

## **for *inter airport* from MAI #1148 / July 10, 2021**

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**Nokia, in collaboration with solutions integrator Singapore-based Beaqon Pte, is to deploy its passive optical local area network solution at Changi Airport (SIN), Singapore.** The new network will support existing operations and enable new services to advance Changi Airport's digital transformation. Nokia said that the optical LAN will be able to support existing CCTV operations as well as intelligent subsystems. Stuart Hendry, head of enterprise for Asia-Pacific and Japan at Nokia, commented: "Changi Airport has a clear mission to become the world's leading digital air hub, transforming its operations efficiently and securely to deliver a seamless travel experience for passengers. This transformation to Airport 4.0 relies on secure and powerful networks that can connect thousands of devices. As a leader in passive optical network (PON) solutions, we are committed to leveraging fibre technology to offer enterprises a quicker and more cost-effective way to deploy LANs. We will partner closely with Beaqon as it transforms operations at Singapore Changi Airport." The optical LAN system leverages the tremendous bandwidth capabilities of fibre, which it is claimed will enable it to cover greater distances than copper LAN networks in a smaller footprint. Nokia notes that it also offers a flexible, scalable, and sustainable way to connect applications, and address growing data demands while reducing capital and operational expenditure. The network will use the Nokia PCC to simplify network monitoring and operations even as Changi Airport expands connectivity to thousands more sensors and devices as it introduces new digital capabilities. The network will use geo-redundancy to ensure data is secure and always available.

**Airport operator Lithuanian Airports says it has integrated the Eddy Travels artificial intelligence (AI) assistant to help travellers plan their trips.** The AI assistant is now available on Vilnius Airport, Kaunas Airport and Palanga Airport websites, making Lithuania one of the first countries globally to have an AI-powered travel assistant on national airport websites. The fully automated AI assistant enables travellers to use natural language to search and book the best travel deals without the need to enter search criteria in cumbersome search forms. Instead, travellers can search flights, accommodation, tours, and activities by messaging the digital assistant in the chat available on airport websites. The chat widget appears after 30 sec on the pages where the direct travel destinations from the airports are listed. According to Rasa Petraitiene, head of customer experience at Lithuanian Airports, the rising demand for air travel as countries loosen restrictions prompted a look for additional tools to ease the travel-planning process. "Our goal is to help travellers navigate the abundance of information regarding today's travel rules and regulations. Fuelled by rising vaccination rates and with many countries opening up, we are happy to offer an additional tool that makes planning for your next trip simpler," she said.

**SITA has implemented its new generation of passenger processing infrastructure at Václav Havel Airport Prague (PRG) in the Czech Republic, paving the way for a completely touchless, mobile passenger journey at the airport in future.** SITA's new TS6 Kiosks work in harmony with SITA's next-generation SITA Flex, offering a fluid and intuitive experience for passengers and increased agility for the airport. Beyond optimising the current experience for passengers, SITA's

next-generation platform empowers Prague Airport to move from the traditional passenger journey to a more efficient and seamless digital passenger journey using mobile, self-service, and automated solutions on-site and off-site. This means in the future passengers will be able to complete various steps in the journey such as check-in and bag drop from their mobile phone or using their biometric identity, improving passenger satisfaction, and streamlining the flow of passengers through the airport. Part of this solution is the deployment of 35 versatile SITA TS6 check-in kiosks that allow passengers to check in with ease and, with the support of SITA Flex, enjoy a unified experience no matter which airline they are flying. The new SITA TS6 kiosk was the winner of the 2021 IF Design award for the slick, sustainable, and adaptive design, which can be customized to fit with the airport's brand design and specific customer needs. The kiosks are complemented by overhead displays and integrate with SITA Flex and represent the future of passenger processing, providing a consistent user experience across platforms. SITA Flex, which is designed to be cloud-based, can be switched on the moment an airline develops a cloud-based app. As a result, airlines can transform their passengers' journeys, building on or tailoring existing passenger processing infrastructure and software.

