

AIRPORT INFORMATION TECHNOLOGY

Airport & Ground Operations

Global Information and Communication Technology (ICT) provider T-Systems is soaring with solutions for major international airports. At Berlin-Brandenburg International (BBI) T-Systems' ICT will manage traffic at the capital's new airport, while at Malmö in Sweden, T-Systems is providing a hosting solution with real-time information for displays.

The new Berlin-Brandenburg Airport - Europe's biggest airport building project - opens in 2011 with a capacity of up to 27 million passengers annually. **In addition to setting up the network and large parts of the IT infrastructure for BBI, T-Systems was commissioned to implement the new traffic control systems.** These bring current and consistent information to the whole airport staff through to the traffic control centre as well as to the passengers, people picking up visitors, and visitors. In the Airport Control Centre, the geographic information system provides employees with an overview of all processing stations from the landing approach to take off as well as on the airport premises and can smoothly coordinate these stations in the Resource Management System (RMS). The solution also includes the airport database AODB (Airport Operational Database). Acting as the airport's 'brain', the AODB processes information from all operational applications, and forwards the individually processed information to connected systems as a basis for decision-making. This includes applications for air traffic control, the airlines and the dispatchers.

Swedavia (formerly known as LFV) is the Swedish airport operator owning and operating 14 airports all over Sweden. Since 2007, **Swedavia has used T-Systems' Flight Information Display System (FIDS) at Göteborg-Landvetter Airport. As part of a system harmonization strategy, Swedavia is currently successively upgrading most of its other airports to this state-of-the-art FIDS solution.** As platform for this upgrade, T-Systems has successfully provided the centrally-hosted FIDS software platform. The system provides the various display units at the airports with real-time information for passengers and airport personnel. Features at the various airports such as support for different processes, presentations, layouts and display types will thereby be individually taken into consideration for each connected airport. Via an integrated web solution, information can be retrieved online e.g. about current arrival times at the airport. **In Malmö, the rollout already took place in June 2010.** The application is centrally operated on the servers at Swedavia's data centre in Stockholm. 883.AIT1

Mercator, the IT solutions provider of the Emirates Group, has acquired the tikaERO passenger services system solution through TIK Systems. With this acquisition, Mercator will now offer world-class, fully functional, flexible and cost effective passenger service and distribution solutions to hybrid, regional, low-cost and start-up airlines worldwide. Unlike other products on the market, the innovative tikaERO system is built on latest technology systems architectures using Microsoft Technologies, thereby enabling easy configuration, fast multi-language user interface changes and simplified end user training and support. Patrick Naef, Divisional Senior Vice President Emirates Group IT, stated: "Currently used by 19 airlines around the globe, tikaERO is better, smarter, faster and more efficient than anything on the market. It's built by staff with airline experience, for airlines. It will help airlines to significantly lower costs by minimising distribution costs, increase their efficiency and lower training efforts. In today's

market where airlines are posting significant losses, this product offers enticing rewards for cutting costs, increasing flexibility and improving long term economic efficiencies and overall net profits.”

The package includes a modern end-to-end customer-centric airline management solution, including web booking engines for consumers, travel agencies, corporate accounts and mobile devices, as well as connectivity with all major Global Distribution Systems. The system is fully IATA e-ticketing compliant, but can be equally adopted by non-IATA ‘ticketless’ low-cost airlines, therefore combining the best of distribution worlds. -- Mercator will establish a new office in Bangkok to which all TIK Systems’ staff will transfer. This office will provide a new base for Mercator’s product development. 883.AIT2

Airports in Geneva and Zurich are among the first in Europe to make the ground at airports safer by using a new ground collision warning system. The system has been in use by Skyguide in Geneva since December and in Zurich since 31 May 2010, and the testing phase is now completed.

Technically known as Runway Incursion Monitoring and Conflict Alert System (Rimcas), the new system supports air traffic controllers as they monitor and manage movements of aircraft and vehicles on the airport’s runway and taxiway network. Such systems are common in the air, around airports, but not on the ground. Interference from buildings, topography and various sources has made it difficult to develop reliable systems that do not have frequent problems with false alarms.

