNOVATION

Issue 4, 2024

- Airport Profile: Perth
- Special report: Airports Innovate
- Plus: Sustainability, Master Planning & Regional News



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वेदीहो 2025

ACI ASIA-PACIFIC & MIDDLE EAST REGIONAL ASSEMBLY, CONFERENCE & EXHIBITION

15-17 April 2025, New Delhi, India



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ACI Asia-Pacific & Middle East Airports
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ACI Asia-Pacific & Middle East (ACI APAC & MID) serves as the voice of 126 airport members, operating 624 airports across 46 countries/territories in Asia-Pacific and Middle East. ACI Asia-Pacific & Middle East is head-quartered in Hong Kong and has a Middle East office in Riyadh (Kingdom of Saudi Arabia). ACI

Asia-Pacific & Middle East represents the collective interests of airport members to promote professional excellence in airport management and operations. ACI Asia-Pacific & Middle East's mission is to advocate for policies and provide services that strengthen its members' ability to serve their passengers, employees and stakeholders.

ACI Asia-Pacific & Middle East key facts:

 134 AIRPORT MEMBERS	 5 AFFILIATE AIRPORT MEMBERS
 624 OPERATED AIRPORTS	 9 ASSOCIATE MEMBERS
 47 COUNTRIES/ TERRITORIES	 106 BUSINESS PARTNERS

In 2023, ACI Asia-Pacific & Middle East airports handled 3.43 billion passengers and 51 million tonnes of cargo.

 **51**
MILLION TONNES OF CARGO

 **3.43**
BILLION PASSENGERS

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VIEW FROM THE TOP

Director general, Stefano Baronci, reflects on the achievements of ACI Asia-Pacific & Middle East in 2024 and looks forward to next year and working with a new president and Executive Board.

This year has been a significant one for ACI Asia-Pacific & Middle East (ACI APAC & MID), marked by key achievements across our advocacy areas.

From advocating for liberalised aviation policies to driving regional alignment at the Asia-Pacific and the Middle East DGCA Conferences, our strategic initiatives have positioned ACI as a leading voice in addressing the evolving needs of the airport sector.

Additionally, we made significant strides in advancing environmental initiatives, unveiling impactful connectivity rankings, and advocating for infrastructure development to secure the long-term success of airports across the region.

A key highlight was the endorsement of the MID-Air Transport Strategic Plan 2025-2040 by ICAO Middle East. As co-rapporteur for this initiative, ACI APAC & MID, in consultation with member airports in the Middle East, provided recommendations to enhance regional connectivity, infrastructure development, safety, security, and environmental protection.

Our recommendations were aimed at boosting regional connectivity through necessary policy adjustment and infrastructure development, while ensuring

transparency and consultation with stakeholders in taxation, highest standards of safety, security, air navigation efficiency, and environmental protection.

The ICAO Middle East Region Air Transport Strategic Plan 2025-2040 was endorsed by all ICAO Middle East member States. At the Asia-Pacific level, too, we reiterated our call for economic sustainability and financial resilience as critical components for infrastructure development to support the anticipated growth in the region's air transport sector.

We are pleased to note that several states supported our recommendations, with ICAO also encouraging their adoption.

Security remained one of the priorities. One notable milestone was India's decision to pilot domestic One-Stop Security at Delhi, Bengaluru and Mumbai airports. This achievement reflects our ongoing collaboration with the Bureau of Civil Aviation Security and our commitment to enhancing security efficiency.

AIRPORT ECONOMICS

This year, we launched the second edition of the Airport Connectivity Report, providing a valuable benchmark for improving air connectivity in the region.

To broaden the benefit of the connectivity programme, we held a customised workshop in Bahrain, helping them assess the current landscape and explore opportunities for growth.

HIGHER AIRFARES

While passenger numbers in Asia-Pacific are returning to pre-pandemic levels this year, many travellers are paying significantly more, especially on domestic routes. This indicates that the demand for air travel is likely higher than in 2019.

We must ensure that rising airfares do not become a barrier for air travel.

Airfares result from a complex pricing system set by airlines, influenced by demand and supply, price elasticity, and competition on any given route. For example, routes that are reliant on a single airline saw fare increases of over 25%, while those with steady competition experienced only about a 10% rise.

It is important to note that the increase in airfares is not related to airport charges. Considering the airlines' cost structure, fuel prices and inflation have a much greater impact than airport charges.

For a long time, airport charges have represented a stable component of airlines' operating costs, averaging around 4%. From 2019 to 2024, airport charges have decreased by 7% for domestic flights and increased by only 6% for international flights, making their influence on the recent spike in airfares in the region negligible.

EFFECTIVE ECONOMIC REGULATION

At the ICAO Workshop on Airports and Air Navigation Services Charges in Doha, we called for more effective economic regulation strategies that can enable socio-economic growth, sustain operational excellence, and meet future capacity needs while maintaining a sustainable, competitive aviation ecosystem.

COMMERCIAL BUSINESS

In October, ACI APAC & MID surveyed its airport members to assess the commercial business trends in 2024.

Passenger traffic has rebounded unevenly due to different re-opening speeds, with some markets growing more than 10% above 2019 levels.

While commercial revenues at some airports have surpassed pre-pandemic levels, nearly half (48%) are still recovering, with gaps of 10% to 30%. Average passenger spending also remains below 2019 levels for most airports.

International passengers stand out as key revenue drivers, spending significantly more than domestic travellers. At 45% of airports, international passengers spend over 200% more, underscoring their economic importance and the need for policy support.

To explore these trends further in 2025, ACI Asia-Pacific & Middle East will partner with the Asia Pacific Travel Retail Association (APTRA) on more detailed analysis of international passenger spending and its industry impact.

SUSTAINABILITY LEADERSHIP

Sustainability remained central, with the launch of our new programme, Net Zero Roadmap, designed to assist airports develop a plan to achieve net zero goals.

This programme aligns with the Airport Carbon Accreditation initiative, which we continue to promote across the region, leading to increasing participation from our members.

We have made great strides by signing contracts with Riyadh Airports Company and Mactan Cebu International Airport. We are also embarking on a new study on climate resilience.

LEADERSHIP AND GOVERNANCE UPDATES

We celebrated new leadership with the election of SGK Kishore as the new president of ACI APAC & MID, with his two-year tenure set to commence from January 2025. Our Board also has an impressive lineup of Executive Committee and new members.

The newly elected Board Directors are Cyril Girot (CEO, Cambodia Airports); Elena Sorlini (MD & CEO, Abu Dhabi Airports); Dato' Mohd Izani Ghani (MD, Malaysia Airports Holding Berhad); and Yam Kum Weng (CEO, Changi Airport Group).

Ali Salim Al-Midfa (chairman, Sharjah International Airport Authority), who is currently serving as second vice president, has been re-elected as Board Director.

There was a transition in the Executive Committee of the Board. The newly appointed members of Executive Committee are Fred Lam (chairman, Airport Authority Hong Kong), second vice president; Akihiko Tamura (president & CEO, Narita International Airport), second vice president; and Gert-Jan de Graaff (CEO, Brisbane Airport Corporation), secretary treasurer.

Long-term supporter, Mohamed Yousif Al-Binfalah (CEO, Bahrain Airport Company), who is currently serving as treasurer, has been re-elected the Executive Committee as first vice president.

On the internal front, we were glad to see six new airport operators, two affiliates and 15 new World Business Partners (WBPs) join us during the year. As a result, ACI Asia-Pacific & Middle East now has 134 airport members, managing and operating 624 airports across 47 countries/territories, and a strong line-up of 106 World Business Partners.

Lastly, I would like to wish all our airport members and World Business Partners a wonderful holiday season ahead.

INDUSTRY NEWS

We provide a snapshot of some of the latest news stories from across Asia-Pacific and the Middle East.



SINGAPORE CHANGI PLANNING S\$3 BILLION UPGRADE

Changi Airport Group (CAG) is to invest S\$3 billion over the next six years on enhancing Terminals 1 to 4 at Singapore Changi Airport.

The investment programme will improve services such as baggage handling, check-in, immigration and Skytrain connections between terminals and replace end-of-life systems to enhance the passenger and airline experience.

According to CAG, the investments will help Changi Airport stay competitive and meet rising demand for air travel before Terminal 5 is operational in the mid-2030s.

It notes that airport charges will be progressively raised between 2025 and 2030 to fund these investments and cater for higher operating costs such as manpower.

This, says CAG, will also enable the recovery of significant investments made during the COVID-19 pandemic,

such as the expansion of Terminal 2 and check-in counter capacity in Terminal 3, when passenger fees and airlines charges were frozen and planned increases were suspended.

CAG says: "Air travel demand is expected to grow strongly over the next few decades, particularly in the Asia-Pacific region. Both IATA and ACI have projected global passenger volumes to at least double between 2023 and 2043, with Asia-Pacific recording the fastest rise, and contributing to more than half of this growth.

"As a major air hub for the Asia-Pacific region and beyond, Changi Airport is well-poised to serve this rise in demand and provide better connectivity to travellers.

"The aviation sector will continue to be a key driver of economic growth for Singapore and provide more and better jobs for Singaporeans."

'TIGER WINGS' AT KEMPEGOWDA

'Tiger Wings', a pioneering vertical garden designed in collaboration with renown botanist, Patrick Blanc, is the latest new addition to Bengaluru's Kempegowda International Airport.

Located in Terminal 2, this transformative 30-feet-high, 160-feet-wide (2 walls each of 80 feet) installation represents Blanc's largest project in India and is said to exemplify T2's foundational philosophy of seamlessly blending nature with infrastructure.

'Tiger Wings' is home to over 15,000 plants across 153 species, many native to Karnataka and its neighbouring regions.

According to the airport, "the garden's intricate design captures the strength and elegance of India's national animal, the Tiger. Asparagus plants trace the silhouette of airplane wings, while vibrant red, orange, yellow, and white Ixora flowers represent the tiger's signature pattern".



Hari Marar, managing director and CEO of Bangalore International Airport Ltd (BIAL), noted: "We wanted to bring in a fresh perspective to our vision of sustainability, artistry, and technological advancement in a way that resonates with Bengaluru's essence.

"Terminal 2 was anchored by four guiding principles – Terminal in a Garden, technology, art, and sustainability – and this wall embodies all of them."



HONG KONG'S AIRPORT CITY CONTINUES TO GROW

First unveiled in 2019, the Airport City at Hong Kong continues to grow and drive economic development in Hong Kong and the Greater Bay Area.

Since opening, the Airport Authority Hong Kong (AAHK) driven project has expanded with new additions such as a new hotel and three Grade-A office towers while 11 SKIES, a complex integrating retail, dining and entertainment facilities is scheduled to open in phases from the second half of 2025.

New projects include an ecosystem for the art industry, AsiaWorld-Expo Phase 2 development, a marina with ancillary facilities, a fresh food market, and a new sport/entertainment complex.

According to AAHK, these new projects will promote high-end commercial, tourism and leisure activities, and are expected to be completed from 2026 to 2031.

AAHK chairman, Fred Lam, says: "The expansion of the development blueprint will focus on leveraging Hong Kong's unique advantages and creating synergy among various projects to transform the Airport City into a new landmark of Asia.

"It will be a distinct tourist hotspot for visitors from Hong Kong, the Greater Bay Area and all over the world, especially premium visitors, injecting impetus into the economic growth of Hong Kong and the region."



NEW TRAFFIC MILESTONE AT JEDDAH'S KING ABDULAZIZ INTERNATIONAL AIRPORT

King Abdulaziz International Airport had double cause to celebrate in November, welcoming back scheduled flights from British Airways and handling an all-time daily traffic high of 161,189 passengers on Wednesday, November 6, 2024.