**Vision-Box, in collaboration with the Finnish Border Guard (RAJA), has deployed the EU first entry/exit system (EES) project at Finland's Helsinki Airport (HEL) in the Schengen area.** The entry/exit system project looks to expand and upgrade the existing border control infrastructure and boost operational efficiency at the airport. Vision-Box secured a contract from RAJA to provide a scalable system, enabling Finland to implement Smart Borders at the airport. Since early 2019, RAJA and Vision-Box have executed the project in phases, at Helsinki Airport, which is the biggest and busiest airport in the country. According to Vision-Box, the implementation of the new system will ensure that Finland complies with the EU regulations on biometric and biographic data capture at entry and exit points in the Schengen area. It is also expected to support officers on the duty and improve operational efficiency. Featuring a suite of digital tools, the new infrastructure minimises or eliminates passenger contact with touchscreen surfaces. Besides, contactless biometric identification addresses safety concerns by reducing physical interaction with the airport and border control officers. Once the system becomes operational in 2022, EES will replace traditional border controls of third-country nationals with digital passenger processing and automated biometric data collection. RAJA is already using the solution with transitional workflows that include the self-service processing of physical visas for TCN-VH (Visa Holders). Vision-Box strategic sales and global partnerships vice-president, Jeff Lennon, commented: "Finland has become the Smart Borders pioneer by implementing the first EES project inside the Schengen space, leveraging Vision-Box's expertise and innovative solutions. The country is now the reference for a successful, secure, safe and compliant solution for EES' enablement at air borders."

**Melbourne, Australia-based airport tech startup, Elenium Automation, has launched VYGR, an AUD 200 million programme to improve airport technology, which it says offers airports and airlines the latest automation technologies to reduce time and lower operational costs.** Elenium Automation launched the programme to help airports and airlines upgrade their technology to make travel seamless and post-Covid ready. The company claims that VYGR (short for Voyager) will allow airlines and airports to access the latest automation technologies without capital investment. The purpose of the AUD 200 million programme is to eliminate the financial risk of deploying such technology during an uncertain time with a consumption-based model, paying only on a per use basis. By using biometrics, telepresence, and touchless technologies that Elenium designed, passengers can walk into the terminal, drop off their bag, and continue to the lounge or boarding gate without having to touch a boarding pass, bag tag or screen. Automating the passenger journey saves more time and energy. An airport can halve the space used for check-in, allocating more space for valuable retail. Travellers spend less times in queues and operational costs can be lowered, according to Elenium. Justin Giddings, CEO of Avalon Airport (AVV), VIC, Australia has applauded how Elenium's innovation worked: "Its technology reduces congestion in the check-in area. Elenium has really freed up a lot of space. It's probably doubled our capacity in the check-in area just by installing these products." Rob Bowring, a senior aviation executive with more than 25 years' experience in the industry has joined

Elenium to lead VYGR and its innovative business model. Bowring has spent the last 12 months playing a key role on Multiplex' bid to design and construct the Western Sydney Airport terminal. Elenium CEO Aaron Hornlimann says the aviation industry can benefit from VYGR by implementing technologies without worrying about the upfront cost and managing the risk of operational disruptions from pandemic to bad weather and adds that airports can pay for it when they use it.

**BEUMER Group has been selected by Norway's airport operator Avinor to design, integrate and operate a new Baggage Handling System (BHS) to replace the existing system at Oslo Airport (OSL).** The investment in the new BHS is a key element in Oslo Airport's development strategy to 'future-proof' operations and to become a central hub. The BHS integrates the latest technology which will enable Oslo Airport to deliver forward-thinking operations which are based on data-driven decisions. The BHS will also continue to interface with the technologies of tomorrow.

A CrisBag® tote-based baggage handling system will be delivered as an end-to-end solution for the entire baggage handling process. Departure, arrival, and transfer baggage will be processed inside the same system, and with 100% tracking at all times. For baggage handlers, more effective handling will be delivered, without heavy lifting, and with automated speed loading which is typically used in warehouse and distribution centres. For airlines, the BHS will enable fast baggage transfers, which are increasingly important for passengers and for competitive hub operations.

With this investment, Oslo Airport joins a list of international airport hubs which are seeing the long-term benefits of investing in modern baggage handling technology. Most recently, San Francisco Airport opened the revamped Harvey Milk Terminal with a CrisBag system and joins Calgary, Singapore Changi and other airports. Munich Airport was among the pioneers to use CrisBag, which has been the backbone of their international terminal operation for two decades. The system has provided low operating costs as well as ongoing integration with new technology to support the airport's exceptionally fast transfer service. At Oslo Airport, the CrisBag system is scheduled to go into operation in summer 2024.

