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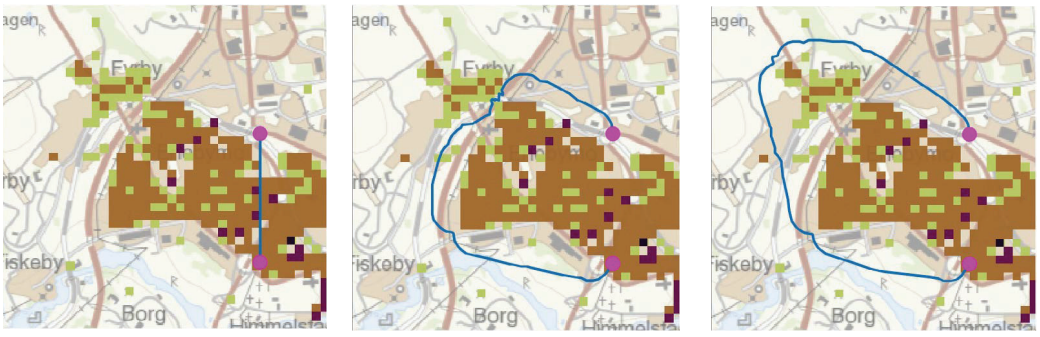
Category: **Airborne** Country: **Sweden**

Research Area 3: **Innovative Infrastructure for Europe 2030** Idea Number: **112**

The Ho Development of key enablers for future Unmanned Traffic Management ver ambulance

Commercial demand for small unmanned vehicles is quickly growing. Before long, thousands of electric autonomous drones will be flying in cities improving multitudes of services. However, management of dense drone traffic requires an efficient and reliable Unmanned Traffic Management (UTM) system. This project addresses the need to establish such an UTM system and enable the growth of the new technology. The research worked closely following authorities and industry experts to identify missing components and to fill the research gaps. As a result, in this project centralised and decentralised UTM systems, developed algorithms for establishing zones with different performance requirements in multi-layer airspace design, developed algorithms for establishing common reference altitude for drones, and developed approaches for ground risk management are compared. The project pushes forward the development of UTM and raises an important question of establishing stricter requirements for drone operations only where it is necessary to enable the growth of the novel technology.



Risk decreases but length increases