



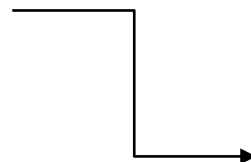
SOCIETAL IMPACT OF MEDICAL USE-CASES

Hellenic U-Space Institute - Adriaan Wiese

SAFIR-Med Conference & Demo Event
Port House, Antwerp, 02 June 2022

Achieving safe, sustainable, socially accepted and socially beneficial Urban Air Mobility.

THROUGH:



*Collaboration
with local
authorities.*



*20+ years of
Industry
Experience*



*Network of
Industry
Professionals*



*Technological
and legal
expertise*



The Hellenic U-Space Institute:

- Performs airspace risk assessments for the purpose of designating a certain volume of airspace as U-space airspace and thus creating sustainable practices regarding medical drone operations at VLL airspace. This is done in anticipation of and in accordance with regulations 2021/664-666, SESAR deliverables, and Eurocontrol documentation.
- Based on the airspace risk assessment, determines vehicle performance and capabilities requirements adhering to regulation 2019/945 chapter III.
- Based on the airspace risk assessment, determines the U-space services performance requirements and applicable operational conditions and requirements.
- The above-mentioned assessments are then tested and demonstrated by computer simulation software which leads to further validation and an increase of safety robustness levels and operational insights.

Outcome: Supporting and facilitating more drone missions in controlled and uncontrolled airspace.

PROBLEM

Athens has **two main hospitals** (south-western and north-western) that serve a huge number of incidents every day.

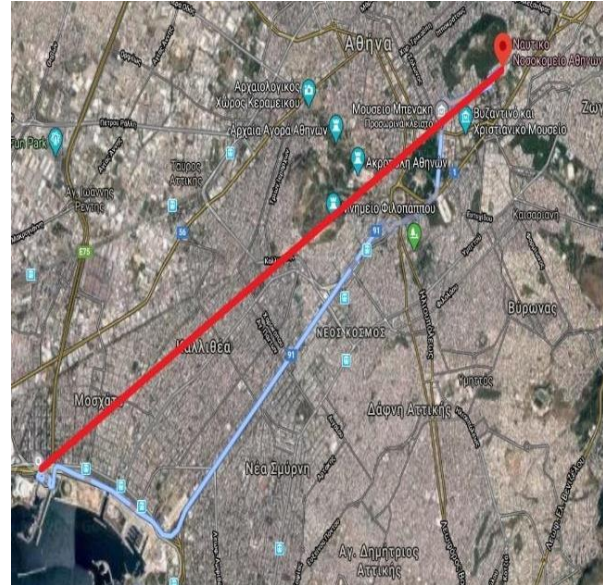
- Distance is less than 20 km by car

BUT

- Almost 1 hour for a crucial sample to be delivered from hospital to hospital.
- Huge traffic load in Athens esp. at rush hour

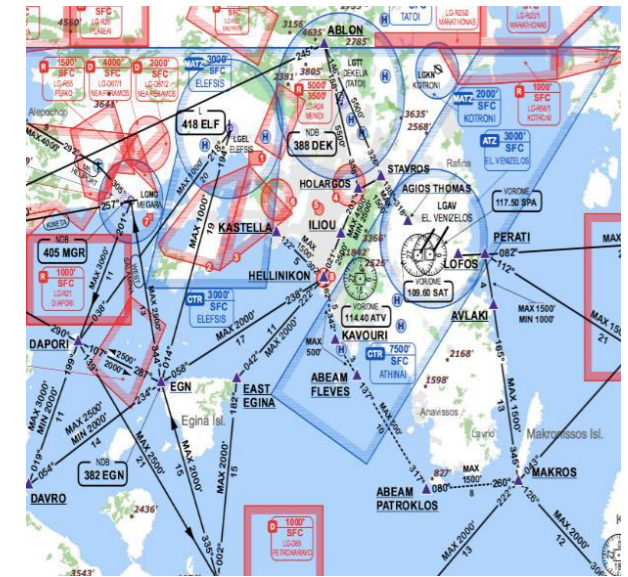
SAFIR-Med Solution

Having a VTOL drone or a multicopter capable of carrying payload would allow delivering the sample from point A to point B fast and efficiently, without any delay, while at the same drastically cutting down the carbon footprint.



ATHENS, GREECE
Blue line: Car route
Red line: UAV route

Operation Airspace



AIM:

- a. To enhance real demos and amplify their effects at a large-scale in order to test maximum capacity of a given airspace with a variety of U-space services and scenarios;
- b. To test assumptions in different locations across Europe thus further validating the obtained results;
- c. To contribute to the cybersecurity resilience in the context of the Digital European Sky, particularly in unmanned aviation and U-space.

HEALTHCARE & SOCIETY

- Cost-saving and therefore making healthcare more accessible to a larger group of people
- Reducing the carbon footprint of transportation
- Alleviating traffic congestion in urban areas and thus ensuring fast transportation of meds and samples
- Providing rapid and ‘contactless’ distribution of medication and vaccines during period of pandemic
- Increasing the societal acceptance of drones through the creation of smart health drone applications which are truly beneficial to society

THANK YOU FOR
YOUR ATTENTION