**Pittsburgh, PA-headquartered Argo AI says its autonomous vehicles will begin testing at Munich Airport (MUC) in Germany on an asphalted area of around 55,000 m<sup>2</sup>.** Around four months after the start of construction work, the management of Munich Airport has now been able to hand over the preliminary test track of the new development site, which it says was completed on schedule. Over the course of the construction work, 220 m<sup>3</sup> of concrete was used, 16,000 m of cable conduit was laid and more than 1km of fencing erected. Among other things, 16 LED floodlight masts, each 18m high, are used to illuminate the facility. The second construction phase of the test track, which will increase the area by approximately a further 36,000 m<sup>2</sup>, is scheduled for completion by the end of 2022. As part of the development of its self-driving system, Argo AI will use the area to test autonomous vehicles in different scenarios from normal traffic events. The company will also be testing its autonomous vehicles on public roads in Munich.

**Dungannon, Northern Ireland-based GSE manufacturer Mallaghan has bolstered its commitment to green aviation with the launch of a new brand to further develop its range of eco-friendly and electric products.** The company's electric i-tec portfolio comprises equipment to support ground handling, cargo handling, passenger transportation, aircraft catering and cleaning and aircraft maintenance for aviation partners across the world. The further electrification of the range will assist airlines and airports achieve environmental targets set by the global aviation industry. A Mallaghan spokesman said: "Mallaghan undertook significant research to understand the unique needs and requirements of our aviation colleagues, and these findings were central to the development of our i-tec portfolio. Details of the electric products have been warmly welcomed by customers who are now looking to the future after an incredibly difficult year." The i-tec range will be developed at the company's manufacturing facilities in Northern Ireland and Georgia, USA.

**Hamad International Airport (DOH) in Doha, Qatar, in partnership with Smiths Detection, has installed new screening technology at its security checkpoint.** The new screening lane, which has been installed at DOH's transfers' hall, is a part of the airport's 'Smart Security Programme',

which aims to deploy advanced screening technological solutions across the wider airport campus. The new technology does not require passengers to remove either liquids or larger electronic items from their bags and will allow for faster passenger processing by providing the possibility for up to six passengers to load their items into trays at the same time. It also incorporates passenger boarding pass scanners prior to screening that enable a range of benefits, one of which is to electronically 'tag' each passengers' belongings to their boarding card to ensure the belongings are tracked. Once passengers remove their possessions from the tray, the system scans the tray to ensure no items are left behind. In the unlikely event a passenger loses an item, a swift investigation can then be conducted on their behalf. The technology further advances passenger security and customer service as it incorporates a shoe screening capability conducted in only a few seconds without the need for passengers to remove their footwear. A remote screening management system for cabin baggage aims to continually keep the system belt moving, even during the image evaluation process. The airport says the system also provides a high detection and low false-alarm rate, which contributes to fewer random checks. The scanner is also fitted with UV-C modules to disinfect every tray before passenger use. As part of its partnership with Smiths Detection, DOH was the first airport in the region to install Smiths Detection's HI-SCAN 6040 CTiX, which screens carry-on baggage at security checkpoints using Computed Tomography (CT).

**Japan's Narita International Airport (NRT) in Tokyo has announced plans to install new automatic disinfection equipment (UV modules) for its security checkpoints at all terminals.**

As part of the project, nearly 62 **Smiths Detection UV disinfection modules will be incorporated** in the security lanes. Around 27 modules will be deployed at international security screening checkpoints in Terminal 1, with 22 in Terminal 2, and 13 modules at international and domestic security screening checkpoints in Terminal 3. The new equipment will feature a shielding mechanism that will conform with international standards to prevent UV light leakage from outside the module. The deployment of the equipment will begin from November 2021 and is anticipated to be finished by the end of FY 2021. Narita Airport has also made investments in fully integrated checkpoint and hold baggage solutions to help ease traffic, reduce passenger wait time, cut down on touch points, and streamline security processes.

**Meanwhile, Smiths Detection has announced that its ultraviolet (UVC) automatic tray disinfection solution is currently on trial at Paris-Charles de Gaulle Airport (CDG).** Smiths Detection's UVC system has been trialled in Terminal 2E since September 2020.

**Publisher's note:** The articles in this special report, compiled for **inter airport Europe**, are samples from the biweekly **Momberger Airport Information** newsletter, published since 1973. The newsletter is an advertising-free, global airport news service that consists of 8 modules and allows subscribers to customize their own newsletter package. The items in this report represent only a small sample of **Momberger Airport Information**. The modules that make up the biweekly newsletter are Airport Development (DEV), Calendar of Events (CAL), and the subscriber-selectable modules Airport Operations (OPS), 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 and to order an annual subscription, please visit [www.mombergerairport.info](http://www.mombergerairport.info)