Published biweekly – available by annual subscription only – www.mombergerairport.info
Editorial office / Subscriptions; Phone: +1 519 833 4642, e-mail: info@mombergerairport.info
Managing Editor / Publisher: **Martin Lamprecht** martin@mombergerairport.info
News Editor: **Paul Ellis** paul@mombergerairport.info – Founding Editor: **Manfred Momberger**

for *inter airport* from MAI #1144

Cambodia Airports has deployed the Amadeus Flow fully integrated cloud platform for airport passenger services to rapidly deploy new passenger handling capacity via the internet as needed. With the new approach, Cambodia Airports can also temporarily reallocate resources not in use. One example would be redistributing airline services between terminals, because the check-in desks and gates will no longer be tied to legacy fixed networks at specific points in the terminal. Amadeus Flow's open architecture is future-ready, laying the foundations for the deployment of innovations such as biometrics, contactless and self-service technologies as required.
Hervé Bonin, general manager of Phnom Penh International Airport (PNH), commented: "Passengers expect a smooth experience, and moving to the cloud with Amadeus means we can deliver that now and into the future. Sharing our long-term vision, Amadeus is the right partner to take care of this complexity behind the scenes so we can easily deploy new innovations that place our customers, passengers, and airlines at the very heart of our airport model. Combining this leading technology with recent key investments in facilities upgrades, our platforms are well prepared to welcome the next growth stage."
Sarah Samuel, head of airport IT, APAC, Amadeus, added: "Airports are at a crossroads when it comes to investment in technology to meet the needs of travellers: should they embrace cloud computing or continue to do things how they've always been done? At Amadeus we believe the airport industry has reached a tipping point, with the pandemic significantly accelerating the move to the cloud. This provides a number of opportunities for airports as we apply new innovations like biometrics to rebuild a better industry. We are delighted to partner with Cambodia Airports and look forward to working closely to realize their strategic vision and to address new challenges and opportunities over the long term."

Seattle-Tacoma International Airport (SEA), WA, has launched two pilot programmes aimed at providing a seamless, touchless travel experience at the airport – SEA Spot Saver, which explores digital reservations for the TSA general screening security checkpoints, and 'happyhover', a technology deployed to airline check-in kiosks for travellers to check in and drop off luggage without touching the electronic screens. "We can use technology to make the travel experience more streamlined and intuitive," said Port of Seattle Commissioner, Sam Cho, adding: "Touchless solutions reduce stress for those traveling today but are the kind of innovations that will make the airport safer and more efficient for years to come. We appreciate the partnership of passengers and airlines to help test these programmes for the benefit of our community."
SEA is one of the first airports in the USA to investigate a 'virtual queuing' system as a solution for crowded general screening lines. Called SEA Spot Saver, it is a free, reservation-based system for TSA general screening security checkpoints. The pilot programme will test if SEA Spot Saver successfully reduces wait times and crowding to better maintain physical distancing. The pilot will operate daily up to 31 August 2021, at Checkpoints 2 and 5 and aims to reduce congestion at the security screening zones. Following the pilot completion later this summer, SEA will evaluate usage with passengers, customer

feedback, and increases to line efficiency. If successful, the airport hopes to launch a broader programme as the Port continues to use staffing and technology to make the security checkpoint experience as efficient as possible.
SEA is also evaluating a touchless technology with happyhover – where fingers are detected above an electronic screen – on common-use check-in kiosks available to various airline passengers, including JetBlue, Spirit Airlines, Korean Air, Volaris, Air Canada and Frontier. With this pilot programme, hardware is mounted discreetly onto the top of the kiosk and creates an infrared sheet of light. The technology emulates a touch interface in mid-air so that the touchscreen responds when the light is broken. This removes the need for travellers to touch superfluous surfaces during the check-in process.

