INFORMASJON FRA ATM NORGE

Nyhetsbrev august 2016

Nytt fra Indra Navia:

NAVIAIR SELECTS INDRA NAVIA'S GAREX 230 VCCS FOR COPENHAGEN CONTROL CENTER

I en pressemelding fra juli i år, skriver Indra Navia følgende:
Naviair, the Danish Air Navigation Service Provider, has signed a contract with Indra Navia for the upgrade of the GAREX Voice Communication Control System (VCCS) at Copenhagen Control Center (CCC). The scope is controller working position (CWP) replacement and an upgrade from GAREX 220 to GAREX 230 with a Voice over IP (VoIP) interface.

The GAREX 230 is Indra Navia's latest generation VCCS. It is built on a single hardware and software platform, making the solution simple, flexible and scalable. GAREX is recognized for its high quality and low lifecycle costs – a result of more than 50 years of continuous innovation and experience delivering 270 systems to customers all over the world.

Naviair will replace 235 controller working positions and six communication systems will be upgraded with new generation hardware and software to include VoIP. Copenhagen Control Center will be in full operation during the upgrade, ensuring a smooth transition to the new system.

"Our experience with the current GAREX system is only the best, with high performance year after year. We are very pleased with the support we get from Indra Navia and the upgrade offers the highest economical and technical advantage for Naviair. The upgrade will extend the life expectancy of the current system by at least 10 years and add new functionality like VoIP," says Bent Fog, Director of Technical Maintenance, Naviair.

Eldar Hauge, the President and CEO at Indra Navia comments, "We have been working together with Naviair for decades and have now started a new project for an upgrade of the previous generation GAREX system delivered in 2005. The contract with Naviair is an important milestone in an ongoing development of our world-class GAREX VCCS system."

Nytt fra ACAMS AS:

ACAMS kommer med 3 nyheter etter ferien:

New TCMS to Kuala Lumpur ATCC, Malaysia

ACAMS has received letter of award from AAT for supply of a new Technical Monitoring and Control System to Kuala Lumpur ATCC in Malaysia.

ACAMS is pleased to announce yet another award from Malaysia. A new ACAMS Technical Monitoring and Control System (TCMS) will be be supplied to Kuala Lumpur ATCC as part of the "New KL ATCC project". The ACAMS TCMS will provide status the to the Technical Supervisor and to enable management of the ATM System operational availability in real time. The ACAMS TCMS at KL ATCC will integrate the following systems:

- ADSB
- RADAR
- VCSS
- VHF
- AMHS
- COSPAS SARSAT
- UPS and POWER SUPPLY
- REC
- ATM
- NETWORK
- TRS
- AMS
- MET
- SARIS
- COMM LINK

Also, the system will integrate with the CNS/ATM System via TCP/IP showing high-level operation state of the new DVOR/DME, GBAS and other related equipment via the existing ACAMS TCMS in Kuala Lumpur Int. Airport.

For the end user DCA Malaysia, the TCMS from ACAMS will provide all equipment status to the technical personnel in uniformly presented thereby improving the maintenance working environment.

The new system to the ATCC will be supplied through Advance Air Traffic System (M) SDN BHD (AAT).

ACAMS supplied Technical Control and Monitoring Systems to Kuala Lumpur Int. Airport in 2013, with expansion in 2015 (see ACAMS News from 2015). ACAMS is proud to offer our client continuous and improved solutions to contribute to safe and effective services.

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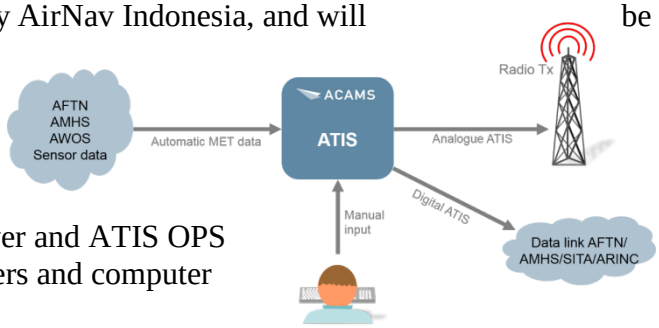
2 new ATIS contracts to Indonesia

ACAMS has received contract for 2 new ATIS-installations for Indonesia.

The two new ATIS systems are procured by AirNav Indonesia, and will be installed in the airports of Komodo on the island of Flores, and the new Samarinda Baru International in Kalimantan (East Borneo).