Rimcas is fed by the data it needs from various sources such as radar and sensors, according to Skyguide. The system then uses the data to constantly calculate the positions of all the aircraft and vehicles on or near the airport’s runways and taxiways. In doing so, it also identifies any possible movement conflicts as they emerge, and alerts the tower controllers to these by issuing audio and visual signals. “Our new warning system gives us an additional safety net to support our tower controllers in their work,” says Urs Ryf, head of operations at Skyguide. 883.AIT3

Air Cargo & Logistics

Global logistics and transportation provider Aramax has selected Messaging and Cargo 2000, Descartes’ Global Logistics Network (GLN) and global supply chain execution applications, to help manage its air freight operations. Descartes’ GLN provides freight forwarders with messaging services that simplify cargo and freight management operations for import, export and domestic transportation activities. Descartes’ GLN helps airlines meet global customs requirements; monitor shipments at a master air waybill level between airports; monitor events and match route map milestones against actual event timing; simplify shipment management and invoicing; consolidate status data of multiple route maps to measure and improve transportation quality; and transmit accurate tracking updates to customers. In addition, Aramex has selected Descartes’ Cargo 2000 solution to help it comply with IATA’s Cargo 2000 initiative. Descartes Cargo 2000 supports the IATA initiative as a fully certified member of the IATA-sponsored Cargo 2000 special interest group. 883.AIT4

Air Traffic Management & Flight Operations

Moldovan Air Navigation Service Provider (ANSP) Moldatsa has chosen apsXML as its eAIP software. The decision came after discussions with Managed-AIS, the U.K.-based aeronautical information specialists behind apsXML. The apsXML tool provides the eAIP and AIP production subsystem

for the European AIS Database (EAD), and is already in use by 17 other EAD states. Moldova was amongst the first group of states to successfully publish an eAIP and will now move their production onto apsXML. Using the EAD eAIP production tool has a number of advantages for a state including full integration with other EAD systems, the ability to use AIXM data in eAIP, and the possibility to publish eAIP pdf and html files directly to PAMS. The users of the EAD eAIP subsystem already own more than 50 licenses of apsXML. Hungary, Latvia and Portugal currently use the system to publish and maintain their eAIP, and a further nine clients are expecting to publish eAIPs on the system during 2010. The most recent of these projects was Malta, whose AIP was converted to an eAIP at the beginning of 2010. 883.AIT5

Air Traffic & Navigation Services (ATNS), South Africa's provider of air traffic, navigation and associated services, has implemented a new data management solution to organize, protect and improve access to information.

The solution, known as CommVault, has been supplied by converged network provider KSS Technologies to service ATNS's 20 airports across the country. ATNS senior manager for information technology, Achmed Wadee, says the company required a centralized management system with modules that share a common set of back-end services and advanced capabilities. Aiming to move to a tapeless environment, ATNS has already started experiencing a reduction in off-site tapes and tape drives, as the solution reduces up to 90% of backup and archive data on disk and tape. It has also reduced backup administration time considerably. ATNS says that a holistic approach to data management eliminates the inherent inefficiencies, complications and expenses associated with operating across multiple silos. From the beginning, CommVault designed its software from the ground up to share a single platform. The resulting technology streamlines the aggregation of enterprise-wide data for high data management functionality and efficiency. 883.AIT6

Tetra Tech Inc. has been awarded the U.S. FAA's Information Technology Support Services Contract (ITSSC), an indefinite quantity contract under which the FAA may order technical support services valued at up to USD 95 million over a five-year period.

This single-award contract is a follow-on contract to Tetra Tech's previous five-year USD 21 million Air Traffic Crew Support System contract with the FAA, known as Cru-X. Under the ITSSC, Tetra Tech will provide information technology services in the areas of software applications development and maintenance support, database development and management, application helpdesk support, information delivery solutions and support, desktop support for software development activities, security certification support, configuration management, and documentation support. The new contract has a one-year base period and four option years. Tetra Tech's team includes EDS, Oracle Corporation, and several small businesses. 883.AIT7

Passur Aerospace has been awarded a USD 2.88 million contract with the U.S. FAA for a one-year pilot programme to provide access to air traffic control and aviation security related products, in support of the FAA's joint role with the Transportation Security Administration (TSA).

