



Press Release

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Avinor ANS begins roll out of first Nordic UTM system at two airport towers in Norway paving the way for its future tech-economy

Avinor Air Navigation Services (ANS) is working with Frequentis and Altitude Angel to implement an unmanned traffic management (UTM) system at 18 airport towers across Norway. The system, which is being tested in a real-world environment at the first two airport towers, before being rolled out nationwide, will support the countries future drone strategy. The UTM system provides an operational overview of the airspace and allows two-way communication between air traffic control (ATC) and drone operators, enabling safe drone use.

The UTM project in Norway supports the Norwegian governments drone strategy for the increased safe use of drones, and to tackle the rising number of reported incidents and airspace violations. With the UTM solution, Norway's Air Navigation Service Provider (ANSP), Avinor ANS, has the means to accelerate the safe integration of drones, evolving the commercial use of the technology to generate sustainable revenue streams.

“To manage the increasing number of requests from drone operators we require a digitalised system to replace as much of the manual operations as possible. The ability to implement real-time no-drone zones, provide geo-awareness, flight approvals, and easy access to drone operator contact information will improve safety for both Avinor ANS and all airspace users,” says Axel Knutsen, Avinor ANS Vice President UTM. “This phased roll-out of UTM at the first two airports will allow the local drone community to use the applications and provide feedback ahead of a nationwide rollout.”

Frequentis, with partner Altitude Angel, has provided the Common Information Services (CIS) function and includes a foundation of U-space (unmanned airspace) services. This allows Avinor ANS to open Norwegian airspace to commercial drone use and includes an operator portal including a fleet management system as well as web and mobile flight planning capabilities. Flight plans can be automatically created and amended, and flight requests approved or declined, while temporary or permanent no fly zones can also be configured in the system.

“The UTM system is now operational at Bodø Airport and Kristiansund Airport”, says Hannu Juurakko, Frequentis Vice President ATM Civil and Chairman of the ATM Executive Team. “We are pleased to be working closely with Avinor ANS on their goals for commercial drone use, shaping the future of UTM together. By providing an advanced drone management environment that integrates both manned and unmanned traffic, we ensure information flow between all relevant stakeholders in real-time.”

The Application was delivered fully cloud based during Covid-19. Meetings were held entirely virtually. The complete solution is operated from a cloud environment.

Norway will be the first country in the Nordic region to implement a UTM system, highlighting Avinor ANS' dedication to the industry. The operational system already follows ongoing regulatory work, consisting of a CIS technology and a U-space service technologies. CIS provides the so called "single source of truth" for relevant safety information to reach connected stakeholders. Integrated by open and standardised APIs, U-space services are provided, including strategic deconfliction, conformance monitoring, and capacity management. Automation is used to increase efficiency; however, controllers and operators remain in full control and are contactable when required for emergency handling.

"We're excited to see the first phase of the project, and the Ninox Drone app, go live. This is the first of what we envisage being many important milestones as we support, with our partners and Avinor ANS, Norway's drone ecosystem.", said Chris Forster, Altitude Angel, Chief Operations Officer. "The potential for Unmanned Ariel Vehicles (UAVs) to facilitate new possibilities, new industries and new businesses is immense. Avinor is leading the way in deploying Ninox Drone to serve – and catalyse – the emerging drone economy."



Axel Knutsen, Avinor Vice President UTM at Kvernberget Airport, Norway

Photo credit: © Anders Martinsen @ Uas Norway

About Avinor Air Navigation Services

Avinor Air Navigation Services provides aerodrome control and approach control services at airports, air traffic services in Norwegian airspace and maintenance and operation of the technical infrastructure for air navigation. The company employs about 1020 people and has its headquarter in Oslo, Norway.

www.avinorflysikring.no / Instagram and Twitter: @avinorans

About Altitude Angel

Altitude Angel is the world's leading provider of UTM (Unmanned Traffic Management) software, enabling those planning to operate, or develop UTM/U-Space solutions, to quickly integrate robust data and services with minimum effort.

From a consistent, well-documented and standards-based platform, drone manufacturers such as DJI and cutting-edge software developers around the world use our Developer Platform to obtain rich, relevant and local geofencing data, exchange and share flight plans, de-conflict their own flights in real-time and interface with national flight authorisation systems. A growing portfolio of enhanced capabilities help our customers to comply with current and future regulations and interface with changing national systems with only minimal effort.

Altitude Angel's first party solutions also power some of the world's leading ANSPs, aviation authorities and Enterprises, including LVNL (Netherlands) and Avinor (Norway), empowering them with new capabilities to safely manage and integrate drone traffic into national operations.

Today, Altitude Angel's market-defining technology is providing a critical, enabling service on which the future of UTM, especially in controlled airspace, will be built across the globe. By unlocking the potential of drones and helping national aviation authorities, ANSPs, developers and enterprise organisations, Altitude Angel is establishing new services to support the growth in the drone industry.

Altitude Angel was founded by Richard Parker in 2014 and is headquartered in Reading, UK. The company's developer platform is open and available to all at <https://developers.altitudeangel.com>

About FREQUENTIS

Frequentis, headquartered in Vienna, is an international supplier of communication and information systems for control centres with safety-critical tasks. Such 'control centre solutions' are developed and marketed by Frequentis in the business sectors Air Traffic Management (civil and military air traffic control, air defence) and Public Safety & Transport (police, fire brigade, ambulance services, shipping, railways). As a global player, Frequentis operates a worldwide network of branches, subsidiaries and local representatives in more than 50 countries.

Products and solutions from Frequentis can be found in over 30,000 operator working positions and in approximately 140 countries. Founded in 1947, Frequentis considers itself to be the global market leader in voice communication systems for air traffic control with a market share of around 30%. In addition, the Frequentis Group's AIM (aeronautical information management) and AMHS (aeronautical message handling) systems, as well as GSM-R systems for Public Transport are industry leading global solutions.

The shares of Frequentis AG are traded on the Vienna and Frankfurt Stock Exchange under the ticker symbol FQT (ISIN: ATFREQUENT09). In 2019, the Frequentis Group had about 1,850 employees worldwide and generated revenues of EUR 303.6 million and EBIT of EUR 17.2 million.

For more information, please visit www.frequentis.com

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