Jeddah Airports Company (JEDCO) revealed that the record breaking daily total included 79,994 arriving passengers and 81,195 departing passengers travelling on 817 flights, averaging 34 inbound and outbound flights per hour.

Additionally, a total of 132,189 pieces of luggage were processed throughout the day.

JEDCO CEO, Mazen Johar, said: "This record demonstrates our commitment to enhancing operational efficiency and meeting the growing demand of travellers, in line with Jeddah Airports Company's strategy and the broader aviation objectives of Saudi Arabia's Vision 2030."



AUSTRALASIA'S FIRST EMAS PROJECT UNDER WAY AT QUEENSTOWN AIRPORT

Engineered materials arresting system (EMAS) beds will be installed at both ends of the main runway at Queenstown Airport over the next few months as part of a NZ\$23 million airfield safety project.

Queenstown Airport is the first in Australia or New Zealand to use this innovative technology, which utilises cellular cement blocks that crush under the weight of an aircraft. These are designed to slow a plane to a safe stop with little damage, should one overshoot the runway.

Airport chief executive, Glen Sowry, notes that although such incidents are rare – the only one to

happen at Queenstown Airport occurred in 1990 – the airport wants to do all that it can to make sure that there is never a repeat.

“EMAS technology has proven its worth in the northern hemisphere, and we are proud to be leading its introduction in this part of the world. It’s the gold standard and will substantially increase the margin of safety for those landing here,” said Sowry.

A sod-turning ceremony was held to mark the start of the project, with representatives of the airport company and the head contractor, Downer, wielding the shovels.

KOTA KINABALU AIRPORT SET FOR UPGRADE

The Malaysian government has approved a RM442.3 million (\$98 million) upgrade of Kota Kinabalu International Airport.

Construction is expected to take two years and be completed by 2027, according to Malaysia’s Minister of Transport, Anthony Loke.

“The project will cost RM442.3 million, fully funded through a private financing initiative by Malaysia Airports Holdings Bhd (MAHB) without any government guarantees,” Loke told a press conference in Parliament on November 8.

The planned revamp of Kota Kinabalu (BKI) includes expanding the main terminal to raise its capacity from nine million to 12mppa, construction of a multi-storey car park, addition of seven aircraft parking bays, and improvements to airport roadways.

Loke, who has previously stated that he’d like to see something like Kuala Lumpur’s Terminal 2 in Kota Kinabalu, noted that the use of green technology, automation and advanced systems will further enhance the

operational efficiency of the gateway, located in Sabah state in northern Borneo.

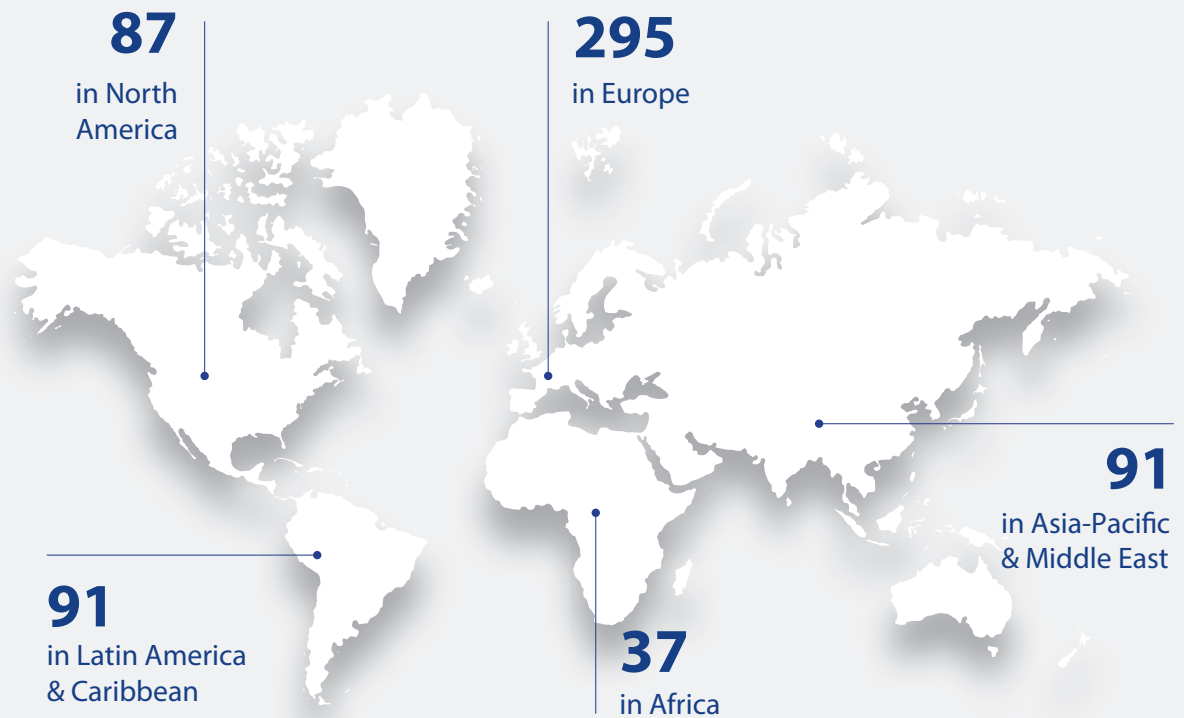
Around seven million passengers passed through the airport in 2023, and with year-on-year numbers up by 13.4% to October 2024, it appears well on the way to returning to pre-COVID traffic levels, when it handled 9.4 million passengers in 2019.

Loke said projections indicated that passenger numbers were expected to reach 12.4 million by 2034.

“Our goal is to minimise any impact on passengers and hope that the construction process will run smoothly,” added Loke. “We cannot close the airport for the expansion project. It still needs to function and operate as usual while the project is being carried out.”

Loke stated that an approved development budget also included proposals to upgrade Tawau, Miri and Ipoh airports, while the Sarawak government is considering a new airport in Kuching.

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per year

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countries
across
the world

or **53.4%**
of global air
passenger
traffic



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REGIONAL UPDATE

ACI Asia-Pacific & Middle East's manager for communications and brand marketing, Yuman Lau, provides the quarterly news round-up.

KEY COMMERCIAL INSIGHTS AT THE TRINITY FORUM 2024



ACI Asia-Pacific & Middle East's director general, Stefano Baronci, unveiled a number of key insights from our latest survey on non-aeronautical revenues at The Trinity Forum 2024.

He pointed at uneven traffic recovery, with growth in some markets over 10% above 2019 levels. Commercial revenues have outpaced 2019 but remain 10% to 30% below pre-pandemic for 48% of airports. F&B leads revenue growth, up 20%, while luxury lags.

He also reminded delegates about the importance of international passengers, who spend 200% more than domestic passengers at airport shops and restaurants.



SECURITY IN THE SPOTLIGHT

Human factors in security screening, the adoption of smart technology at security checkpoints, liquid screening, emergency exercises, and cargo security were the central topics of discussion at the recent ACI APAC & MID Regional Aviation Security Committee (RASC) meeting in Da Nang, Vietnam.

The two-day meeting saw a record participation of 65 security experts from across the region, underscoring the critical importance of aviation security. These sessions highlighted the evolving challenges in

aviation security and the innovative approaches airports are implementing to enhance safety and efficiency.

A significant portion of the meeting focused on the concept of security-by-design, emphasising the importance of integrating security considerations during the design phase of new airport infrastructure to save unnecessary costs and improve operational efficiency. The committee will consolidate the discussion points into a reference document for the benefit of all members.

PILOT OF NET ZERO ROADMAP PROGRAMME

ACI APAC & MID has formulated a new programme, Net Zero Roadmap, to help airports reach their net zero goals.

The Net Zero Roadmap is an on-demand service which complements the Airport Carbon Accreditation programme, and is designed to help airports create structured plans, including carbon footprint projections, governance frameworks, and recommendations across areas like assets, fuels, and operations.

Seen as crucial to our efforts to assist airports in the Asia-Pacific and Middle East regions in developing comprehensive roadmaps to achieve net-zero emissions, the programme also offers guidance on CAPEX planning, implementation strategies, and offsetting measures, while connecting airports with global financial institutions for potential funding. In line with this, ACI APAC & MID has signed agreements with Mactan-Cebu International Airport (MCIA) and Riyadh Airports Company to run a pilot of the programme.



KUWAIT HOSTS 5TH ICAO MIDDLE EAST SAFETY SUMMIT

ACI APAC & MID was honoured to participate at the 5th International Civil Aviation Organization Middle East Safety Summit 2024 in Kuwait.

Hosted by the Directorate General of Civil Aviation (DGCA) of Kuwait, we were represented by environment manager, Adeeb Mobaraki, who addressed the challenges and experiences involved in establishing and implementing Aerodrome SMS and Aerodrome Certification, and Runway Safety Team Implementation.



SAVE THE DATE



delhi 2025

ACI ASIA-PACIFIC & MIDDLE EAST
REGIONAL ASSEMBLY, CONFERENCE AND EXHIBITION
15 - 17 April 2025

SAVE THE DATE FOR OUR FLAGSHIP EVENT OF 2025

ACI Asia-Pacific & Middle East Regional Assembly, Conference and Exhibition

Mark your diaries, next year's ACI Asia-Pacific & Middle East Regional Assembly, Conference and Exhibition will take place in New Delhi, India, on 15-17 April 2025.

Hosted by Delhi Airport, the event would be a great opportunity for you to meet the global aviation leaders, experts, and stakeholders.

A HOLISTIC APPROACH TO AIRPORT CHARGES IS CRITICAL

At the recent ICAO Workshop on Airports and Air Navigation Services Charges in Qatar, ACI APAC & MID called for more effective economic regulation strategies to enable socio-economic growth, sustain operational excellence, and meet future capacity needs while maintaining a sustainable, competitive aviation ecosystem. The Civil Aviation Authority of Qatar hosted the event.

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**Regional Advisor on WGB



AVIATION'S CHALLENGES OUTLINED AT TAOYUAN AIRPORT FORUM

At the 2024 Taoyuan Airport Forum in Chinese Taipei, DG, Stefano Baronci, shared insights on the evolving aviation landscape in Asia-Pacific.

Drawing on trends from the past two decades, he likened passenger traffic trends to The Great Wave of Kanagawa.

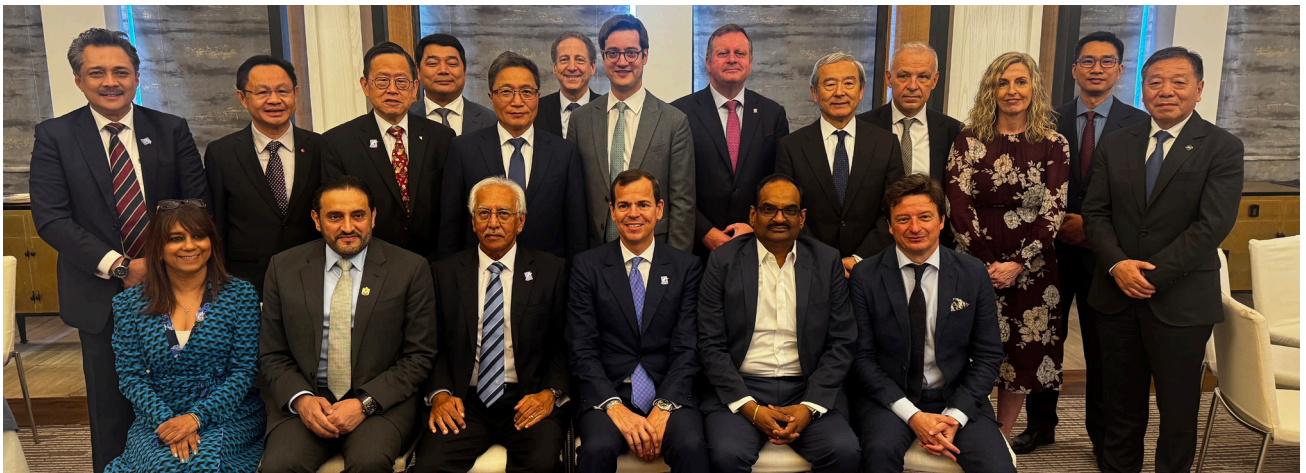
Despite a global decline in inflation, he said the aviation industry faces growing risks, including geopolitical tensions, strict monetary policies, and economic slowdowns.