SITA and AOKpass will work in collaboration with the other companies, including AOKpass launch associates International SOS/MedAire and the International Chamber of Commerce (ICC), to facilitate a secure return to international travel. Previously, SITA and AOKpass worked together on operational pilots for 30 days for flights operating from and to airports in Paris (CDG), San Francisco (SFO) and Los Angeles (LAX). Soon, the partners will launch a joint deployment to facilitate the Hong Kong (HKD)-to-Singapore (SIN) travel bubble, which was slated to reopen in May 2021. AOKpass CEO Darren Toh said: "AOKpass has been operationalising successful large-scale deployments for airlines and airports since September 2020, providing safe and secure Covid-19 status verification for thousands of passengers. We're just one of the many critical players needed to reactivate international travel. Interoperating with industry leaders such as SITA is vital to any truly global effort to overcome the unprecedented barriers Covid has imposed on cross-border mobility." SITA will be able to incorporate privacy-preserving health pass verification functionality into its solutions after combining with the AOKpass system. This integration is said to result in creating an end-to-end frictionless experience across the entire journey of the passengers.
SITA vice-president Jeremy Springall said: "A key benefit of SITA Health Protect is a unique ability to seamlessly integrate with multiple travel pass or 'health passport' schemes, bridging the gap between these schemes and aviation and border processes. Critically, by incorporating Advance Passenger Processing (APP), it enables authorities to make an informed decision about whether a passenger can travel at the point of check-in, improving the safety of all passengers."

Orthogon has joined with Frequentis Group in the first step of the acquisition of L3Harris.
The former L3Harris Orthogon, based in Bremen, Germany, will now operate as Frequentis Orthogon. The company's software benefits todays crowded air traffic environment through the flexible use of resources to reduce controller workload and manage air traffic queues safely and efficiently. The company, founded in 1987, has led advancements in air traffic queue optimisation, demand capacity management, traffic flow management, and visualisation solutions for the air traffic management (ATM) and airport industries for more than 30 years. Notable is the impact that solutions have on reducing air traffic carbon emissions. Together, the products will be further marketed within the Frequentis Group and included in the range of remote digital towers and air traffic control centres.
Orthogon currently employs around 80 people and achieved annual sales of around EUR 10 million in 2020. The management remains in the hands of Frank Koehne, who has been managing the company since 2009. The purchase agreement was signed on 23 February 2021 and closing took place on 3 April 2021.
Together both look to the future with optimism, to grow the business in the air traffic control and airport domain. The takeover is a particular success for Frequentis, as Frequentis has strived for shareholdings in the market-leading company for over 15 years. The takeover of two further units from L3Harris (Harris ATC Solutions business unit from Harris Canada Systems Inc., and Harris C4i, Australia) is expected to complete in the coming months, subject to the usual regulatory approvals.

Pristina International Airport (PRN) in Kosovo is continuing the modernisation of its services with the installation of 10 Auto Bag Drop (ABD) units from Amadeus company ICM Airport Technics, deployed for the benefit of airlines and passengers in time for the summer season. Pristina Airport has been modernising its services since 2011 when the government of Kosovo entered a 20-year franchise with infrastructure management specialist, the Limak Group. In 2018 the airport laid the foundation for the transformation of its passenger services by deploying Amadeus Altéa Departure Control for Ground Handlers and Baggage Reconciliation System to improve service while reducing costs by 20%. The new ABD units will help to automate the process of check-in and bag drop, while reducing interpersonal contact as a response to Covid-19. They will be implemented as a retrofit solution, equating to a third of Pristina's traditional check-in counters.
Gökmen Aritay, COO of Pristina Airport, said: "With the Covid-19 pandemic, travellers demand an automated, quick, convenient and contactless experience at the airport, which is why we're giving them the option to do self-service bag drop. It is the most important step as it drastically reduces crowding and complements our high rate of online check-in, which is already over 90%."

A new concourse at Ronald Reagan Washington National Airport (DCA), VA, includes ADB SAFEGATE's gate solutions delivered by AERO BridgeWorks. The 14-gate concourse is a key element of the airport's Project Journey construction program. The new gates are operated by American Airlines and feature ADB SAFEGATE's Safedock Advanced Visual Docking Guidance System (A-VDGS) and SafeControl Apron Management. With this automated system, pilots can park aircraft precisely and safely, even in adverse weather conditions. Jay Grantham, president of AERO BridgeWorks, said: "In the last five years, AERO has delivered several projects at Reagan National Airport (DCA) and Dulles International Airport (IAD), which are managed by the Metropolitan Washington Airports Authority (MWAA). American Airlines is one of ADB SAFEGATE's largest customers and will be using the Safedock technology to support its regional jet operations.
ADB SAFEGATE delivered 14 Safedock A-VDGS, which were connected to American Airlines' existing SafeControl Apron Management (SAM) solution to automate the docking process. SAM integrates with the airline's flight information system to share flight information with the A-VDGS prior to arrival. Using the A-VDGS to track arrival and departure of aircraft at the gate, SAM provides accurate gate availability information to stakeholders, and supports real-time assignment of gates to mitigate delays. The integrated system further streamlines the aircraft turn process with its Ramp Information Display System (RIDS) capability to deliver vital flight information and updates to flight and ground crew via the Safedock display.
Project Journey includes the new 14-gate concourse as well as two new security checkpoint buildings at Reagan National. This major construction program is transforming the passenger experience by eliminating bus operations to 14 outdoor airline gates. Connecting the gates to the main terminal and converting existing pre-security areas into secured spaces improves passenger flow between concourses and expands passenger access to airport amenities. ADB SAFEGATE's Safedock systems were installed in February 2021.

