



EU Drone Days

**Launch of the
European Drone Strategy 2.0**

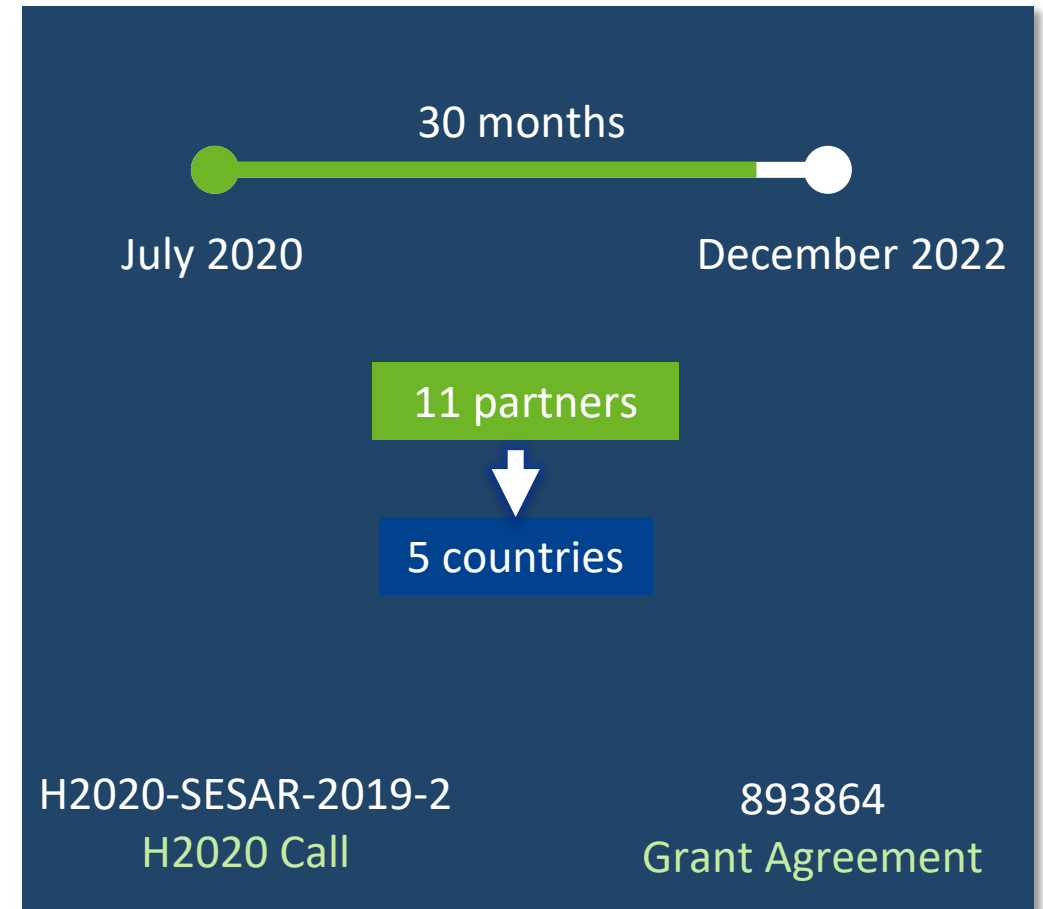
SESAR U-space Showcase

Brussels, 29-30 November 2022



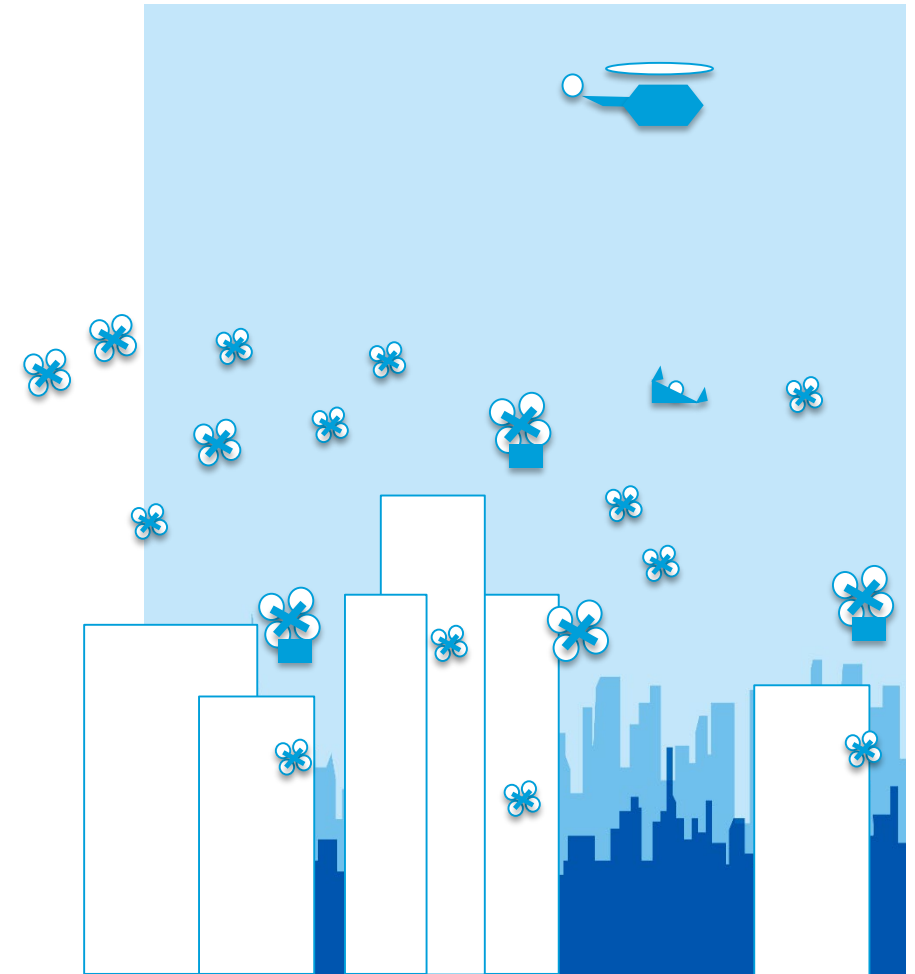
#EUDroneDays

Partners

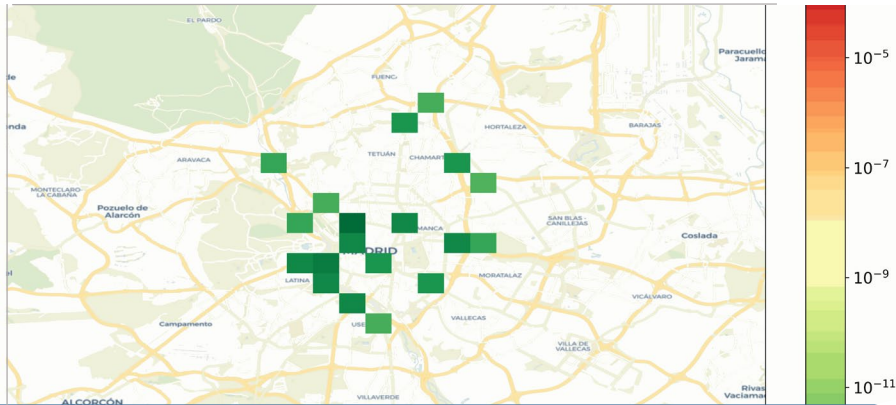


Objectives

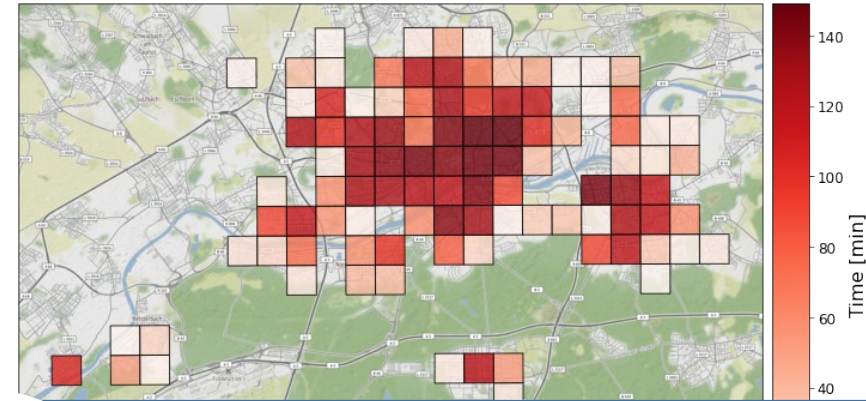
- **U3 Dynamic Capacity Management service** for urban environments and its integration in the U-space services ecosystem.
 1. U-space capacity associated to the air and ground risk.
 2. U-space capacity associated to the social impact.
 3. UAV flight plan to support the determination of the demand and its uncertainty.
 4. Mitigation measures in case of demand & capacity imbalances in U-space.



Prototypes and experiments