"We're very proud to partner with the FAA and the TSA in support of the multi-agency mission of airspace security," said Jim Barry, Passur Aerospace's President and CEO. "And we're equally proud of our team's ability to deliver the robust, reliable, and sophisticated technology and services that are required for this project."

Passur Aerospace is the sole provider of all products and services to be performed under this contract. Specific solutions will be delivered through the FAA's ADAPT (Automatic Detection and Processing Terminal) System, and will include both data feeds as well as end-user software applications. The Passur solutions derive from several core Passur capabilities, including its national network of surveillance systems, which includes extended coverage of critical airspace corridors; its integrated database of live and historical flight and airspace information; flight behaviour algorithms; flight and airspace visualization technology; and collaborative information dashboards for instant alerts and decision support, as well as the ability to immediately share information and coordinate action. 883.AIT8

Telvent is to provide a new aviation information system for South Africa's Air Traffic and Navigation Services (ATNS) at the new King Shaka International Airport, located just north of Durban. With Telvent's aviation information management technology, the airport will handle and distribute the most accurate terminal and weather information available to ensure air traffic safety and reliability. ATNS will rely on Telvent's Automated Terminal Information System (ATIS) for information relating to terminal area operations at King Shaka International Airport. This new system will be integrated within the existing D-ATIS systems already installed at OR Tambo International, and Cape Town Airports, which were also provided and currently maintained by Telvent. "We are pleased that we have been able to continue our partnership with ATNS that allows them to benefit from our integrated aviation solutions," said Ignacio González, Telvent's Chief Executive. "Our aviation systems employ advanced technology to gather, process and distribute accurate information essential to air traffic safety and operations." 883.AIT9

The U.S. FAA's Air Traffic Organization is looking for opportunities to improve efficiency and reduce costs by using cloud computing, social media and other innovative technologies, according to Chief Information Officer Steve Cooper. A private, government-only cloud might be suitable for agency data centre consolidation, asset management, virtualization and cyber-security, Cooper said in a recent speech to industry members sponsored by the Industry Advisory Council. "We want to pilot cloud computing capabilities," Cooper said. "I have a hunch there is a lot of capability available."

One area in which a cloud might be useful is in providing a virtual production environment that simulates the air traffic organization's existing production environment, which is spread out among a number of facilities. A virtual environment could be used for development and testing of new software solutions, Cooper said. Cooper said he also is interested in e-mail cloud applications and is watching the General Services Administration's lead on that application. The Air Traffic Organization also is exploring pilot projects for social media, which may involve websites offering two-way interaction between the organization and private pilots, airport officials, the flying public and other stakeholders. Cooper said the social media project ideas are still being developed and involve some sensitivity, especially when using safety and accident data. In general, the social media effort will involve reaching out to pilots, passengers and others affected by the organization's activities and determining how to meet their needs better, he said. 883.AIT10

MRO & Safety

Enigma Inc. has announced the immediate availability of Enigma Software-as-a-Service Electronic Parts Catalog (SaaS EPC). Enigma SaaS EPC is a browser-based application for creating online service and parts catalogs with unlimited incremental updates of technical content. The graphical user interface of SaaS EPC provides dealers and customers with a synchronized view of assembly drawings and the associated parts lists, including extended part information, such as pricing and availability. Enigma SaaS EPC helps OEMs reduce their investment in server hardware and maintenance, and limits internal support costs. This online solution complements manufacturers' existing aftermarket activities by improving their response to the needs of the field. Enigma SaaS EPC is a hosted solution and can be up-and-running in 90 days, providing parts and service information to dealers, customers, maintenance shops and customer support departments around the world. 883.AIT11