The proposed system comprises ATIS Server and ATIS OPS Software to be installed on computers servers and computer

workstations for each airport respectively. The dual servers, with LAN interconnections, will have interfaces for:

• Analogue audio E&M/ IP connection to VHF Radio

• TCP IP/Serial connection for METAR Text string input from e.g. AFTN

• TCP IP connection for Time Synchronization via NTP through the GPS Clock

• Synthesized voice software using Text To Speech (TTS)

The systems will be supplied by ACAMS through PT. Darma Tridimesi, Jakarta.

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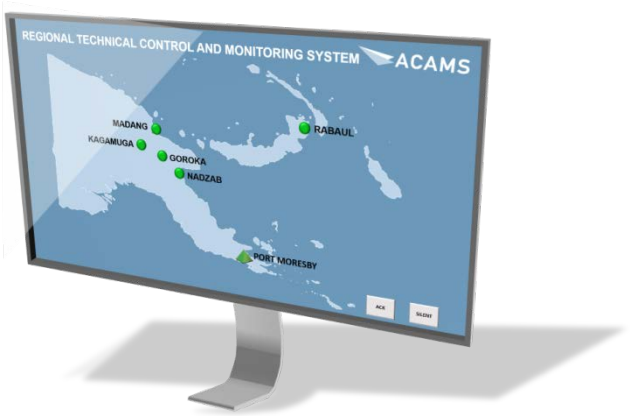
6 ATIS and TCMS to Papua New Guinea

ACAMS has been selected to provide 6 ATIS systems to various airports in Papua New Guinea as well as a regional technical monitoring system (TCMS).

ACAMS will supply 6 ATIS systems to Papua New Guinea Air Services (PANGASL) and a regional TCMS for monitoring technical status on all airports from a central location in Port Moresby.

Local ATIS systems will be installed in the following sites:

- Port Moresby Jacksons Int. Airport
- Mt. Hagen (Kakamuga) Int. Airport
- Nadzab Airport
- Madang Airport
- Goroka Airport
- Tokua (Rabaoul) Airport



The ACAMS ATIS solution is with this contract further strengthening its reputation as the world leader in effective and economical ATIS solutions.

The contract is also another proof of trust in ACAMS's superior concept of technical control and status monitoring for remote airports. It is found to be very useful for technical staff with an overview of their systems and resources from the centralised location in the capital city, Port Moresby. ACAMS has previously supplied similar regional TCMS installation in Indonesia with great success, contributing to better reliability and lower costs for the operator. Please refer to Indonesia regional TCMS reference sheet for details on the previous Indonesia project.

The systems will be supplied through ST Electronics in Singapore.

News from Momberger Airport Information - www.mombergerairport.info

SESAR has helped to develop a winter weather forecasting tool to provide short-term forecasts for de-icing operations. The tool was validated during a series of exercises, which took place in Helsinki, **Oslo** and Stockholm airports during late 2015 and early 2016. The validation explored the added value of refined weather forecast information, compared to relying on the existing standard ICAO weather products such as aerodrome routine meteorological report (METAR) and aerodrome forecast (TAF). The focus of the exercises was to analyse the impact of a planning phase for de-icing operations on the predictability of the air transit view (ATV) through the introduction of a de-icing management tool (DIMT). With the involvement of airport operations data base (AODB), the DIMT subscribes to flight information and produces information in the form of time stamps for use by coordinators, managing the de-icing of aircraft. When MET information is combined with the known properties of the de-icing fluids used at Helsinki, Stockholm and **Oslo** airports, operators can make more effective decisions related to their operations. The initiative was led by EUMETNET EIG in collaboration with the Finnish Meteorological Institute (FMI), which together developed a prototype capable of generating relevant weather information and identifying critical weather parameters and their thresholds for de-icing operations. The validation results clearly showed the prototype forecasts outperformed existing TAF forecasts in estimating the de-icing conditions for up to three hours ahead. Indeed, the temporal resolution demonstrated 15 min time steps for the new product which was far more effective, providing a more tailored MET solution. The results were further split to analyse performance under differing weather regimes and separate case studies were made for the days of the exercise. The benefits of the new system were most visible in snow shower situations, when the new system was able to forecast up to 75 min ahead, while TAF product alone was comparatively ineffective tool to guide de-icing management activities. #1029.ATC6

The Borealis Alliance has been awarded considerable financial support to continue its work to deliver Free Route Airspace (FRA) across Northern Europe by 2021. The funding of EUR 63.2 million has been granted to support the ongoing evolution of the Borealis FRA programme, extending the number of countries in which Free Route Airspace is available and joining those areas of Free Route Airspace together. On 8 July 2016, the EU Member States formally approved the recipients of the EU financial support under the FY 2015 calls for proposals of the Connecting Europe Facility (CEF) funding. The Borealis Free Route Airspace programme has been supported as part of SESAR–related activities contributing to a sustainable and efficient ATM network in Europe, in line with the European Commission's Single European Sky (SES) initiative. It was one of 195 transport projects awarded funding.