SAF ON THE AGENDA AT CHINESE TAIPEI FORUM

ACI Asia-Pacific & Middle East's head of sustainability, Ken Lau, was also in Chinese Taipei for the Taoyuan Airport Forum, using his time on the podium to speak about how airports from the region could support and facilitate the transition to Sustainable Aviation Fuel (SAF).

He provided glimpses into the findings of our survey on environment and an overview of ACI's environmental programme to help airports become climate resilient and achieve net zero goals.



CONCERN OVER HIGH AIRFARES

The topic of rising airfares was one of the focal points of discussions among airport leaders during the Board Meeting of the ACI APAC & MID, hosted by Cambodia Airports, in Phnom Penh.

While international air traffic is rebounding, with seat capacity expected to surpass pre-pandemic levels by the end of the year, airfares remain more than 10% higher in several markets.

Several markets experienced significant airfare increases. The study showed a sharp rise in domestic airfares during the first half of 2024 compared to 2019 levels. Notable

increases were seen in key domestic markets such as India (+43%), Vietnam (+63%), Malaysia (+36%), Thailand (+26%), and Australia (+21%), all of which heavily rely on domestic air travel.

In the Middle East, traffic volumes had surpassed pre-pandemic levels in most countries by Q2 2024. Countries such as Bahrain (+24%), Qatar (+27%), Saudi Arabia (+30%), and the United Arab Emirates (+39%) have experienced robust traffic growth. However, despite this recovery, international airfares in some countries remain elevated. In the UAE, fares increased by 22%, while Oman saw a rise of 10%.

NEW LEADERSHIP FOR ACI APAC & MID REGIONAL BOARD

A well-known face in the industry, SGK Kishore, executive director and chief innovation officer of the GMR Group, will become the new president of ACI Asia-Pacific & Middle East on January 1, 2025.

Kishore will succeed Emmanuel Menanteau, the board director of Cambodia Airports and regional director of VINCI Airports, upon completion of his two-year term.

In other changes to the executive committee, Mohamed Yousif Al-Binfalah, CEO, Bahrain Airport Company, will become first vice president; the newly elected second vice presidents are Fred Lam, chairman of Airport Authority Hong Kong, and Akihiko Tamura, president and CEO of Narita International Airport; and Gert-Jan de Graaff, CEO, Brisbane Airport Corporation, will succeed Al-Binfalah as secretary treasurer.

Newly elected Board Directors are Ali Salim Al-Midfa, chairman of Sharjah International Airport Authority; Cyril Girot, CEO, Cambodia Airports; Elena Sorlini, managing director and CEO of Abu Dhabi Airports; Dato' Mohd Izani Ghani, managing director of Malaysia Airports Holding Berhad (MAHB); and Yam Kum Weng, CEO of Changi Airport Group.

All begin their three-year terms on January 1, 2025, ending December 31, 2027.

Congratulating the new president and the newly elected members, Menanteau, said: "It has been an exceptional two years, during which we've made significant steps in advancing our key initiatives and strategic priorities, especially with regard to economic and environmental sustainability of airports.

INTERNATIONAL CONFERENCE ON GREEN AVIATION

Head of sustainability, Ken Lau, gave a presentation on the topic 'Airports Sustainability in Asia-Pacific & Middle East' at the 2nd International Conference on Green Aviation, in Chengdu, China.

During the lecture, he emphasised our association's environmental sustainability's efforts in strengthening the advocacy in the regions through our flagship programme: Green Airports Recognition and biennial environmental survey. He previewed the Net Zero Roadmap project and study on climate adaptation approach in 2025. Lau also moderated three lectures in 'Green Airport Technologies and Operation Forum'.

ACI APEX SECURITY REVIEW IN FIJI

Fiji has successfully hosted an Airport Excellence Programme (APEX) Review in Security.

Hosted by Fiji Airports in Nadi, Fiji, in late November 2024, it was the first such review conducted in the



"I am grateful to our Board for their support, which has allowed us to strengthen our advocacy across the region. As I hand over the leadership to Mr Kishore, I am confident that under his guidance, ACI Asia-Pacific & Middle East will continue to be a powerful advocate for our region's airports. I also extend my sincere congratulations to all newly elected Board members."

Commenting on his new role, Kishore said: "I am deeply honoured to take on the role of president and to continue the remarkable work of my predecessor, Emmanuel Menanteau.

"As we look toward the future, our collective focus will be on driving environmental sustainability, innovation, and ensuring the economic resilience of airports as aviation industry in our region is set for the next big phase of growth."



country. Representing ACI Asia-Pacific & Middle East, senior manager for security and facilitation, Gary Leung, was part of the review team to share insights and offer recommendations to help the airport enhance security compliance and efficiency.

ACI APAC & MID PARTICIPATES IN IFALPA EVENT

ACI APAC & MID was honoured to participate at the 2024 security committee of The International Federation of Air Line Pilots' Associations (IFALPA) in Fukuoka, Japan, in mid-November.

Marking a significant milestone, this was the first time ACI APAC & MID had been invited to attend IFALPA's annual security committee, which is held for commercial airline pilots to discuss aviation security-related matters.



ALL CHANGE AT TOP FOR ECONOMICS COMMITTEE



Riyadh Airports Company's chief commercial officer, Abdulaziz Al-Asaker, and Bahrain Airport Company's Leena Faraj have been appointed chair and vice chair respectively of ACI APAC & MID's Regional Economics Committee.

It is hoped that the leadership transition will help usher in a new era of collaboration and a strategic focus on the evolving landscape of airport economics.

NEW LEADERS FOR REGIONAL ENVIRONMENT COMMITTEE

Kristy Tan, senior manager for climate resilience at Airport Authority Hong Kong, and Dana Ismaeel, acting head of environment and sustainability at Bahrain Airport Company, have been appointed as

chair and vice chair respectively of the ACI Asia-Pacific & Middle East Regional Environment Committee (REC). They will lead the committee for two years in 2025-2026.



AI-DRIVEN HUMAN RESOURCES MANAGEMENT

AI Driven Innovation in Human Resources Management was the central topic of discussion at the ACI APAC & MID Regional Human Resources Committee meeting in Taipei.

Hosted by Taoyuan International Airport, more than 40 airport HR leaders discussed how AI will impact the workforce and reshape human resources at airports and across other industries.



ASEAN AIR TRANSPORT WORKING GROUP

ACI APAC & MID spoke about smart airports and digital transformation at the 50th ASEAN Air Transport Working Group meeting and an associated Sustainability Forum held in Chiang Mai, Thailand.

Representing ACI APAC & MID, Ken Lau, our head of sustainability, highlighted the work and application of ACI and airports in the areas of cybersecurity, touchless technology, biometrics, artificial intelligence and robotics.

He emphasised that introducing new technologies without robust cybersecurity measures in place poses a risk to the industry. In addition, he touched on Sustainable Airport Management as a key element of becoming a smart airport.



ECONOMIC SUSTAINABILITY AND FINANCIAL RESILIENCE KEY TO FUTURE GROWTH

ACI APAC & MID has reiterated its call for economic sustainability and financial resilience as critical components for infrastructure development to support the expected growth in the region's air transport sector.

At the 59th Conference of Directors General of Civil Aviation for Asia and Pacific Regions in Cebu, Philippines, ACI APAC & MID presented an outlook on the future of the aviation industry, as well as made several recommendations.

ACI APAC & MID's proposals were supported by ICAO urging states to consider implementing the recommended initiatives.

Airport economic sustainability and financial resilience are key pillars for infrastructure development.

With the Asia-Pacific region growing at an annual rate of 5.8%, more than the global average of 4.3%, the region is expected to account for 40% of global passengers over the next two decades. The 3.4 billion passengers that took to the skies in 2023 are expected to swell to over 8.7 billion by 2042.

Meeting this demand requires significant investment in infrastructure. ACI APAC & MID's long-term forecast estimates a capital expenditure of \$2.4 trillion globally, with Asia-Pacific alone needing \$1.3 trillion, including \$579 billion for greenfield airport development.

ACI APAC & MID highlighted the financial stress airports are facing, especially following the economic blow of the COVID-19 pandemic.

In conclusion, the Conference encouraged States and Administrations to support, as appropriate, the operations and infrastructure investment in airports.

– SECURITY-BY-DESIGN

With the significant forecasted growth in airport infrastructure investment, ACI APAC & MID, through an Information Paper, stressed the need to integrate security considerations into the design phase for any new infrastructure to improve eventual operational performance.

– ENVIRONMENTAL SUSTAINABILITY

The Conference urged States to engage in ACI APAC & MID's Net Zero Roadmap programme to ensure sustainable air transport. ACI APAC & MID has recently partnered with Riyadh Airports Company and Mactan Cebu International Airport to assist the airports establish a net zero roadmap.

– SAFETY

ACI APAC & MID, in partnership with industry associations such as CANSO, Flight Safety Foundation, International Federation of Air Line Pilots Associations, and International Federation of Air Traffic Controllers' Associations, regulators and airport operators to encourage safety culture. Recognising the critical role safety plays in the long-term resilience and growth of the aviation sector, the Conference urged States and Administrations to adopt the positive safety culture indicators as part of their safety assessments.

Stefano Baronci, director General of ACI Asia-Pacific & Middle East, said: "With the Asia-Pacific region driving the global growth in air travel, investing in modern, efficient, and sustainable airport infrastructure is no longer an option – it is now become a necessity. As airports continue to play a crucial role in the socio-economic development of their regions, they must be equipped to meet growing demand while maintaining financial viability for decades to come.

"At the same time, as the industry evolves, we must also prioritise enhanced safety, explore innovative ways to strengthen aviation security, promote diversity, and inclusion, and greater sharper focus on environmental sustainability."



ONE VISION

We take a closer look at the development plans of Perth Airport where new facilities and passenger growth are very much on the agenda.

Perth Airport has officially unveiled its master plan for the future, which will deliver its long-awaited “one airport” vision for Western Australian travellers.

The A\$5billion investment programme will bring all operations into the Airport Central precinct, with a new parallel runway, new terminal facilities, two multi-storey car parks with associated roadworks, an upgrade of Terminal 2, and the airport’s first on-site hotel.

Perth Airport CEO, Jason Waters, notes that the scale of what needs to be built is unprecedented in Perth.

“We will be completely changing the face of Perth Airport over the next decade,” he enthuses.

“We will have a world class airport experience for travellers while delivering the capacity and efficiency our airline partners need to grow their connections into Western Australia.

“We want the new terminal facilities to reflect the confidence and character of Western Australia. This will be the first welcome to our State for millions of visitors each year and we want to make a lasting first impression.

“We know that one of the things that confuses the public the most is which terminal or which part of the airport they should be heading to. Bringing everything into one precinct will create ‘one airport’ for all flights. This will make the whole experience more intuitive and simpler.

“It will also help boost regional tourism as it will make it easier for connections between international, interstate and regional flights.