Alstom has been awarded an EUR 87 million (USD 105 million) contract by the Houston Airport System in Houston, TX, to provide 10 years of operations and maintenance services for the Innovia Skyway automated people mover (APM) system at George Bush Intercontinental Airport (IAH). Under the agreement, Alstom will be responsible for 24-hr train operations and dispatching as well as maintenance of the Innovia vehicle fleet, guideway, signalling system, and facilities including stations and the maintenance building. This follows a previous 10-year services contract with Bombardier Transportation, which is now part of Alstom.

Cincinnati/Northern Kentucky International Airport (CVG), KY, and Assaia International AG are deploying Assaia's Turnaround Control solution at the airport. The solution will help improve

turnaround transparency and assist CVG in working with airline partners to enhance on-time performance. The system will provide a 24/7 overview of what is happening during turnarounds and will notify employees if it detects any deviations from schedule. It can identify the elements or situations that most often cause delays and report back for managers to take corrective action. "Assaia's technology adds critical data points to CVG's early-stage neural network for operational advancements," said Brian Cobb, chief innovation office at CVG, adding: "Structured data generated by artificial intelligence will provide information to make decisions, optimise airside processes, and improve efficiency and safety." CVG Airport is installing new cameras and artificial intelligence technology at several of its gates to capture turnaround data and provide visibility to its airline partners of what is happening at the airport. Computer vision is used to generate insights from video streams and leverage untapped operational data to optimise apron operations in real-time. The system's rollout began in April 2021, with the first gates going live this month.

Smiths Detection has launched a new lithium batteries algorithm for the HI-SCAN 10080 EDX-2is, its dual-view air cargo and checked-baggage screening system. The algorithm will provide automatic detection of lithium batteries in all freight and baggage screened for explosives by the HI-SCAN 10080 EDX-2is, reducing the burden on image analysts with very low false alarm rates. Consumer demand for lithium batteries is growing exponentially, as these batteries are the primary power source for personal and portable electronic devices. Classified as dangerous goods because of the potential for these batteries to ignite, lithium batteries pose a significant safety threat. Since January 2006, a total of 310 incidents of smoke, heat, fire, or explosion involving lithium batteries in air cargo or hold baggage has been recorded.
The lithium battery algorithm is part of Smiths Detection's family of AI-algorithms, iCMORE, which provides powerful automatic detection of dangerous goods and weapons across its conventional x-ray and EDS technologies using deep learning and classical material discrimination, increasing the safety of passengers, staff, goods, and aircraft in a quick and efficient way. The iCMORE algorithms are complementary solutions to existing screening technology.
"We are continually striving to develop new technologies to ensure the safety of people globally" said Richard Thompson, Global Director Aviation for Smiths Detection. "Harnessing the power of deep learning is crucial in further developing object recognition algorithms. This new technology has been developed by working with our customers to capture thousands of X-ray images to then be analysed by the new algorithm so it can learn to detect lithium batteries based on shape. This algorithm will provide the powerful detection of lithium batteries while increasing efficiency and speed for users."

Amsterdam Schiphol Airport (AMS) in the Netherlands has installed computed tomography (CT) scans in all departure and transfer filters to enhance security at the airport. The airport now includes nearly 35 security lanes, around 21 security lanes at Departures 1 and 14 lanes at Departures 2. With this deployment, Schiphol Airport is said to have become the first major airport to switch to CT scans. The airport has opened the new security filter on the mezzanine floor of Departures 1, which now features 21 security lanes armed with CT scans. Departures 1 has now commenced operations after the completion of renovation work. Royal Schiphol Group safety, security and environment deputy director Hedzer Komduur said: "This is a world first. Good news for passengers because they are no longer required to take their liquids and electronics out of their bags when going through security. It's also good for security staff. The CT scan allows them to check baggage on their screen in 3D and even rotate it 360 degrees."
To improve circulation, both the departures have been connected in a way that allows the passengers to move through Departures 2 in case Departures 1 becomes crowded. However, the airport has recommended that passengers pack liquids and gels in their hand luggage.