First-ever remote drone delivery completed in Latvia

In December of 2020, Latvia welcomed its first-ever gift delivery completed by a drone. A parcel consisting of tablets was “shipped” with joint efforts of Latvian Mobile Telephone (LMT), SPH Engineering, and DPD Latvija. The drone's Beyond the Visual Line of Sight (BVLOS) flight was conducted entirely on the mobile network, and the flying drone used a remote ID device prototype made by LMT, as well as UgCS drone mission and route planning software by SPH Engineering.

LMT's remote ID device prototype is a drone-mounted device that enhances the drone with remote flight capabilities. The device's SIM card provides two functionalities – remote identification and location tracking of the UAV according to the GPS signal. Combined, they offer additional security and transparency, making BVLOS flights possible.

The combination of the LMT remote ID device with the UgCS route planning makes remote drone flight possible. Because the drone and flight path data is available to everyone involved, it paves the way for the implementation of remote UAV flights into airspace, without compromising security. The drone pilot in a command center, flight security observers, and anyone else who holds the need to observe or coordinate flights BVLOS have access to the necessary data via a prototyped site, available on computers or smart devices.

Ingmārs Pūķis, the Vice President of LMT, comments:
“Using a UAV to deliver parcels is a great example of how technologies serve people. In cooperation with international partners, LMT is actively working towards promoting safer drone flights BVLOS on mobile networks.”

The fast-paced global digital transformation marks a need for new products and services, enabling a full-fledged use of drone technology and mobile networks. The majority of UAV commercial flights in the future could be conducted BVLOS. For now, such drone flights aren't prevalent due to the legal regulations that only allow drone flights within direct visual sight because of safety concerns. However, in research and testing cases, permission for a drone flight BVLOS can be granted.

Moreover, mobile network connectivity improves such flights’ safety as the network accessibility in the air often exceeds the one on the ground due to the lack of obstructions. During 94% of the conducted drone delivery flights, the average network strength was -87.6dBm, which is a very good indicator by the cellular network provider standards.

“Drone delivery is turning into a new applicable global trend. Within the last few months, we have observed how delivery and mobile market players, both global and local, are joining efforts to introduce

delivery solutions with UAVs. We are proud to contribute with UgCS technology to the LMT and DPD initiative and support drone deliveries across Latvia," Alexey Dobrovolskiy, CTO of SPH Engineering.

The drones' delivery flight took gifts to the residents in various social care centers in Latvia. The seniors received tablets from LMT packed with useful apps to allow the elderly to communicate with their relatives, follow the news, and learn new skills online.

Jānis Grants, the President of the Executive Board of DPD Latvija, also emphasizes the importance of adjusting to technological progress. He notes that DPD has always been eager to follow the latest tech tendencies and explore more sustainable delivery solutions. Next to electric vehicles already in use, delivering packages with drones is another sustainable solution, also speeding up the delivery time.

Access the video of the first-ever gift delivery in Latvia completed by a UAV here.