“Last year we hosted a record 16 million passengers through our terminals, and we’re heading toward the 20 million passengers per year mark within the coming decade.

“There will be some pain along the way as have to build most of these projects in a live and increasingly busy airport environment, but we’ll be sequencing the construction works and placing a strong focus on minimising disruption for our passengers and our airline partners.”

Waters is confident that the new terminal facilities will cater to a diverse range of different travellers needs and expectations.

He says: “Travellers want their airport experience to be as smooth as possible, from arriving at the airport, to moving through check-in and security, to waiting for their flight to board.

“Many want to feel the buzz of the excitement of a journey about to begin. Some will be looking for a range of quality, affordable food and beverage or retail outlets. Others will be looking for more quiet, reflective areas to help lower the stress levels.

“We’ve got an amazing opportunity here to build in up-front measures to cater for passengers of all abilities and remove the barriers to travel that some people experience.

“We’ll also be ensuring both the construction and operations of the new facilities will be sustainable and environmentally responsible. This will include measures to reduce water and energy use, and to also reduce the amount of waste generated.”



He notes that a number of projects associated with the transformation of Perth Airport are already underway.

“The future is coming at us fast and we have made a great start to this once-in-a-generation build,” says Waters.

“Construction has commenced on the multi-storey car park, and works are underway at Terminal 2 to add more departure gates and seating. We will also add more car parks and make changes to the road network around T2 to improve traffic flow along the forecourt.

“We’ve partnered with with Australia’s largest hotel operator, Accor, to operate the first hotel on the airport estate under the Pullman Hotels & Resorts brand.

“Design discussions with our airline partners are also underway on the expanded international terminal and the new domestic terminal.

“And detailed design on the runway has been completed with construction works due to begin in the New Year.

“Along with the construction activity, our team together with the State government will continue to work on attracting more interstate and international routes, which will further support our important tourism, resource and export sectors.”

FIRST AIRPORT HOTEL

As already mentioned, the gateway’s vision for the future includes the addition of its first on-site hotel, the Pullman Perth Airport, which will be developed in partnership with Australia’s largest hotel operator, Accor.

The new state-of-the-art hotel is slated to open in 2027 and will feature 240 rooms and suites across eight floors, a rooftop restaurant and bar, lobby lounge café, gymnasium, sauna, meeting facilities, and co-working spaces.

Dan Sweet, Perth Airport’s chief property officer, says: “We are delighted to be partnering with world-leading hospitality group, Accor, to deliver our first hotel.

“The new Pullman Perth Airport hotel will be a world-class facility located at the front door to our major terminals. It will make it even more convenient for international and interstate visitors, providing a place to stay and relax during connections.”

QANTAS KEY TO AIRPORT’S SUCCESS

Earlier this year Qantas and Perth Airport reached an historic commercial agreement that proved the catalyst for the multi-billion-dollar wave of investment in the Western Australia gateway.

As part of the 12-year agreement, Perth Airport will invest around A\$3 billion in new terminal facilities and a new parallel runway, which will generate immediate and ongoing economic growth and job creation.

Qantas and Jetstar will relocate all services to a new terminal in the Airport Central precinct that will, along with the airline’s major investment in new aircraft, enable the growth required to turn Western Australia into a major domestic and international hub for the airlines.

Qantas and Jetstar plan to add 4.4 million seats to and from Perth per annum by the time the new terminal opens in 2031.

The hub will significantly enhance inbound tourism and give Australians more options when travelling to Asia, Africa, India and Europe.

Ongoing upgrades to Terminal 3 and Terminal 4 will enable Qantas to add services and more destinations from Perth, including Auckland and Johannesburg from mid-2025, subject to meeting border agency requirements.

The works will also include gate upgrades to accommodate ultra-long-haul aircraft, including its Project Sunrise Airbus A350s which arrive from 2026.

Speaking about the agreement at the time, Qantas CEO, Vanessa Hudson, said: “This is the largest airport



infrastructure deal in our history. It will enable us to create a world-class western hub and significantly expand our domestic and international services over the short, medium and long-term.

“Not only will it allow us to bring hundreds of thousands more travellers to and through Western Australia each year, it will also make it easier for overseas tourists to connect to more destinations across Australia.

“Perth-London and Perth-Rome are two of the most popular flights on our international network, which gives us confidence in our strategy to ramp up WA flying over the next few years as we receive new aircraft and grow our fleet.”

TRAFFIC GROWTH AND STRONG PROFITS

The airport has reported a strong profit result for FY24 as it prepares to embark on its historic A\$5 billion infrastructure investment programme.

Strong growth in passenger numbers saw increased revenue across all of the airport’s operations, including aviation, ground transport, property and retail.

As a result, Perth Airport’s EBITDA rose from A\$403 million in FY23 to A\$420 million in FY24, while net profit after tax rose from A\$110 million in FY23 to A\$125 million in FY24.

Importantly the results reflect the resolution of all outstanding commercial issues with the Qantas Group.

“When Perth Airport grows and prospers, Western Australia grows and prospers,” says Waters.

Reflecting on FY24, Waters says that it proved to be a year of consolidation and growth for Perth Airport.

He says: “In FY24 our push for increased international connections paid off with new routes, the post-COVID return of a number of international airlines, and increased flight numbers on several existing routes.

“This included the Qantas Perth-Paris service, Vietjet and Vietnam Airlines flights to Ho Chi Minh City, Batik Air and Citilink services to Jakarta, and Singapore Airlines and Cathay Pacific both lifting capacity into Perth.

“We expect this to build even further in 2025 when the Routes Asia conference takes place in Perth – an event Perth Airport played a major role in securing.

“Our operations team has done a remarkable job in managing almost 157,000 aircraft movements and more than 16.1 million passengers safely and securely.

“Our property portfolio continues to record outstanding results with an occupancy rate of more than 99% while delivering the new Dunreath Village shopping centre, KFC, McDonalds and an IMO carwash.

“Retail and ground transport revenue has grown while delivering a range of new product offerings for passengers including new food and beverage outlets and increased undercover parking.

“Demand for parking continues to grow and we added two new Long Term car parks and expanded our Premium car park offer in T3/T4 to accommodate this increase.”

With a clear vision for the future and the airlines onboard with its ambitious plans, the next decade and beyond promise to be interesting and exciting ones for Western Australia’s gateway to the world.



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INNOVATION ALL THE WAY

Joe Bates reports on some of the highlights of the recent Airports Innovate conference and exhibition in Rome.

All roads led to Rome for this year's Airports Innovate conference and exhibition, which once again showed that airports are becoming increasingly innovative in the ways that they operate and plan for the future.

New technology was, of course, high on the agenda, although as conference master of ceremonies, SITA's Catherine Mayer was quick to point out, the event was also about people as innovation comes in many forms, with IT invariably acting as the enabler for airports and their staff to be more efficient, sustainable and customer friendly.

As a result, the wide scope of the conference led to it addressing a host of different challenges and opportunities facing the world's airports, ranging from accommodating traffic growth and a new era of advanced air mobility to making aviation an appealing career for future generations.

In her opening remarks Mayer, SITA's vice president for airports, noted: "We typically think of artificial intelligence, AI, when we talk about innovation, but the true definition of innovation is any new idea, method or a device that changes the way that things have been done.

"Innovation is also very disruptive and critical for businesses and organisations. Today, in order to succeed, in order to be ahead of the competition, and in order to really be a leader, we have to innovate."

Vincenzo Nunziata, chairman of event host Aeroporti di Roma (ADR), provided the welcome address, warmly

welcoming more than 400 delegates from 53 different countries in attendance to Rome.

He was followed by one of the industry's most innovative airport leaders, ADR CEO, Marco Troncone, who delivered a powerful speech about the importance of innovation and industry collaboration, citing a number of examples of how Rome's Fiumicino has led the way with innovative new facilities, services and initiatives.

Indeed, Troncone revealed that innovation is a crucial pillar in ADR's mission to build the airport of the future, basing its strategy on open innovation and international co-operation.

He noted that the right attitude and culture within a company plays a key role in fostering innovation, and that the process of being an innovation trendsetter inevitably involves some failures.

Troncone added that ADR welcomes the opportunity to share views and ideas with its peers from all over the world, stating that in the search for global solutions, "the objective is not to arrive first, but to arrive together, with many".

Next up were State of the Industry addresses from ACI World director general, Justin Erbacci, and ACI EUROPE director general, Olivier Jankovec.

Speaking first, Jankovec addressed the region's traffic and financials, revealing that 43% of European airports achieved a full passenger recovery in 2023 although the 2.3 billion passengers handled across the continent was still down 6.3% of pre-pandemic 2019.



In terms of financials, he told delegates that Europe's airports are now much closer to pre-COVID profit levels, with the overall 7% upturn in revenues in 2023 being driven by non-aeronautical activities. Nevertheless, rising operating costs now 14% above 2019 makes for a challenging environment with Europe's airports facing debts of €130 billion – 33% higher than in 2019.

Jankovec stated that the good news is that he felt that Europe's airports had finally "turned the corner" in 2024 with passenger levels up by 7.4% in the year to date and freight volumes soaring by nearly 12% in the first 10 months of the year.

Looking ahead, ACI EUROPE forecasts that this year's predicted 3% rise in passenger volumes over 2019 will be followed by healthy annual increases vs 2019 of 12% in 2025, 19% in 2026 and a significant 24% in 2027.

Downside risks to this projected, stated Jankovec, are the delay in aircraft deliveries and availability of spare parts; the airlines' capacity discipline and focus on yields; airline consolidation and network rationalisation; the economy; and geopolitics.

ACI World's Erbacci used his time on stage to note that globally the industry was moving from a period of recovery to a period of growth, with a total of 9.5 billion passengers expected to pass through the world's airports in 2024 – a rise of 10% on last year and, significantly, a 4% increase on pre-COVID 2019.

This year's upturn, he noted, happened despite two global conflicts, grounded aircraft due to engine and other faults and maintenance, delayed aircraft deliveries, human resource issues, and high ticket prices.

From a long-term perspective, he said ACI World is projecting continued significant growth with global traffic doubling to 18.5 billion passengers per annum by 2042 and a little above 23.2 billion in 2052.

Yet despite the good news, Erbacci confirmed that airport profitability is in decline, with globally airports experiencing decreased revenues and rising debt levels further weakening the financial health of the industry.

"The expected significant traffic growth and the challenges of financing new infrastructure means that ACI's strategy focus will be on championing the cause for the transformation of airports to help them deal with this growth and be financially viable.

"One of the areas we need to focus on is how airports use existing capacity more efficiently and sustainably by using new technologies that help us get more out of what we have today.

"We also need to look at how we develop and manage new infrastructure that will provide more safe and sustainable capacity. Then we have to help airports figure out how to adapt commercially to maintain and improve financial viability as they can no longer depend on passenger growth to fund capacity increases and operational improvements.

"There is also the need to improve the efficiency and safety of operations and, most importantly, the overall customer experience.

"These are the areas we are focusing on, and the challenge for all of us is how we use innovation to meet these goals."

A busy opening session ended with ACI Asia-Pacific & Middle East's director general, Stefano Baronci, sitting down with Dubai Airports CEO, Paul Griffiths, for an engaging conversation about the future of aviation.

Baronci, who prior to the event noted that "innovation is no longer a luxury but a necessity for airports in today's fast-evolving aviation landscape", opened their session by



touching on traffic growth and highlighting some examples of airport innovation across the Asia-Pacific and Middle East regions.

His snapshot of the region included discussing a new innovation survey of 22 airports in Asia-Pacific and the Middle East, which revealed that 82% of the participants had already implemented biometric technology and 64% technology such as robots and AI powered tools to enhance terminal operations for passenger flows, cleanliness and security.

