

## **for inter airport Europe from Momberger Airport Information #1215 / April 15, 2024**

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**T-Systems and Frequentis are advancing the digitalization of Dublin Airport (Ireland) by integrating Frequentis' management product, airportWORKS, into the airport's systems.** This technology enhances information flow and resource management by digitizing all airside maintenance and repair activities on the apron, taxiways, and runways. T-Systems has connected airportWORKS with its own management system in Dublin, enabling automatic updates regarding tarmac works to systems managing terminal and apron parking positions. This integration facilitates seamless coordination during full flight operations, providing quick, informed updates to all relevant parties and ensuring alignment with the airport operations plan. Additionally, airportWORKS generates audit-proof reports for air traffic control and civil aviation authorities. T-Systems, already a provider of airport management solutions to over 50 international airports, focuses on optimizing flight plan and resource management and enhancing passenger experiences across terminal operations. The collaboration with Frequentis extends T-Systems' digitalization solutions, improving efficiency, reducing costs, and boosting passenger satisfaction by integrating flight operations into its service offerings.

**Manchester Airport (United Kingdom) has installed a new, advanced baggage handling system (BHS) in Terminal 2, which is set to serve about 70% of the airport's passengers from 2025.** Developed by Vanderlande, the system spans over two miles of conveyor belts and is capable of processing 3,000 bags per hour. Since its launch in late March, it has already handled over 100,000 bags. The system efficiently transports bags through in approximately 10 minutes, ensuring quick delivery to aircraft by ground handling agents. This installation is part of a broader £1.3 billion upgrade program aimed at enhancing the overall passenger experience and operational efficiency at Manchester Airport, as stated by Managing Director Chris Woodroofe.

**Gatwick Airport (United Kingdom) has launched a cloud-based geospatial data platform using GIS (Geographic Information System) technology from Esri UK to enhance the safety of engineering and construction works and support environmental sustainability.** The system helps in preventing accidental strikes on buried utilities by providing a single view of assets such as gas, electricity, telecoms, water, and fuel lines across the airport's 650-hectare site. This integration of spatial data allows for better collaboration and decision-making, supporting up to 50 ongoing engineering and construction projects by making work safer and minimizing disruption risks. Furthermore, the GIS platform is instrumental in managing the airport's biodiversity, assisting in the Biodiversity Action Plan (BAP) aimed at achieving a biodiversity net gain by 2030. It offers insights to plan works around environmentally sensitive areas, incorporating data on protected species, and supporting the sustainability strategy, including optimizing sites for solar panel installations. The airport envisions expanding the GIS's utility as a planning tool for estate-wide works and sharing data with local planning authorities to streamline planning processes. Simon Richardson, Gatwick Airport's digital information lead, highlights the GIS's role in democratizing spatial data, enhancing operational efficiency, and contributing to the airport's sustainable development, including the creation of a digital

twin for Gatwick. The initiative reflects Gatwick's commitment to technology-driven efficiency, environmental protection, and sustainable growth.

**Amsterdam Airport Schiphol (The Netherlands) has introduced a feature providing travellers with real-time baggage waiting times, enhancing the passenger experience by using predictive algorithms.** This technology, which Schiphol already applies to aircraft ground handling, feeds into a self-learning model drawing from 13 data sources, including the Deep Turnaround technology for insights into the aircraft turnaround process. Passengers can now see where their luggage is—whether still on the plane, en route to the baggage basement, or on the baggage belt—and its estimated arrival time on the belt. This information is accessible on 150 screens in the baggage halls, through the Schiphol app, and on the airport's website.

Sander van Tienhoven, AMS's product owner of passenger information, highlighted that this innovation stems from passenger feedback desiring updates on baggage arrival times, aiming to provide transparent and up-to-date luggage status.

**Ljubljana Jože Pučnik Airport (Slovenia) has implemented Assaia's turnaround technology to enhance turnaround efficiency, marking a key development for the Fraport group's network of airports.** This technology has already shown promising results, notably reducing average ground delays by nearly six minutes for flights responding to alerts.

The system is operational at all critical gates, allowing real-time operations optimization, including accurate staffing based on live events and data-driven improvements to Standard Operating Procedures for faster, more predictable turnarounds. Assaia's system, which employs computer vision and AI, monitors all aspects of the turnaround process, integrating data into relevant systems to provide real-time updates and long-term insights.

This initiative is part of Fraport's strategy to improve apron operations, benefiting passengers and airline partners by streamlining aircraft ground time. Assaia aims to enhance on-time performance, safety, and sustainability, for instance, by tracking and potentially reducing unnecessary auxiliary power unit usage to lower carbon emissions.

