Drei partners with Dimetor to enable advanced UAV services, first virtual test with FREQUENTIS

Drei, the leading 5G network service provider in Austria, and Dimetor have partnered to enable the safe operation of drones in the airspace. A first virtual test was done together with market leader of airspace management software Frequentis and other consortium members of the SESAR JU GOF 2.0 project this week in Austria.

Reliable real-time communication between drone flight operators, aviation authorities and 3rd parties involved is critical for the deployment of innovative drone use cases. Mobile network connectivity allows drones to be safely controlled beyond the visual line of sight (BVLOS).

Through the partnership, Drei has deployed Dimetor's AirborneRF platform and provided critical connectivity and ground risk information for the flight of BVLOS drones. The data has been integrated into the airspace management platforms of Frequentis.

As a next step towards to further develop this 5G use case, Drei works closely with Dimetor in the EU funded research project GOF 2.0. 15 partners in GOF 2.0 aim to create a European drone market and will deliver the technical components (services, software, competencies, practices) needed to provide innovative strategic and tactical services to demonstrate how both manned and unmanned aircraft can safely share the same airspace. This is a prerequisite to cost efficiently operate autonomous and semi-autonomous drones beyond visual line of sight in low-level airspace.

The results of these implementations demonstrate and validate that the Drei mobile network in its current configuration is capable of facilitating safe UAV (Unmanned Aerial Vehicle) flights. Drei is currently looking for interested parties to jointly demonstrate and develop innovative drone use cases. Various new use cases are made possible by drones being connected to 5G and thus e.g. delivering high solution live-images during a fire fighter operation from the location to the arriving fire brigade vehicle. 5G not only delivers the needed safety critical communication and capacity for various drone use cases, but also the relevant connection quality.

"Early adoption of innovation is part of Drei's DNA from the beginning," says Matthias Baldermann, CTO of Drei. "We have just been recognized as the fastest 5G network in Austria. Pairing this network with connected drones provides a perfect platform for our customers enabling new innovative business solutions."

Example of innovative drone use cases involve medical emergencies (e.g. the fast transport of blood supply or defibrillators over the air) or first response (e.g. exploratory drones for fire fighters and rescue missions).

Drei has been conducting drone trial flights in unmanned areas around the company's Vienna headquarter from January 2021.

Emphasizing the leading innovation role, Drei has also been a partner in establishing global standards for data exchange between the cellular service providers and the aviation industry. Drei is an active member of Aerial Connectivity Joint Activity (ACJA), a global initiative by GSMA and GUTMA that was launched to integrate UAVs into common airspace.

"We are thrilled to collaborate with Drei to meet the connectivity requirements for BVLOS UAV operations," said Thomas Wana, CTO and Co-Founder of Dimetor. "With Drei being at the forefront of 5G, and drones being considered one of the most compelling use cases for 5G, we see our partnership as a foundation for a range of new services in Austria and beyond. We appreciate the opportunity to work very closely with Drei, where we can also bring in our global experience and help making Aerial IoT a reality in the very near future".

"In the GOF2.0 project, Frequentis, together with 14 partners, wants to demonstrate the operational validity of combining Air Traffic Management and U-space services and systems and create a shared interoperable infrastructure for both manned and unmanned aviation, especially in dense urban environments. The provision of timely, relevant, and accurate digital information to all airspace users on a system-wide basis will enable safe and secure management of unified airspace", explains Günter Graf, Vice President New Business Development at Frequentis. "On 5 October we were able to successfully demonstrate the first live end-to-end telecom-aviation data integration in Austria, together with the Austrian mobile network operator Drei and Dimetor, in the context of a simulated trial of the GOF 2.0 project."

About Drei
Hutchison Drei Austria GmbH is a 100% subsidiary of CK Hutchison Holdings Limited (Hong Kong) and part of the 3Group Europe's division "3Scandinavia & Austria". By the end of December 2020, Drei achieved a total revenue of 850 million euros with about 3.7 million customers. As a leading Austrian telecommunications provider the company offers mobile communication, internet, fixed line, TV and business solutions from a single source. Next to the biggest network of branded stores by an Austrian telecommunications provider and an encompassing customer service for residential and business customers, Drei provides the densest 4G network with a 98% coverage in population. In June 2019 Drei launched Austria's first, real, comprehensive 5G network in Linz and received the Ookla Speedtest AwardTM for the country's fastest 5G network in September 2021.
More information: www.drei.at

About Dimetor

Dimetor is a software company bridging the data gap between communications service providers (CSPs) and the aviation eco-systems. Through its world-leading platform AirborneRF, they help provide supplementary data that is critical for safe BVLOS drone operations. AirborneRF focuses on (a) the 3D corridors in space that have sufficiently good connectivity for drone operations (e.g. for networked remote ID, command and control, payload communication), and (b) the population density for ground risk assessment, based on anonymized cellular mobility data. Developed by experts in mobile communication

networks, aviation and drone technology, AirborneRF also provides live notifications from the CSP networks in case of any issue during flight operation may occur. Dimetor's software has been deployed worldwide, including Australia, Europe and North America. Visit www.dimetor.com and www.airborneRF.com for more information.

About Frequentis

Frequentis, headquartered in Vienna, is a global 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 40,000 operator working positions and in approximately 150 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 dispatcher working positions for Public Transport are industry leading solutions. The shares of Frequentis AG are traded on the Vienna and Frankfurt Stock Exchange under the ticker symbol FQT (ISIN: ATFREQUENT09). In 2020, the Frequentis Group generated revenues of EUR 299.4 million and EBIT of EUR 26.8 million. Following the transaction with L3Harris, the number of employees is around 2,100. For more information, please visit www.frequentis.com