Although the survey discovered that the use of automated robots or self driving vehicles on the apron was still in its infancy across the region with just 9% of airports trialling or utilising such technology, 41% stated that it was in the pipeline.

Interestingly, ACI Asia-Pacific & Middle East's Innovation Survey showed that 82% of the 22 airports surveyed had created their own dedicated Innovation Department.

The always top draw Griffiths followed suit by addressing a number of innovative concepts and procedures that could transform the industry going forward, and shared his thoughts on how airports can drive economic growth and become destinations in their own right.

He indicated that some of the technologies and new concepts being trialled and tested by Dubai Airports today could be used in the next development phase of Dubai World Central-AI Maktoum International Airport, which if all goes to plan, will ultimately become the world's largest airport handling in excess of 260 million passengers per annum.

A great believer in the power of technology, Griffiths noted: "When I arrived at Dubai Airports in 2007, I was told that the maximum throughput we could get through Dubai

International Airport [DXB] was 65 million passengers. Since then we have persistently deconstructed every point of the passenger journey and reconstructed it with more technology and greater efficiency, and we will handle 93 million passengers this year.

"In 2007 we handled 32 million passengers and had 5,500 staff. Now we have 93 million passengers and 1,700 staff, so the technological efficiency we have achieved by just keeping people moving has been amazing.

"If you can double the throughput by halving the processing time that a passenger has to endure going through an airport you have achieved three things. Amazing increases in capacity, avoided investing in costly new infrastructure and increased customer satisfaction levels."

Griffiths, who has overseen DXB's rise to become the world's busiest international airport, also spoke about alternative flying modes such as electric vertical take-off and landing (eVTOL) aircraft, and their role in driving sustainable aviation as well as his passion for music and specifically church organs!

Bob Kwik, worldwide head of airports and ground transportation for Amazon Web Services followed with an address about 'Charting New Skies with Generative AI' ahead of two panel discussions. The first was around the rather wordy topic of 'How to Put Innovation at the Very Core of Your Business and Truly Execute it', followed by 'Innovation in Improving Daily Operations'.

In the hot-seat in the first panel – moderated by Pierre Charbonneau, ACI World's vice president for events, commercial programmes and services – Riga Airport's CEO and chair of the executive board, Laila Odina, stated that the Latvian airport has its own innovation team and actively encourages staff to submit ideas on how improvements could be made at the gateway.

ISMAIL POLAT
Senior VP
Development
Dubai Airports



Speaking on the same panel, ADR's senior vice president for transformation and technology, Emmanuele Calà, described the number of ways the airport operator put innovation at the heart of the business, ranging from establishing its own highly successful Innovation Lab in 2021 and holding regular hackathons.

"Innovation is not just a buzz word for us, it is a key pillar of our business strategy," stated Calà. "It is not a goal, it is a lever to help us meet the challenges that we face, such as raising capacity, increasing customer satisfaction and sustainable development.

"Everyone has a part to play in innovation, it is not just about the innovation team or the IT department. Everyone in the company can contribute."

Innovation means adding value to processes and procedures across the entire airport ecosystem, stated Ismail Polat, senior vice president for development at Dubai Airports.

The Innovation in Improving Daily Operations panel boasted a diverse group of speakers that included to Beijing Daxing's general manager of international affairs, science and technology department, Lubing Wang, and representatives from SITA, Aurrigo, Lufthansa and ADB Safegate.

Talking about artificial intelligence, SITA's senior product manager for total optimizer, Gareth Lawton, believes that AI will actually empower humans, enhance airport operations and help them meet their respective capacity and sustainability challenges while also ending the traditional practice of teams working in silos and not sharing a holistic vision.

He told delegates: "We believe that AI is going to be a critical enabler that helps us tackle problems in a number of different areas. Sensationalist news stories about evil AI

coming and taking people's jobs couldn't be further from the truth.

"Instead, we think AI should be treated as a junior member of your team and given repetitive, simpler tasks. You still need, to tell the AI what it needs to achieve, what it needs to report and check that it has done it in the way you need. Far from replacing humans, it will promote humans to do things that people are better at, such as strategic thinking and engaging with other humans."

In a similar vein, Tenille Houston, vice president of public relations and communications for autonomous vehicle specialist Aurrigo stated that the next generation of autonomous electric ground vehicles would increase safety by helping staff who would no longer have to handle heavy loads and work in all weathers on the ramp.

She added that such equipment will also increase operational efficiency and help airports cope with staff shortages and reduce their CO2 emissions.

Beijing Daxing's Wang noted that the Chinese airport's commitment to improving daily operations extended to it operating an energy efficient terminal while the electrification of 80% of its airside vehicles and utilisation of windpower had reduced its CO2 footprint by 150,000 tonnes per annum.

Also on the panel were Lufthansa's head of project and processes, group, Stuart Holdstock, and Gert Taeymans, ADB Safegate's business vice president for Europe.

NACO's managing director, Esther Kromhout, opened the afternoon proceedings with a presentation called 'Resilience by Design', which covered some of the ways innovation is being used in response to more challenging regulations, economic prospects and climate events.



The renewable energy debate then got into full swing with a panel discussion entitled ‘From Air-ports to Ener-ports: Innovation in Hydrogen Infrastructure and Energy at Airports’.

Discussing the impact the adoption of hydrogen as a fuel source for aviation could have on the industry as well as the potential for airports to effectively reinvent themselves as energy providers were Aena’s director of sustainability, Ana Salazar Lopez-Pedraza; Zeroavia’s director of infrastructure, Peter Gallen; and Fraunhofer Institute’s senior researcher and project manager, Karsten Uhing.

Aena’s Lopez-Pedraza believes that airports have to reinvent the way that they operate to meet aviation’s sustainability goals, noting that “Aena’s airports are working to adapt to the new needs of our customers in terms of the supply of sustainable energy and fuels”.

This strategy, she said, included looking at hydrogen, which she believed could become key energy source across airport sites and, potentially, an “energy backbone” for airports by 2050.

Zeroavia’s Gallen believes that it is time for airports to look at upgrading their refuelling infrastructure so that they are ready for hydrogen production and storage, especially with hydrogen powered aircraft expected to take off in 2026 and possibly operating transatlantic services by 2040.

The Fraunhofer Institute’s Uhing suggested that a possible future scenario for the development of hydrogen for the aviation industry might involve airports forming investment bodies with partners from other modes of transport to lower the cost of its production.

The spotlight then turned to air traffic control and efforts to achieve a Single European Sky when Andreas Boschen, executive director of the SESAR 3 Joint Undertaking, delivered a keynote speech discussing the role of airports in delivering the Digital European Sky.

He shared the tangible benefits brought by SESAR JU solutions, including enhanced safety, cost efficiency, and improved connectivity, and highlighted the European ATM Master Plan, a roadmap prepared in consultation with all European stakeholders that will serve as a powerful tool for transformation.

We were now into the last few sessions of a busy day and, in the first of these, attention was turned to the the need for innovation in staff recruitment, retention and progression to ensure that the industry continues to attract the talent it will need in the future.

And in a surprise twist to the usual set-up, the panel was actually made up of comparatively new recruits to the industry, who spoke about their experiences, the initial challenges they faced upon entering the industry, and offered advice on how airports might consider doing things differently when recruiting from Generation Z.

All three – Aline Henne, who works in digitalisation and innovation at Stuttgart Airport; Anushree Misra, an ORAT co-ordinator at Noida International Airport; and Diogene De Souza, an airspace and ATM specialist at London Heathrow – admitted that they suffered early frustrations in their jobs partly due to their employees not fully realising the different skill sets they offered.

Henne revealed that in her early days in the industry she felt that when she questioned the status quo she was was often met with frustrating comments like “we’ve always done it that way”, and Misra believed that there needed to be more “open mindedness” from employers when it comes to dealing with young professionals.

For his part, De Souza believes that when appealing to young professionals, potential employers need to be good communicators and be honest and upfront about what they expect from new recruits, potential career advancement and pay.



McKinsey & Company partner, Giuletta Poltronieri, and Bologna Airport's HR director, Marco Verga, were also on the 'HR Innovations & Perspectives from Young Professionals in Aviation' panel, moderated by Dornier Group's director of airports and aviation, Tine Hass.

The conference part of Day 1 effectively ended with Pablo Lopez Loeches, head of ideation and entrepreneurship at Aena, moderating a session dedicated to startups.

Day 2 got off to a lively and upbeat start with a ceremony for winners of the ACI World Technology Awards, an annual event held in partnership with Amadeus.

For the record, the winners were Dallas Love Field for its 3D LED Holographic Signage Fan Displays; Toronto Pearson for Optimising Turnaround Operations Using AI); ADR's Emanuele Calà was named Best Airport Innovation Leader; and Gerald Ford International Airport for its Ford Launchpad for Innovative Technologies and Entrepreneurship (FLITE) initiative.

Two interesting and very different panel sessions followed, the first of which focused on Advanced Air Mobility (AAM) and the progress being made on the development of eVTOL vehicles and vertiports across the globe.

All three panelists involved in the AAM debate – Alban Negret, Groupe ADP's head of innovation and corporate venture; Hyungkyu (Chris) Woo, Korea Airport Corporation's senior manager of advanced air mobility office; and Ivan Bassato, chairman of vertiport development company, UrbanV – agreed that the new mode of transport is coming, and that airports will have a part to play in its development.

Indeed, advancements in AAM technology and the development of on the ground facilities at airports and elsewhere were addressed by the panel along with potential timescales for the widespread introduction of the technology.



Woo revealed that KAC plans to build a vertport at Gimpo Airport that will serve the Seoul Metropolitan Area, although Jeju Island is expected to become the first region to handle AAM operations in South Korea with eVTOL flights starting in 2032.

He said: "Leveraging our extensive experience in aviation, we are positioning AAM as a future core business. We believe it will provide seamless future mobility connections and broader aviation services frontier."

While Groupe ADP's Negret reminded delegates that in August 2024, after years of testing, the company launched the world's first operational vertiport in collaboration with Volocopter and the French Civil Aviation Authority.

Located close to the Château de Versailles in Saint-Cyr-L'École, the facility handled eVTOL flights between Paris and Versailles this summer. Together with the Paris Hospital Authority and ADAC, Groupe ADP is now exploring the potential of using eVTOLs to transport medical supplies and emergency evacuations in the Paris region.

UrbanV Bassato's spoke about ongoing vertiport/eVTOL projects in Italy at Rome's Fiumicino Airport as well as in Bologna and Venice, and outlined the bigger global picture for the development of the new mode of transport based on projects in Brazil, the EU, USA, UAE and Saudi Arabia.

According to his data, the US, UAE and Saudi Arabia are leading the world in investment and market readiness with eVTOL manufacturers Joby, Archer, Beta and Eve forecasting the launch of the first commercial flights in the US, UAE and Brazil in 2025/2026.

In the spotlight for this one were Narita International Airport Corporation deputy general manager, Tatsuya



Izumi; Vancouver Airport Authority's director for innovation and product development, Chris Gilliland; Cirium's vice president of product, Niha Shaikh, and WSP's global AI director, Massimo Dragan.

Next up was a panel discussion about 'Innovation for the passenger experience' which addressed the importance of change management in driving innovation and how airports collaborate with startups among a host of other issues.

SEA Milan Airports' head of innovation, Maddalena Spreafico, reaffirmed that innovation is a key strategic pillar for the Italian airport operator.

While fellow panelist, Aena's director of innovation and customer experience, Luis José Cañón Ordóñez, described his company's efforts to innovate and enhance the passenger experience by using AI and other technologies at its airports across Spain.

