

SABCA IS READY FOR MEDICAL DRONE FLIGHT OVER CITIES

SABCA is part of an ecosystem in which leading companies from different sectors collaborate intensively with innovative hospital groups. This cooperation is demonstrated in various projects at European level (SAFIR), Belgian level (Medrona) and Flemish-Brussels regional level (HAI-SCS) and implicates the following companies: skeyes, SABCA, Baloise Insurance, NSX, Unifly, Proximus, Orange, imec, VIL and Helicus, the hospital groups GZA-ZNA, Helix and Jessa, as well as research groups from UAntwerp and KU Leuven.

Each partner excels in its field of expertise, which means that a robust total solution can be offered to hospitals and laboratories. It may be said that only by combining all this expertise the drone flights within the hospital network will become a success in good time. SABCA developed an eco-system that meets aviation standards and acts as fleet manager or support to operators. The company's objective is to perform safety critical missions like flights over densely populated areas, offshore windmill inspection, surveillance over sea and flights over remote areas.

To this end, SABCA offers its partners a range of services such as drone design, payload integration, ground and flight testing, drone qualification and certification, inspection, maintenance and repair activities.

After an intensive cooperation, the first medical flight between GZA Ziekenhuizen Campus Sint-Augustinus and the University Hospital of Antwerp (UZA) would have taken place on 25 September 2019. Due to weather conditions the flight is unfortunately delayed. This flights however, are unique in several aspects.

Innovation: Combining unrivalled innovative expertise to make medical transport by drone possible. The flights are fully automatic so that human errors are reduced to a minimum. In addition, the command & control system continuously monitors the drone flight. This means that the central system continuously measures the parameters of the drone and compares them with expected values. In case of deviations, the operator-pilot in the Command and Control Centre will be alerted. The operator-pilot can then (possibly) take over the control of the drone in the event of an exceptional situation.

Aviation: On behalf of Europe, the partners have worked together to help shape the air traffic organisation of the future. It means that other airspace users, such as manned aviation or other future unmanned public service flights (e.g. fire brigade inspection flight) are taken into account at an operational level.

Society: The medical transport by drones will eventually ensure that doctors and consequently patients receive results on time, regardless of possible traffic jams on the road. In line with the hospital reforms of Federal Minister for Health Maggie De Block, hospitals are increasingly working together in networks. This evolution is necessary to ensure the current high quality of healthcare in the future. The network organisation naturally leads to an increasing demand for efficient urgent transport, which risks further aggravating the current ground-based traffic problems. Drones do not run into delays due to traffic jams or traffic lights and thus avoid the growing transport problems on the road. Moreover, the distance to be covered is shorter and the road network is less burdened, so that we contribute to a greener society.

The drones and their freight fly from roof to roof, at a cruising altitude between 90 and 50 metres and with an average ground speed of 60 km/h. This means that the drones remain within the limits of the so-called Low Airspace. A number of flights will be scheduled in the coming months with the aim of

organising a weekly flight day

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