**ADB SAFEGATE has successfully partnered with Aeroporti di Roma to implement a significant innovation and cybersecurity project at Fiumicino Airport in Rome (Italy).** This project included the virtualization of the Airport Operations Centre (APOC) and the implementation of a cybersecurity system for the apron management software and the Airfield Lighting Control and Monitoring System (ALCMS/ILCMS) infrastructures.

This collaboration marks a key advancement in Fiumicino Airport's digital and innovation strategy, allowing for enhanced IT security in compliance with stringent criteria set by the Italian Cybersecurity Authority. The project, which took two years to complete, was executed without disrupting airport operations, ensuring continuous system redundancies.

The initiative has provided the airport with a fully updated cybersecurity infrastructure and the capability to manage various operations from the APOC, positioning Leonardo da Vinci-Fiumicino Airport as a leader in operational efficiency and safety. This project is part of ADB SAFEGATE's broader commitment to improving airport operations worldwide through integrated solutions that enhance efficiency, safety, environmental sustainability, and reduce operational costs.

**SITA is partnering with John C. Munro Hamilton International Airport in Ontario, Canada, to enhance the passenger experience through advanced technological solutions.** This collaboration involves the installation of 28 common-use passenger processing workstations and four TS6 common-use self-service kiosks, designed to expedite the check-in and boarding processes. This initiative is part of Hamilton International's efforts to improve passenger flow and convenience, especially with the opening of The New Terminal One at John F. Kennedy International Airport.

This partnership marks the sixth between SITA and major Canadian airports, contributing to the deployment of over 700 kiosks and 2,000 workstations across the country in 2023. These upgrades follow Canadian accessibility standards and lay the groundwork for future technological advancements, including

contactless services and biometric features, in line with the Canadian Airports Council's vision for a technology-driven, consumer-centric travel experience.

Hamilton International's commitment to enhancing the passenger journey is supported by SITA's technology, aiming to provide a more accessible, efficient, and hassle-free experience. SITA's involvement underscores the ongoing trend of digitalization across Canadian airports, facilitating a streamlined and technology-enhanced passenger experience nationwide.

**The BEUMER Group and HÖRMANN Klatt Conveyors have entered into a strategic partnership to launch SECTRO, an innovative solution for hand baggage screening at airports, aiming for a market debut in 2025 with pilot projects starting this year.** SECTRO is designed to process up to 1000 passengers per hour per module, significantly reducing waiting times and the need for CT scanners and personnel by 50% and 33% respectively, compared to traditional security lanes. This system enhances passenger experience by utilizing a self-service area where baggage is placed in biometrically linked, lockable containers, minimizing loss or theft risks. Baggage needing further checks can be easily identified, directing owners to a specific area.

The prototype, completed in late 2023, is moving towards certification, with BEUMER Group handling the market launch, sales, and customer support, and HÖRMANN Klatt Conveyors providing the conveyor technology. This partnership aims to alleviate the stress of security checks for passengers, addressing labour shortages and improving efficiency and satisfaction for airports, airlines, and travellers alike.

**Mallaghan, a ground support equipment (GSE) manufacturer, has launched the SkyBelt, an innovative belt loader designed to enhance the efficiency and safety of aircraft baggage handling.** Manufactured in Dungannon, Northern Ireland, and Atlanta, Georgia, the SkyBelt introduces a patented lifting system and an advanced sensor array to minimize the risk of aircraft damage during ground handling operations.

Its design allows for vertical boom movement without the unintended lateral movement typical of other loaders, reducing the chance of fuselage contact. The SkyBelt also features an auto-raise function and an automatic height adjustment system to maintain alignment with the aircraft bin floor, requiring no special monitoring by operators. This electric belt loader is distinguished by extended run times, remote diagnostic capabilities, and has been rigorously tested for reliability.

With its deployment at major U.S. airports like SEA, LAX, and LGA, the SkyBelt aims to reduce aircraft damage, lower maintenance costs, and improve sustainability in ground handling services. Mallaghan offers the SkyBelt with a robust chassis design, an AC traction motor, and optional features such as a Collision Avoidance System and customizable handrails, marking a significant advancement in GSE innovation.

**Publisher's note:** The articles in this special report, compiled for **inter airport Europe**, are a few select samples from the biweekly **Momberger Airport Information** newsletter, published since 1973. The newsletter is an advertising-free, global airport news service that consists of 9 modules and allows subscribers to customize their own newsletter package. The modules that make up the biweekly newsletter are: Airport Development (DEV), Calendar of Events (CAL), and the subscriber-selectable modules Airport Operations (OPS), Management, Ownership & Finance (MGT), Ground Support Equipment (GSE), Air Traffic Services (ATC), Consultant & Contractor / Sustainable Aviation (CON), Airport Information Technology (AIT), and Maintenance Base & FBO (MRO). For more information, a sample of a complete newsletter issue, and to order an annual subscription, please visit [www.mombergerairport.info](http://www.mombergerairport.info)