Also on the lively and entertaining panel were Neil Barnfather, chief commercial officer of Goodmaps; and Kristof Philips, chief commercial officer of TCR International.

A 'Climate Adaption Briefing' by ACI EUROPE/Eurocontrol followed before a panel discussion on 'Enhancing Sustainability Through Innovation' brought an end to the conference sessions.

In the latter, Christel Vandenhouten from Brussels Airport provided an overview of the impressive strides Brussels Airport is making in its decarbonisation journey and the continued success of Stargate, an EU Commission backed initiative to designed to accelerate aviation's green transformation.

Innovation is at the core of Brussels Airport's Stargate strategy, said Vandenhouten, which features 30 different

projects with a focus on decarbonisation, improving the local environment, and a modal shift away from CO2 emitting vehicles.

She noted that enhancing the local environment meant embracing the electrification of ground equipment and the testing of new technology such as the Taxibot, and that BRU's decarbonisation goals included developing an on-site facility for research for gathering insight into SAF blending, its supply chain and certification processes.

While Turin Airport's operations, development and maintenance director, Lorenzo Gusman, told the audience that his gateway was now focused on reducing Scope 3 emissions and was preparing for the first electric powered aircraft flights within the next 10 years.

A member of the EU backed TULIPS project dedicated to developing innovations that facilitate the transition to low-carbon mobility and enhance the sustainability of airports, Turin Airport has its sights set on becoming a 'Smart Energy Hub' using a combination of solar and wind for power and hydrogen and SAF to fuel aircraft.

That just left time for the announcement that Korea Airports Corporation will host next year's Airports Innovate conference in Busan in South Korea in November 25-27, 2025.

Based purely on what we heard and saw from members of the KAC team in Rome, it promises to be another inspiring event.

That just left time for the announcement that Korea Airports Corporation will host next year's Airports Innovate conference in Busan in South Korea in November 25-27, 2025. Based purely on what we heard and saw from members of the KAC team in Rome, it promises to be another inspiring event.

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ENABLING GROWTH

We round-up some of the latest IT news stories making headlines across Asia-Pacific and the Middle East in the last quarter of the year.

TAOYUAN INTERNATIONAL AIRPORT TO PARTNER WITH SITA

SITA is partnering with Taipei's Taoyuan International Airport (TPE) to transform its passenger processing solutions.

According to SITA, its check-in kiosk solutions will bring new innovation to TPE and help make passenger processing “become a state-of-the-art feature of the airport experience”.

With the new check-in and baggage handling processes, Taipei Taoyuan International Airport is expected to reduce wait times and improve its overall efficiency.

It has chosen SITA to provide its Local Departure Control System (LDCS), Common Use Terminal Equipment (CUTE) and Common Use Self-Service (CUSS) systems, including a full hardware refresh of 80 check-in kiosks to support all international flights in Terminals 1 and 2.

Sumesh Patel, SITA's APAC president, said: “Airports around the world are facing challenges on many fronts, from staffing to efficiency, and improving the overall passenger experience. TPE can become a pioneer in the Asian market in terms of digitalisation and innovation, becoming an example for others in an ever-evolving travel industry.”

While Nelson Wang, TPE's operation committee chairman, noted: “As part of our improvement programme, the smart use of technology will maximise our existing infrastructure, and provide our passengers with a world-class experience, while supporting our airline customers in managing their operations more efficiently.

“SITA's CUSS and CUTE systems are key to meeting our ambitions – from managing the flow of passengers through

our terminals to making all of our passengers' journeys smoother and more efficient.”

ROBOTS AT THE READY AT QUEEN ALIA

Amman's Queen Alia International Airport has unveiled four state-of-the-art cleaning robots that it believes will significantly enhance its cleaning processes, resource allocation and overall efficiency.

The new additions, introduced by AMM operator Airport International Group (AIG) in collaboration with MENA Facilities Management, are also said to highlight AIG's commitment to adopting the latest technology and maintaining a clean and hygienic environment for passengers, employees and visitors.

“We constantly strive to provide our passengers, employees and visitors with exceptional facilities for a truly comfortable experience while at QAIA,” notes AIG CEO, Nicolas Deviller.

“With MENA Facilities Management, we are dedicated to enhancing our airport journey, setting new benchmarks for cleanliness and comfort, while underscoring our unyielding pursuit of a welcoming atmosphere where passengers feel at home.”

While About Abu Gharbieh, CEO of MENA Facilities Management, noted: “This collaboration reflects our commitment to leveraging cutting-edge technology to enhance operational efficiency and maintain the highest standards of cleanliness in one of the region's most important aviation hubs.

“Our goal is to support the airport's ongoing efforts to provide a safe and welcoming environment for travellers, and we look forward to working together to achieve this vision.”



CALL FOR AVIATION TO EMBRACE TRANSFORMATION

Smart solutions provider, Aurrigo International, is urging the aviation industry to embrace innovation and drive the evolution of ground support equipment.

Aurrigo CEO, professor David Keene, believes that the adoption of what he calls iGSE (intelligent Ground Support Equipment) will take operational efficiency to the next level.

His vision encompasses a suite of advanced, integrated technologies designed to enhance operational performance and streamline airside activities.

Keene insists that adopting smart airside solutions will allow the industry to reduce turnaround times, improve reliability, and significantly lower its environmental footprint.

“Today’s aviation landscape demands that we step up our game,” said Keene. “As we move into a new era of airside operations, it is imperative that we harness advanced technologies to improve efficiency, safety, and sustainability.

“The future belongs to those who will lead the charge in reimagining how ground handling is performed.”

He outlined automation, data analytics and sustainability as key areas where iGSE can make a profound impact.

Keene noted that implementing automated systems can minimise human error and enhance operational speed and that leveraging real-time data would allow airports and ground handlers to optimise resource allocation and improve decision-making processes.

As for sustainability, he has no doubt that integrating eco-friendly practices into ground support operations will reduce emissions and support global sustainability goals.

“By moving to iGSE, we can create a more connected and efficient ground handling environment that meets the demands of modern air travel,” stated Keene.

“This is not just about technology; it’s about transforming our industry to better serve airlines, passengers, and the planet. Who will be the first GSE to transition to an iGSE approach?”

Aurrigo is no stranger to airports with its range of autonomous vehicles being trialled at gateways across the world, including Singapore Changi (pictured above) which continues to trial its Auto-DollyTug, a zero emission, all-electric baggage and cargo tractor.

DRIVING INNOVATION IN HR MANAGEMENT

AI Driven Innovation in human resources management was the central topic of discussion at the ACI Asia-Pacific & Middle East’s Regional Human Resources Committee meeting in Chinese Taipei.

HR leaders from across the region discussed how artificial intelligence will impact and reshape the airport workforce.

The committee also examined how HR can be a guiding force through these changes and ensure that AI improves work without compromising human dignity and wellbeing.

AOT’S AUTOMATED BIOMETRIC IDENTIFICATION SYSTEM

Airports of Thailand (AOT) has launched a new Automated Biometric Identification System powered by facial recognition technology, aimed at delivering a faster, more convenient, and secure experience for passengers across six AOT airports.

Passengers can register to use the new biometric system upon checking in at the airport, either at a manned check-in desk or at a self-service kiosk.

Once enrolled, passengers consent to the use of their biometric data for that specific journey, eliminating the need to present a passport or boarding pass at baggage drop, security checks, and boarding.

The new service is available at Suvarnabhumi, Don Mueang, Chiang Mai, Mae Fah Luang-Chiang Rai, Phuket, and Hat Yai airports.



INTELLIGENT THINKING

Stephan Hirmer, Amadeus' head of end-to-end passenger servicing for airport and airline operations, considers how AI is transforming aviation.

The air transport industry is under pressure to handle growing passenger volumes while maintaining high security standards and meeting the needs of travellers who increasingly expect a seamless experience.

With Airports Council International predicting passenger volumes will grow by 10% to reach 9.5 billion in 2025, traditional passenger servicing methods are becoming stretched, leading to bottlenecks, delays and frustrated travellers.

This challenge is particularly acute at major transit hubs, where efficient passenger processing can mean the difference between smooth operations and system-wide delays.

And as passenger numbers continue to rise, airports must find ways to achieve operational efficiency and deliver a great passenger experience.

From streamlining airport processes to managing unexpected disruptions, AI technologies are helping the aviation industry meet these challenges.

This article examines two key AI use cases that are already delivering results: computer vision systems for passenger processing and intelligent solutions for disruption management.

These examples demonstrate how artificial intelligence can remove friction from the travel experience while helping airports and airlines to optimise their operations.

HOW COMPUTER VISION SUPPORTS SMOOTHER PASSENGER PROCESSING

Computer vision systems use advanced machine learning algorithms and neural networks to process and analyse visual information in real time, making them ideal for busy

airport environments where fast, accurate identification of passengers and assets is critical.

These AI-powered systems are particularly effective when used within biometric processing systems.

Advanced computer vision algorithms can recognise and analyse facial features with remarkable accuracy, taking into account variations in face types, poses and lighting conditions.

The technology creates what's known as a biometric template – a unique digital signature based on an individual's facial characteristics – which can be matched with high accuracy against images that are held for a short period of time.

The practical implementation of this technology is changing the way airports process passengers. Instead of relying on traditional identification documents, travellers can now choose to use their biometrics as an identifier throughout their journey.

This shift from physical to biometric identification not only enhances security, but also significantly reduces processing times at key touchpoints such as check-in, security and boarding. By automating otherwise manual checks, they are much more accurate as they remove potential human error.

An example of this technology in action is the Vision-Box Seamless Journey Platform. This system connects multiple stakeholders across the passenger journey, creating a single digital identity management platform.

The technology enables passengers to move through various airport checkpoints without having to repeatedly present physical documents, while maintaining high security standards through continuous biometric identification and verification.

The benefits of implementing such systems go beyond faster processing times. Airports using AI-powered biometric solutions report improved accuracy of security checks, reduced operational costs and increased passenger satisfaction.

Having more intelligent systems in place also helps airports to refine their operations and allocate resources more efficiently.

As the aviation industry continues to evolve, the integration of AI and biometric technology will become increasingly important for airports looking to maintain a competitive edge while delivering the efficient, secure and seamless experience today's traveller demands.

ACCOMMODATING DISRUPTED PASSENGERS WITH ARTIFICIAL INTELLIGENCE

Flight disruptions remain a persistent challenge in aviation, with a recent report finding that more than half of airline and airport leaders report levels of disruption above the 2019 norm.

Traditional manual approaches to managing these disruptions often result in overwhelmed staff, frustrated passengers, and significant operational inefficiencies, with re-accommodation processes sometimes taking 12 hours per affected flight.

The complexity of modern airline networks, particularly in hub-and-spoke systems, makes disruption management increasingly challenging.

When a flight is cancelled or significantly delayed, airlines must consider multiple factors simultaneously: available seats across their network, passenger priorities, connecting flights, and the ripple effects on crew scheduling and the broader operation such as airport slots and craft maintenance.

Without advanced technology, this situation can quickly become overwhelming.

Artificial intelligence is emerging as a key tool in transforming how airlines handle disruption. Modern AI systems can process vast amounts of data in real-time, considering factors such as passenger status, connection requirements, and available capacity across multiple flights and partner airlines.

These systems use machine learning algorithms to evaluate thousands of possible solutions and identify optimal re-accommodation options for affected passengers.

The technology goes beyond reactive measures, incorporating predictive capabilities that can anticipate potential disruptions based on factors such as weather patterns and operational data. This enables airlines to take proactive steps, potentially offering alternative travel arrangements before passengers even leave for the airport.