HCL AXON has announced that its iMRO solution is now a SAP-endorsed business solution. iMRO is an industry solution add-on for the SAP ERP application. It reduces cost, complexity and risk for large and small airlines, manufacturers and third-party MRO providers by delivering best practices for maintenance engineering, maintenance planning, maintenance operations and business support processes. Solutions endorsed by SAP are complementary to SAP software offerings, are developed in accordance with SAP development guidelines, and provide additional choices and flexibility for businesses running SAP applications. As part of the agreement between HCL AXON and SAP, both companies will share technology and product roadmaps. -- iMRO has been recognized as a leading MRO solution from industry leaders around the globe. In February 2010, HCL AXON was selected by Frost & Sullivan as the Aerospace IT Solutions Provider of the Year Award in Asia-Pacific for its outstanding performance in innovation in aerospace and defence, following competition against several high-profile organizations. 883.AIT12

Inmedius® Inc. has announced that Karlsruhe-based Reinisch AG has implemented its S1000D Publishing Suite™ to service the complex S1000D documentation projects of its clients with contracts supporting Airbus A350, A380 and A400M programmes. The technical publication firm designs and creates communications involved in aircraft operation and MRO, as well as components and machines for aerospace and aviation. "Utilizing the Inmedius software allows Reinisch to provide superior authoring services to smaller-scale suppliers with S1000D project requirements for the Airbus A350, A380 and A400M programmes," stated Manfred Schneebecke, Business Unit Manager, Aerospace and Defence, Reinisch AG. "Many of the Airbus programme vendors we service supply only a small amount of S1000D data, and typically do not have the staff, expertise or budget to produce highly-complex Data Modules on their own. Utilizing the flexible, Web-based deployment technologies of the Inmedius software, allows reinisch to host, manage and deliver their S1000D Data Modules in a timely manner, on our servers, located throughout Europe. Our clients benefit from the latest functionality, without the need to install and maintain costly programs." 883.AIT13

C & L Aviation Services (previously Telford Aviation Services) recently selected Component Control's Quantum Control aviation enterprise resource planning (ERP) software to optimize operations at its Bangor, Maine-based FAA repair station. "We had been using a different ERP

software to manage our operations, but decided that we needed to upgrade our technology to remain competitive," said C & L Aviation Services President Chris Kilgour. "With Quantum, we will process work orders more efficiently, thereby increasing shop floor productivity and ultimately resulting in a more profitable enterprise." Quantum Control is an aviation-specific ERP platform combining shop floor control, inventory management, accounting, e-commerce, sales and invoicing, and other business functions into one integrated software suite. 883.AIT14

WinWare Inc. has attained Gold Certified Partner status in the Microsoft Partner Network with a competency in ISV/Software Solutions, recognizing WinWare's expertise and impact in the technology marketplace. With more than 3000 CribMaster users, WinWare leads the way as the most robust and flexible system to manage indirect materials such as tools and MRO supplies. Larry Harper, WinWare President, said: "The benefits provided through our Gold Certified Partner status will allow us to continue to enhance the offerings that we provide for customers." As a Gold Certified Partner, WinWare has demonstrated expertise with Microsoft technologies and a proven ability to meet customers' needs. 883.AIT15

Security & Surveillance

NICE Systems has announced that Ronald Reagan Washington National Airport has completed implementation of the NiceVision Net IP video surveillance solution, in a follow on project. This latest NICE deployment will help the airport improve safety and security for its 18 million annual passengers, and provide a platform for future expansions and migration to IP video surveillance. The project is being funded through the U.S. TSA's Advanced Surveillance Program under the American Recovery and Reinvestment Act (ARRA).

With its aviation security solutions and domain expertise, NICE enables Ronald Reagan Washington National Airport's security personnel to anticipate, manage and mitigate security, safety and operational risks by capturing and analyzing video, and ensuring that the right people get the right information at the right time, to take action. Video data is indexed for easy retrieval, giving airport security personnel an effective solution for event investigation, debriefing and reporting. Furthermore, NICE's IP-based video surveillance solution accommodates both analogue and IP cameras on a single platform, allowing the Airport to maintain its current infrastructure while having a path to migrate to IP. 883.AIT16