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Munich Airport, along with its Terminal 2 subsidiary and Dabico Airport Solutions Germany GmbH, has signed a letter of intent (LOI) during inter airport Europe 2023 to develop an innovative concept for fully automated passenger boarding bridges. The LOI outlines plans to define the requirements for autonomous operation of these bridges and jointly develop a pilot system for Munich Airport. The aim is to enhance operational reliability and efficiency by reducing the duration of docking and undocking operations. This initiative aligns with Munich Airport's broader digitalization strategy, which includes various passenger-friendly processes and technologies, such as biometric checks, smart trolleys, chatbots, self-checkout kiosks, and robotic projects for ground handling and cleaning. The collaboration builds on Munich Airport's commitment to innovation and Dabico's expertise, especially following its acquisition of passenger boarding bridge manufacturer FMT in January.

Geneva Airport, in collaboration with SITA and easyJet, has implemented a technological partnership that includes the installation of 30 new kiosks and 15 self-service baggage drop-off points. Since October 2023, easyJet passengers in the international zone can independently drop off their checked baggage before going through security. The deployment follows a successful 3-month trial during the summer, and the service is now extended to all easyJet passengers. Passengers are greeted by Swissport ground handling agents and use the kiosks to validate baggage weight, obtain baggage tags, and attach them. The bags are then placed on the baggage carousel at self-service drop-off points. The process is designed to be autonomous for passengers, with assistance agents available if needed. Personalized assistance is also provided by mobile and fixed ticket offices. The new baggage drop-off area incorporates advanced features for handling special baggage, such as skis and bicycles. The goal is to improve and streamline the passenger experience by reducing check-in time. The process allows for various situations, including printing labels for special baggage and payment for excess baggage directly at the kiosks.

Fraport, the operator of Frankfurt Airport (Germany), is gradually transitioning its vehicle fleet to electric drives. Alongside this initiative, the airport is expanding its charging infrastructure to support bidirectional charging. This technology will allow electric vehicles to act as mobile storage units, feeding unused power back into the grid as needed. Fraport aims to implement this innovative solution to stabilize the network and power supply, aligning with its goal of achieving zero carbon operation by 2045. The project, supported by the German Ministry for Economic Affairs and Climate Action, involves an investment of over EUR 5 million in Frankfurt Airport over the next four years. Fraport, along with partners, will invest an additional EUR 4.1 million. The airport's unique position as both the network operator and primary consumer enables it to model a bidirectional charging infrastructure despite ongoing standardization challenges. The initiative aims to create a large-scale virtual reservoir using electric vehicles as storage units, managed by sophisticated software to balance supply and demand. Fraport currently has around 650 electric vehicles, with plans to add 600 more by 2026. The bidirectional charging system will be gradually introduced throughout the airport, with nearly 90 charging points to be installed over the next three

years. The project is expected to enhance network stability, provide economic benefits, and contribute to Fraport's sustainability goals.

Frankfurt Airport (Germany) has initiated a trial of the Rohde & Schwarz R&S QPS Walk2000, a walk-through scanner aimed at expediting security checks. Located in Concourse A of Terminal 1, the 360-degree scanner utilizes millimetre-wave technology to penetrate multiple layers of clothing, eliminating the need to remove jackets and coats.

The AI-based detection software identifies both metallic and non-metallic objects. Anomalies are displayed on a unisex avatar in real-time, reducing the necessity for follow-up checks.

The trial, jointly evaluated by Fraport and the German Federal Police, will determine the scanner's approval for daily operations. The chosen high-footfall area allows for a direct comparison with existing R&S QPS201 scanners, aiming to make walk-through security checks as reliable as the current procedures.

Leidos has introduced ProSight, its latest enterprise software platform designed for airports and commercial entities with high-risk entry points. Unveiled at inter airport Europe 2023, ProSight serves as a centralized security management system, integrating traditionally separate elements such as security screening equipment and threat detection algorithms. The platform provides real-time data through business intelligence dashboards, enhancing operational efficiency and threat detection. ProSight's open architecture allows improved performance, maintainability, and scalability, with deployments planned at several airports in the UK, Europe, and Australia in the coming months.

The Greater Toronto Airports Authority (GTAA) in Canada has unveiled an innovative autonomous airfield inspection vehicle, a pioneering solution for inspecting airport runways, taxiways, and security fences. Developed in collaboration with technology leaders such as Honda, Illuminex AI, Genwave Technologies, Cisco, and Eagle Aerospace, the proof-of-concept solution aims to enhance the safety, security, and sustainability of Toronto Pearson Airport.

The autonomous vehicle is designed to alert GTAA to potential safety or security issues, providing an efficient and accurate means of managing airfield operations. The initiative reflects Toronto Pearson's commitment to investing in technology-driven solutions to ensure the airport's overall efficiency.

Christchurch International Airport, the second largest airport in New Zealand, has collaborated with Amadeus to enhance its passenger service infrastructure by adopting more efficient and sustainable common-use technology shared by multiple airlines. The new system simplifies the check-in process for multiple airlines, offers flexibility for seasonal operations, and allows connections with passengers at locations beyond the airport.

This move to cloud-based infrastructure enables Christchurch Airport to decommission 80 energy-intensive workstations, replacing them with super-efficient thin client devices. The upgrade is timed to enhance check-in processes before the busy summer season, providing passengers with more time to relax before boarding. The collaboration with Amadeus also paves the way for future transitions to self-service kiosks and bag drops for all airlines and passengers, contributing to a more streamlined and frictionless travel experience.

Airports Council International (ACI) World has affirmed its commitment to enhancing cybersecurity in the aviation sector through advocacy and the introduction of a new assessment program. This commitment follows the adoption of the ACI World Resolution at the 33rd ACI World Annual General Assembly, addressing evolving cyber threats in aviation. ACI World will actively participate in the International Civil Aviation Organization's (ICAO) Security Week 2023, emphasizing the need for a regulatory framework focused on outcomes, leveraging existing standards, and fostering a cybersecurity culture.

The newly launched APEX in Cybersecurity, an extension of the Airport Excellence (APEX) program, aims to help airports identify vulnerabilities, mitigate risks, and ensure regulatory compliance by providing a comprehensive evaluation of their cybersecurity landscape. ACI World stresses the importance of

collaborative efforts to strengthen the aviation ecosystem's resilience to cyber events and emphasizes the significance of incident response and recovery mechanisms, as well as international cyber information-sharing mechanisms.

Luis Felipe de Oliveira, Director General at ACI World, emphasizes the need for a collaborative approach to address cyber threats and introduces the APEX in Cybersecurity program to enhance cyber awareness and resilience standards across airports globally.

Avinor and Roboxi, a startup based in Forus, have demonstrated a robot at Stavanger Airport Sola (Norway) designed to revolutionize airport operations. The robot, about the size of a car, is equipped with cameras and sensors to check runway lights, detect and scare away birds, identify and remove foreign objects (FOD) that could damage aircraft, inspect fences, and identify cracks in the asphalt. In the pilot project supported by Innovasjon Norge, the robot is remotely controlled by an operator but aims to operate autonomously in the future.

The initiative explores the potential of digitalizing traditional tasks on the airside, enhancing efficiency with artificial intelligence and 5G technology. The robot will be tested under different climatic conditions in Stavanger and Alta. The project aligns with Avinor's need to test 5G technology in response to increasing aviation activities and the rise of autonomous vehicles and drones.

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