The programme involving all nine Borealis members builds on Free Route Airspace initiatives in three Functional Airspace Blocks – the Danish-Swedish, UK-Ireland and NEFAB, and Iceland. By 2021, it will create seamless FRA, enabling airlines to plan and fly their preferred routes across the whole of Northern Europe, saving significant time, fuel and therefore money. The initiative has already been highlighted by the European Commission (EC) as a major contributor to the vision of SES, awarding it one of the inaugural 'SES' awards in March 2016. #1030.ATC10

Following a public tender, Switzerland's ANSP, Skyguide, has awarded a EUR 6 million contract to Indra to deploy primary S band surveillance radars at the Geneva and Zurich International Airports. Indra's surveillance systems will support approach and landing operations at the country's two largest airports, and their "solid performance" will help ensure optimal safety levels and allow for high traffic capacity and smooth flow at the two airports, according to Skyguide. Indra's radars, which will replace the existing equipment, also feature the latest developments in the mitigation of interferences caused by wind energy turbines. Indra has worked with Skyguide since early 2000 implementing NOVA A-SMGCS in Zurich and Geneva. In Geneva, Indra has recently installed a new second Surface Movement Radar. In total, 12 NORMARC ILS have been installed over the years at seven Swiss airports, the latest being the world's first ultra-wide CAT III ILS which started operations in 2014. #1029.ATC1

Following hundreds of hours of testing and fine tuning, a state-of-the-art new air traffic control system has entered full operational service at Scotland's Prestwick Control Centre. The system, called iTEC, is the next generation of air traffic control technology, designed to increase airspace capacity and improve safety by automatically detecting potential aircraft conflicts ahead of time. It also helps to reduce aircraft fuel burn and emissions by enabling the future introduction of 'Free Route Airspace' above 28,000 ft, giving pilots greater flexibility to fly the best and most direct routes instead of following the existing network of rigid waypoints and airways. More than 110 air traffic controllers at Prestwick have spent the last 10 months being trained on the new system, which has been in use periodically at increasingly busy times since January 2016, in preparation for a full switch-over. Alastair Muir, Director at Prestwick Centre, said: "An enormous amount of work has gone into getting us to this point. It's a major milestone both for Prestwick and NATS but also for aviation in the UK. How we do air traffic control is going to change in the next five years, making flying cleaner, quieter and more fuel efficient and this is a great step forward." The iTEC platform has been developed by Indra to be interoperable with air traffic management systems across Europe. Its introduction at Prestwick – only its second deployment - represents a major milestone for NATS and helps bring the prospect of a Single European Sky closer to reality. **Meanwhile, Poland's ANSP, PANSA, and Oro Navigacija SE in Lithuania signed contracts with Indra on 26 July 2016 for the deployment of iTEC last-generation air traffic management systems.** The contracts are the result of a common procurement procedure, and are key for the deployment of a common system across the Baltic FAB. #1030.ATC1

News from HIS Jane's Airport Review - http://www.ihsairport360.com/atc

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Saab displayed its digital aerodrome capability at the Farnborough International Airshow on 11-17 July 2016, mounted on a mobile platform in the middle of the show ground. The Farnborough airfield was viewed remotely from the tower suite located in the Saab exhibition area, using high-definition cameras.

"We draw on our heritage from the Gripen Fighter to focus on easing the workload for operators," Saab head of ATM Anders Carp explained to *IHS Jane's* . "We can incorporate tracking and labelling features, and highlight any moving objects on the screens."

Some of these features are included in the latest contract from Swedish air navigation service provider (ANSP) LFV - awarded in June 2016 - to develop remote tower services for multiple

airport operations. Saab is already working with the Irish Aviation Authority to deliver remote tower services at Shannon and Cork airports from a single facility at Dublin.

On show for the first time, Kongsberg exhibited a prototype of its Ninox remote tower, developed in partnership with Indra Navia and Avinor. Ninox sensor technology is being installed at Rost on Norway's western coast, followed by several other small airfields, to enable Avinor to test the system in mid-2017.

In addition to Kongsberg's specialised camera technology, the system features a new tower display based on Indra Navia's InNOVA human machine interface. The result of several months' analysis by Avinor controllers and technicians, the single display features electronic flight strips, real-time video, and multi-sensor surveillance data to support remote tower operations.

"By using service-oriented architecture, the system gives us the flexibility to accommodate different requirements," Kongsberg programme director Thor Helgerud told *IHS Jane's* . The prototype demonstrated remote operation of three airports at the same time, with the out-of-the-window view projected onto screens which can be split horizontally and vertically.

Thales exhibited another remote tower solution for the first time at Farnborough.

Les her for mer.

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