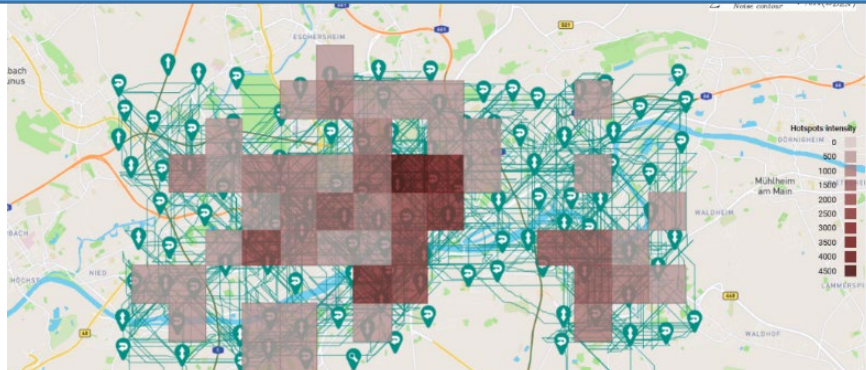


Collision risk prototype



Social impact prototype

Route planning prototype



Fast-time simulations



Results

1. **Collision Risk** quantifies capacity by calculating air risk and ground risk over the population associated to drone failures or collisions.
2. **Social Impact** identifies areas where demand exceeds capacity associated to noise exposure and visual annoyance over the population.
3. **Route planning** quantifies how uncertainties due to departure time, weather and contingencies impact on the identification of imbalances.
4. **Effectiveness of mitigation measures** to solve imbalances according to their impact on U-space indicators defined by SESAR.



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