The systems can also prioritise solutions based on various factors, such as ensuring business travellers with tight connections receive priority rebooking while still maintaining fair treatment for all passengers.

Air Canada's implementation of this technology provides a clear example of the potential benefits. Prior to implementing AI-powered recovery, the airline's disruption management was largely manual, requiring extensive co-ordination across teams and expert knowledge of its network.

The process could take anywhere from 45 minutes to several hours per flight, often resulting in congested terminals.

The airline now consistently provides affected passengers with rebooking options within 30 minutes of a cancellation notice, with most travellers receiving new arrangements in just 10 minutes – a dramatic improvement from the previous average of 12 hours.

The process of creating these options is incredibly complex, but this automated system considers the airline's complete network capacity and passenger prioritisation policies in a few moments, enabling faster and more efficient decision-making during disruptions.

Passengers are also able to choose from multiple rebooking options in case the first option isn't suitable for them, ensuring their experience is the best it can be.

The implementation demonstrates how AI can significantly improve both operational efficiency and passenger experience during disruptions.

By automating complex decision-making processes and considering multiple variables simultaneously, these systems help airlines maintain service levels even during challenging situations, while ensuring fair and efficient re-accommodation of affected passengers.

The agents in charge of the system still have full control of it and can adapt the solutions it proposes for passengers if necessary.

The use of AI technology in aviation is more than just a technological advancement – it's a strategic response to the industry's evolving challenges.

As the industry continues to face growing passenger volumes and operational complexity, the strategic use of AI solutions will become increasingly important to maintain competitive advantage.

The future of aviation lies not only in overcoming these challenges, but in using technology to turn them into opportunities for improved passenger experience and operational excellence.



GREEN PLANNING

Sustainable master planning can ensure that airports balance expansion plans whilst accelerating their sustainability objectives, writes Alton Aviation Consultancy's Mabel Kwan.

Airports are vital gateways to nations, linking cities, driving trade and serving as cultural hubs for millions of travellers.

However, whilst aviation has brought about economic and social benefits, it has also increased the impact on the environment, with a 50% rise in CO2 emissions since 2000.

Alton projects the global aircraft fleet to grow from 31,200 aircraft to over 41,000 aircraft by 2035, equivalent to 2.8% per year, intensifying the environmental and social challenges on airport operations.

As key players in the aviation ecosystem, airports are uniquely positioned to lead sustainability efforts.

Situated at the intersection of airlines, governments, and communities, airports can drive collaborative initiatives to address these challenges.

Sustainable master planning has emerged as a crucial tool, enabling airports to balance growth with sustainability while meeting stakeholder expectations and building resilience for the future.

THE NECESSITY OF SUSTAINABLE MASTER PLANNING

The aviation industry faces growing pressure to decarbonise, in alignment with global sustainability goals. Both ACI and IATA are committed to achieving net-zero carbon emissions by 2050, but the path requires airports to be proactive and establish a common vision to align initiatives.

For example, Changi Airport in Singapore implemented an airport-wide energy management system aiming to reduce Scope 1 and 2 emissions by 20% by 2030.

By integrating sustainability into master planning, airports can adopt renewable energy sources, enable carbon-neutral operations, and contribute meaningfully to global climate targets.

Globally, governments and regulatory bodies are also introducing stricter regulations to tackle climate issues. For instance, the EU's Green Deal mandates decarbonisation in all sectors, including aviation. As part of this, airports must address community concerns such as noise pollution and local environmental impact.

Heathrow Airport's 'Fly Quiet and Green' programme incentivises airlines to use quieter, cleaner aircraft through a ranking table and has led to a step change in noise levels. This demonstrates how aligning the community's interests with sustainability objectives can create positive outcomes for multiple stakeholders.

Sustainable airports are better positioned for long-term success from increased economic resilience, benefiting from reduced operational costs, increased passenger satisfaction, and mitigated risks from climate disruptions.

In 2020, San Francisco International Airport (SFO) invested \$86 million into 10 energy-saving initiatives, designed to reduce its future energy use by 54%. This better protects the airport from energy scarcity by reducing energy demand.



Planning for resource efficiency and sustainability ensures airports improve their economic resilience amid growing environmental risks.

BALANCING EXPANSION AMBITIONS WITH SUSTAINABILITY OBJECTIVES

Sustainable master planning demands a delicate balance between infrastructure expansion and environmental stewardship.

Given the long-term horizon of master plans, often spanning 20–30 years, forward-thinking strategies are crucial in future-proofing operations.

Planning for emerging technologies during this phase helps mitigate the risk of costly retrofitting in later years. For instance, accommodating the electrification of ground support equipment requires robust charging infrastructure within plans, even if the current adoption of such technology remains limited.

While technological advancements will continue to enhance operational efficiency, meaningful progress in sustainability will depend on partnerships among stakeholders. Aligning business objectives across the aviation ecosystem fosters stronger relationships and creates opportunities for significant improvements.

Achieving net zero, however, requires both internal and external stakeholder buy-in, emphasising the importance of a shared commitment to sustainability goals.

STRATEGIES FOR SUSTAINABLE DEVELOPMENT

There is no silver bullet to achieving sustainability goals and the aviation sector's decarbonisation journey will likely involve a combination of strategies.

These include enhancements in operational efficiency, widespread adoption of sustainable aviation fuels (SAF),

electrification of ground operations, and the eventual deployment of hydrogen-powered aircraft.

Achieving net zero emissions will require more than a single solution, it demands a multifaceted, integrated approach. For instance, airports in Asia-Pacific have identified five focus areas to meet their decarbonisation targets, underscoring the necessity of a portfolio-style strategy to effectively address the complexities of sustainability goals.

On fuels specifically, new technology requires infrastructure adaptations. SAF, which is compatible with existing infrastructure, offers a near-term solution while electrification and hydrogen are expected to make a step change in sustainability.

Airports like Amsterdam Schiphol (AMS) are already investigating hydrogen fuelling systems to prepare for a longer-term transition.

Incorporating modularity and optionality into master plans enables airports to adapt to evolving technologies and enables a faster uptake, particularly given differing expectations and implementation path.

Hydrogen's route to market demonstrates the need for flexibility at airports. IATA's latest forecast indicates that 54% of the regional fleet could be hydrogen fuelled aircraft by 2050.

However, the high development and implementation cost could lead OEMs to bring hydrogen to market on narrowbody or even widebody aircraft.

Airports can also reduce the carbon footprint of expansion works through integrated design and innovative construction practices. Circular construction principles – for instance, reusing building materials – have been employed at Oslo Airport (OSL) in Norway, resulting in an estimated 35% reduction in carbon dioxide emissions.



Similarly, digital twin technology allows designers to simulate operational performance and optimise energy efficiency before construction begins.

Brussels Airport (BRU) used digital twin technology to demonstrate the potential for the airport to reach net zero and determine the most efficient way to achieve this.

Carbon neutrality remains one of the most effective strategies for improving an airport’s sustainability but requires robust investments in renewable energy and infrastructure.

Payback periods for green technologies can often be measured in decades and high capital costs can place strain on an airport’s financials.

Airports are turning to green bonds to raise funds for capital-intensive projects. One notable example was JFK Millennium Partners’ issuance of a \$1.85 billion green bond in 2024, to finance the expansion and operation of Terminal 6 at New York’s JFK International Airport.

Integrated data systems play pivotal roles in aligning stakeholders by offering a unified platform for tracking emissions, fostering transparency, and ensuring accountability.

With standardised reporting guidelines, airports and their partners can identify areas for improvement and collaboratively implement effective solutions.

Advanced systems such as the Aircraft Communications Addressing and Reporting System (ACARS) further enhance this capability by providing real-time aircraft data. This data can optimise air traffic management, ground support equipment, and ground handling agent operations, contributing significantly to emission reductions and operational efficiency.

Smart resource management empowers airports to reduce their environmental footprint by optimising resource utilisation. Frankfurt Airport (FRA), for example, has implemented ‘smart, needs-driven’ technology powered by

AI algorithms to regulate air conditioning systems, achieving annual CO2 emission reductions of up to 1,900 tonnes.

In some cases, airports have gone beyond conservation, generating resources that benefit local communities. Bengaluru International Airport (BLR) in India, for instance, has become water-positive through initiatives such as rainwater recharge pits and integrated waste management systems.

Looking ahead, innovative technologies like harvesting kinetic energy from aircraft takeoffs and landings are being explored, representing the next frontier in resource efficiency and sustainability.

It is important to remember that airports serve as critical social infrastructure, and their development should be community centric. Local communities are inherently affected by airport developments making their involvement important during master planning.

Partnering with local stakeholders to protect biodiversity and promote cultural heritage creates a sense of shared ownership. Inclusive planning ensures that airports remain socially sustainable, aligning with community interests.

CONCLUSION

In a multi-stakeholder environment, airports must lead by aligning efforts and fostering collaboration. Frameworks like the Civil Aviation Authority of Singapore’s sustainable aviation blueprint, demonstrate how partnerships can create shared visions and direct resources effectively.

By embedding stakeholder needs into sustainable master planning, airports can address environmental imperatives, regulatory demands, and economic resilience.

Through initiatives such as integrating renewable energy and adopting community-focused practices, airports can balance growth with sustainability, driving the aviation industry toward a greener future while fulfilling their social and environmental responsibilities.





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GREEN INNOVATION

Airports across ACI's Asia-Pacific and Middle East region continue to pioneer green initiatives and deliver on sustainability, writes Joe Bates.

DXB CONTINUES TO RAISE THE SUSTAINABILITY BAR

Dubai International Airport's (DXB) has achieved Level 4 'Transformation' status in ACI's Airport Carbon Accreditation programme.

The UAE hub notes that the achievement recognises its efforts to cut carbon emissions and places it among the top 5% of airports participating in the programme.

'Transformation' certification is awarded to airports that realise absolute emissions reductions and drive systemic change with its stakeholders.

The airport has no doubt that its commitment to minimising its environmental impact and enhancing operational efficiency – with a comprehensive focus on decarbonisation, resource conservation, and the adoption of cutting-edge technologies – will play a key role in supporting the UAE's Net Zero 2050 strategy.

"Achieving Level 4 'Transformation' accreditation underscores our firm commitment to embedding sustainability at the core of everything we do at Dubai Airports," enthuses Dubai Airports CEO, Paul Griffiths.

"This recognition not only highlights our progress in reducing our own carbon footprint but also reflects the strength of our partnerships in driving broader, systemic change across the aviation ecosystem.

"For us, sustainability is not a checkbox – it's a long-term strategy that involves collaboration, innovation, and constant improvement.

"The responsibility we own goes beyond our operation; it's about leading by example and embracing a culture where every stakeholder plays a part in creating a more sustainable future. Together, we are setting a new standard for what is possible in airport operations, as we continue to support Dubai's and the UAE's leadership in the global effort towards Net Zero by 2050."

DXB has made significant progress through key initiatives and partnerships aimed at advancing sustainable aviation.

For example, a recent collaboration with dnata and Emirates National Oil Company (ENOC) is designed to transition dnata's non-electric airside fleet to a biodiesel blend, reducing carbon emissions by over 3,500 tonnes annually.

Other initiatives include a partnership with Etihad Energy Services to enhance energy efficiency through building and lighting retrofit and solar integration, and a collaboration with BEEAH Group, reducing landfill waste by 60% through an innovative food waste treatment plan.

On the airfield, DXB's adoption of the 'Follow the Greens' system has also optimised aircraft taxiing, cutting fuel consumption and emissions.

While other successful initiatives include active engagement with 'Airports of Tomorrow', a collaborative venture by the World Economic Forum (WEF) and ACI, to steer the aviation industry toward net-zero carbon emissions by 2050.



