

MedLife, the first private medical operator in Central and Eastern Europe to transport biological laboratory samples by drones

„We started the project in the west side of the country, and our ambition is to implement this transportation platform at national level and to expand the range of products delivered by air”

- *With a 120 km length, the route initiated by MedLife between Oradea and Arad becomes the longest drone flight route for medical samples in Europe.*
- *With the implementation of the drone transport system, the delivery time of biological samples is reduced by over 50%, compared to land transport.*
- *The key beneficiaries of this innovative project are the patients, who will be able to receive results on the same day for 76% of the available tests array within the MedLife laboratories.*
- *On medium to long term, MedLife Group is considering the implementation of the drone transportation system on a national level, and also the expansion of the product range for air transportation.*

Oradea, November 09, 2023: MedLife, the largest network of private medical services in Romania, continues the technological process of the offered services offered and invests in a new far-reaching project, through which it introduces the drone transportation system for biological laboratory samples. With this step, developed in partnership with the Australian company Skyy Network, MedLife becomes the first private medical operator in Romania and in Central and Eastern Europe to use drones for the transport of laboratory samples, and one of the few European medical operators that will usually transport biological samples over medium and long distances.

In the beginning, the transports will be carried out from 4 cities in Bihor County (Aleșd, Beiuș, Marghita, Salonta) to Oradea and Arad, following that in the upcoming future, the project to be expanded nationwide. With a 120 km length, the route between Oradea and Arad is currently the longest drone flight route for medical samples in Europe, the transport being completed in less than an hour.

The logistic partner with whom MedLife implements this project, Skyy Network, is an Australian company with a comprehensive experience in manned and unmanned aviation, whose focus is on drone integration services and solutions in companies' business processes. The MedLife project has the approval of the Romanian Civil Aeronautic Authority (RoCAA), as well as of the Public Health Directorate in Bihor and Arad Counties and of the Ministry of National Defence. After almost three months of tests and preparations, the first flights with real samples from patients have already been carried out.

"Along with the expertise and training of our doctors and specialists, obtaining a high-performance medical act relies, in the same time, on technological resources. As part of our mission to provide the best patient care, we are constantly investing in modernizing MedLife Group with state-of-the-art equipment, whether it's surgical robots, ultrasounds, laboratory equipment and more. All this openness to innovation, but also the courage to experiment, have helped us consolidate our position as market leader, while also contributing to the modernization of the Romanian medicine. We are proud to strengthen our status as a pioneer in the field and bring the future of medicine closer to the present. We have already successfully

carried out the first drone flights of biological samples, and this success gives us confidence in the future plans outlined in this direction", stated Mihai Marcu, CEO and Chairman of MedLife Group.

50% time saved when compared to ground transportation, with test results available same day for all standard tests

The average duration of a transport load flight time from the collections points to Oradea is around 19-28 minutes per each way, respectively less than one hour between Oradea and Arad, the drone cruising at a speed of approximately 122 km/h. This represents a 50% time saving compared to land transport, adding at the same time a greater efficacy in collection and delivery through the autonomy offered by the system. As a result, MedLife manages to offer its patients quicker results, by cutting the response time for 76% of the laboratory tests array.

"The decision to introduce this transport system was based on a preliminary analysis, by which we found that there are a series of important advantages at operational level, which allow us to streamline the activity to the benefit of our patients. By lowering the sample delivery duration, avoiding the traffic delays, the increasing of the number of samples that we can receive and process, we can guarantee our patients the rapid delivery of results for a broad spectrum of laboratory services. In fact, patients will receive in the same day the results for most tests. All this leads, implicitly, to the opportunity of having a faster diagnostic and treatment. Additionally, we are also talking about a sustainability initiative, by integrating a lower carbon footprint transport alternative compared to vehicle transport" stated Dr. Robert Beke, Executive Director of the Laboratory Division MedLife Group.

The longest drone flight route for medical logistics in Europe

The first flight routes were created between Bihor and Arad counties and they connect the collection points from Beiuș, Alesd, Marghita and Salonta cities with the MedLife Oradea and MedLife Arad labs. Specifically, the samples collected in the collection points are transported by drone to the Oradea and Arad MedLife labs, depending on the type and complexity of the analyses.

Upon the launch of the drone transportation system between Oradea and Arad, with a length of 120 km, MedLife puts Romania on the innovation map, by creating the longest drone flight route for medical logistics in Europe, this segment being covered in less than 1 hour.

The European Union passed Regulations 2019/945 & 2019/947, by which it created the most favourable regulatory environment for complex drone operations globally, enabling thus the implementation of this cutting-edge project. Adopting standards developed together with the industry, academia and regulatory bodies', Europe is the leader of innovation in drone economy.

State-of-the-art technology for the benefit of Romanian patients

The new transport system introduced by MedLife leverages 3 Swoop Aero Kite drones, fitted with state-of-the-art technology and market leading software, permitting the transportation

of medical samples in complete safety. The aircraft are fully autonomous, with one pilot being able to monitor multiple drones at once. The human intervention is only for loading and unloading the samples and, in this regard, the local medical teams from the 4 collection points, as well as from the MedLife Oradea and MedLife Arad laboratories have been trained and certified by the Skyy Network team for their role-specific aircraft handling.

"We are very pleased to bring one of the most novel transport systems to Romania and we are glad to find in MedLife a motivated partner, with a common vision towards innovation and future. After almost 3 months of preparation and flight tests, we carried out the first flights with real samples from patients in the safest possible conditions, and the system is now fully operational. Beyond the satisfaction related to the technological premiere that this project brings, locally and at European level, we are mostly motivated by the fact that our work contributes to an increased quality of life for Romanian patients", noted Rory Houston, CEO and Co-Founder of the company Skyy Network.

Future plans: expansion of the drone transportation system at national level

In the next phase, the company announces that it will initiate new steps towards expanding the number of locations, by including in the transportation route, new collection points in the Arad, Hunedoara, Mehedinți, Gorj, Timiș and Caraș-Severin counties. The drones will cover the sample transfers between the collection points situated outside of the cities in a proportion of almost 100%, replacing thus the ground transportation by vehicles, commonly used.

This is just the first stage of the larger plans set out by MedLife Group for the development of the Laboratory division, which, in the medium and long term, target not only the expansion of this transportation system at the national level, but also the expansion of the product range for air transport. According to company representatives, the diversification of the product range would include sanitary materials, medicines, or biological products, which are necessary in emergency cases, but also on a daily basis, within the network, and in the public system.

More details here: <https://www.medlife.ro/laboratoarele-medlife/drone>.