GREEN LOAN PART OF NEWCASTLE'S SUSTAINABILITY FOCUSED FUTURE

Newcastle Airport has joined forces with CommBank to fund a raft of pioneering sustainability programmes at the Australian gateway via an innovative A\$235 million Green Sustainability-Linked Loan (GSLL).

The GSLL converts existing loan funding to one linked to specific sustainability actions and outcomes.

Airport CEO, Dr Peter Cock, said with the support of the GSLL, Newcastle Airport is proud to be part of the Hunter Region's transition to low carbon energy.

"As we strive to be the green gateway to the Hunter, we are committed to supporting and demonstrating the region's shift towards a sustainable future," he enthused.

"Our new terminal, which has achieved 5 Star Green Star standard in design, reflects our dedication to environmental responsibility and our role in this important transition.

"We have already achieved net zero for Scope 1 and 2 emissions well ahead of our 2030 goal. It's ambitious programmes like this that are really setting the standard for how we approach sustainability.

"Our terminal expansion build has also been Designed Assessed by the Green Building Council of Australia (GBCA) and is on track to receive a 5 Star Green Star Buildings rating – the first airport terminal in Australia to achieve this under the new rating tool."

CommBank's GSLL is broadly tied to Newcastle Airport's efforts to reduce Scope 3 emissions, achieving a high ACA level and minimising waste sent to landfill across the entire airport precinct, with interest rates linked to ambitious progress against these goals.

In the past year, Newcastle Airport has made significant progress towards becoming one of the most sustainable airports in Australia, including partnering with Australian renewable energy retailer to allow energy requirements to be met entirely through renewable sources helping to achieve net zero Scope 2 emissions well ahead of the airport's original 2030 target.

AIRPORTS OF THAILAND UNVEILS GREEN MANAGEMENT PLAN

Thai airport operator, Airports of Thailand (AOT), has ambitions to transform Chiang Mai, Mae Fah Luang, Phuket, Hat Yai and Bangkok's Suvarnabhumi and Don Mueang airports into 'green' gateways.

The six international airports currently account for 95% of all air traffic across Thailand.

According to AOT's chief advisor for engineering and construction, Jakkraphob Jarassri, the new green strategy focuses on four main pillars – connectivity, system integration, sustainability and airport size.

From the sustainability perspective, the focus is on fostering an eco-friendly airport environment in co-operation with local communities, aimed at reducing the long-term environmental impact of airport activities.

Jarassri, speaking at the recent 'Road to Net Zero 2024: The Extraordinary Green' event, said: "As for airport size, we realised that large airports are not always necessary, and will try to keep these suitable for users' needs while still maintaining efficiency and convenience."

In support of Thailand's bid to reduce carbon emissions from the transport sector, AOT routinely monitors energy consumption at its airports.

"We try to reduce energy usage to minimise greenhouse gas emissions as much as possible," added Jarassri.

"AOT also plans to purchase carbon credits in the future to offset the portion of emissions that we cannot reduce."

BAHRAIN BECOMES FIRST AIRPORT TO RECEIVE IATA ENVIRONMENTAL ASSESSMENT CERTIFICATION

Bahrain International Airport has become the first airport in the world to attain IATA Environmental Assessment (IEnvA) Certification.

Operator, Bahrain Airport Company (BAC) believes that the achievement highlights the airport's innovative approach to environmental sustainability and responsible operations.



BAC CEO, Mohamed Al Binfalal, stated: “Achieving the world’s first IEnvA airport certification is a remarkable milestone, reflecting BAC’s strategic dedication to minimising the airport environmental footprint.

“This achievement is a direct result of the hard work and dedication of the entire airport community, who have embraced our strategic objective.

“By minimising our environmental impact, we not only enhance our own performance but also contribute to a more sustainable future for the entire aviation industry.”

Established by IATA over a decade ago, the IEnvA programme has been instrumental in enhancing the environmental performance of airlines and was expanded to encompass airports and ground handling companies in July 2022.

BAC enrolled in the programme in February 2023. The rigorous certification process involved five stages, including comprehensive gap analyses and on-site assessments conducted by IATA experts.

LEED GOLD CERTIFICATION FOR HAMAD’S ORCHARD

Hamad International Airport’s Central Concourse, which includes the indoor tropical garden, ORCHARD, has received Leadership in Energy and Environmental Design (LEED) Gold Certification.

The certification showcases the airport’s commitment to sustainability and environmentally responsible construction practices.

LEED certification is a globally recognised symbol of sustainability achievement and one of the most widely used green building rating system.

Certifications are awarded to buildings that meet rigorous environmental standards across various parameters,

including energy efficiency, water usage, air quality, and material selection.

The Central Concourse, where ORCHARD is located, is part of Phase A of Hamad International Airport’s expansion plan and was designed to utilise 30% less energy and 55% less overall water usage.

It joins a relatively limited number of airport terminals worldwide which have achieved similar LEED certification from the US Green Build Council.

MATAR, the Qatar Company responsible for operating and managing the gateway, believes that LEED Certificate stands as a testament to Hamad International Airport’s ongoing commitment to reducing emissions and addressing climate change through continuous enhancements to the facility’s environmental performance.

The Qatari hub notes that in its sustained effort to promote sustainability, the airport is spearheading innovative initiatives aimed at minimising waste and maximising resource efficiency, further highlighting its dedication to environmental responsibility.

AIRPORT CARBON ACCREDITATION MILESTONE

ACI’s Airport Carbon Accreditation programme has recorded a new milestone with more than 600 accredited airports worldwide.

The programme provides airports with a robust framework for active carbon management. Its success lies in its ability to convert commitments into concrete achievements, offering airports clear and actionable steps to reduce their emissions effectively.

This milestone comes at a time when the urgency for climate action has never been clearer. Airports are playing an active role in the path towards



decarbonisation: today, 84 airports worldwide are aligned with the objectives of the Paris Agreement, and accredited airports handle over 53% of global passenger traffic.

Notably, 19 airports have achieved the programme’s highest certification, Level 5, operating net zero facilities for emissions under their control while actively working towards full decarbonisation by 2050 or earlier.

From smaller regional airports to major global hubs, the diversity of participants highlights meaningful progress within the aviation ecosystem. Whether it’s the solar panels powering Kota Kinabalu Airport in Malaysia or the creation of a CO2 reducing seaweed bed at Kansai International Airport in Japan, each accredited airport is contributing measurable results in the global effort to decarbonise.

ACI ASIA-PACIFIC & MIDDLE EAST TO HELP MACTAN CEBU ACHIEVE ITS NET ZERO GOALS

In what is being described as a “significant milestone”, Mactan Cebu International Airport has signed a Memorandum of Understanding to become the first gateway to take part in a new ACI Asia-Pacific & Middle East programme designed to help airports establish a comprehensive framework on environmentally sustainable initiatives to achieve their net zero emissions goals.

ICAO president, Salvatore Sciacchitano, and secretary general, Juan Carlos Salazar, were present at the signing of the MoU, which took place at 59th Conference of Directors General of Civil Aviation, Asia and Pacific Regions in Cebu, in mid-October.

As a result of the agreement, through its Net Zero Roadmap – a programme endorsed by Airport Carbon Accreditation – ACI Asia-Pacific & Middle East will provide strategic guidance to support the airport’s sustainability journey.

This on-demand service, which is separate to the Airport Carbon Accreditation programme, will help airports create structured plans, including carbon footprint projections, governance frameworks, and recommendations across areas like assets, fuels, and operations.

The programme also offers guidance on CAPEX planning, implementation strategies, and offsetting measures, while connecting airports with global financial institutions for potential funding.

Airport CEO, Athanasios Titonis, has no doubt that the MoU reaffirms his commitment to establishing Mactan Cebu as a benchmark for sustainability among Philippine airports.

“We are proud to be at the forefront of advancing sustainability in Filipino airports. While we recognise there is still much work ahead, our partnership with ACI Asia-Pacific & Middle East gives us confidence that our initiatives will leave a meaningful, long-lasting impact on the environment,” notes Titonis.

“We aspire to inspire other airports across the Philippines and Asia to follow suit. Together, we can drive sustainable tourism, ensuring that destinations worldwide offer enriching and responsible experiences for generations to come.”

Commenting on the new partnership, Stefano Baronci, the director general of ACI Asia-Pacific & Middle East, said: “In an era where environmental sustainability has become not just an option but a fundamental need for the aviation industry, ACI Asia-Pacific & Middle East is proud to lead in guiding our airport members towards achieving their Net Zero emissions goals. We recognise that robust action is required to ensure that airports are prepared for a sustainable future.”

WBP NEWS

The latest news and views from World Business Partners across Asia-Pacific and the Middle East.



VANDERLANDE ACQUIRES SIEMENS LOGISTICS

Vanderlande has signed an agreement to acquire value-added baggage, cargo handling and digital solutions provider, Siemens Logistics.

According to Vanderlande, the proposed transaction will significantly enhance its value to its customers by providing accelerated access to advanced technologies, improving its global presence, and creating further customer value through synergies in technology development.

Andrew Manship, Vanderlande's president & CEO, says: "Siemens

Logistics' innovative approach and robust business model align perfectly with Vanderlande's vision for the future.

"Its forward-thinking and innovative mindset also proves its ability to adapt to changing market dynamics. Our customers will benefit from a broader range of solutions and services, enabling them to address their challenges more effectively."

The transaction is subject to customary regulatory approval, but is expected to be ratified next year.

GOOD END TO YEAR FOR ALSTEF

Alstef has announced that it has successfully completed the installation of a new baggage system at Princess Juliana International Airport in Sint Maarten in the Caribbean and been awarded the contract to expand the BHS at Zagreb International Airport (pictured right) in Croatia.

The Sint Maarten project was part of the airport's comprehensive recovery and modernisation plan following the devastating effects of Hurricane Irma in 2017.

The Zagreb contract builds upon Alstef's initial installation of the airport's baggage handling system in 2014, which has since been managed and maintained by an onsite Alstef team to ensure continuous, reliable service.



The expansion project will add a new check-in island equipped with 15 check-in desks, allowing the airport to accommodate rising passenger numbers. Additionally, Alstef will integrate an extra screening line along with a full suite of conveyors to connect the new check-in area with the existing screening and make-up carousels.

WBP PROFILES



HORIZON CONSUMER SCIENCE

Location: USA

Type of business: IT and Communications

W: www.horizonconsumerscience.com
Based in the US, Horizon Consumer Science specialises in understanding travelling consumers, from the time they leave home to the time they return. Over more than 30 years it has helped airports, retailers and brands develop their offerings for travellers, troubleshoot problems that occur along the way and track and evaluate performance. It has produced the Travel Retail Catalyst Study (TraCS) since 2012.

PORTS PROJECT MANAGEMENT AND DEVELOPMENT COMPANY (PPMDC)

Location: Saudi Arabia

Type of business: Planning & Construction

W: www.ppmdc.com.sa
Ports Project Management and Development Company (PPMDC) was established in 2007 as the first private company to operate a Hajj Terminal Complex (HTC) in Saudi Arabia, the Hajj Terminal at Jeddah's King Abdulaziz International Airport.

GRAYMATTER SOFTWARE SERVICES

Location: India

Type of business: Consulting & Management

W: www.emma.aero
GrayMatter is a big data, analytics, data science, artificial intelligence and IoT data integration company with 200+ successful business intelligence implementations across multiple industries in the US, Europe, Middle East and Asia-Pacific regions. R&SD for GrayMatter's airport analytics (AA+) solution has been bolstered by a €3 million investment by Tekes, a publicly funded expert organisation for financing innovation in Finland.

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