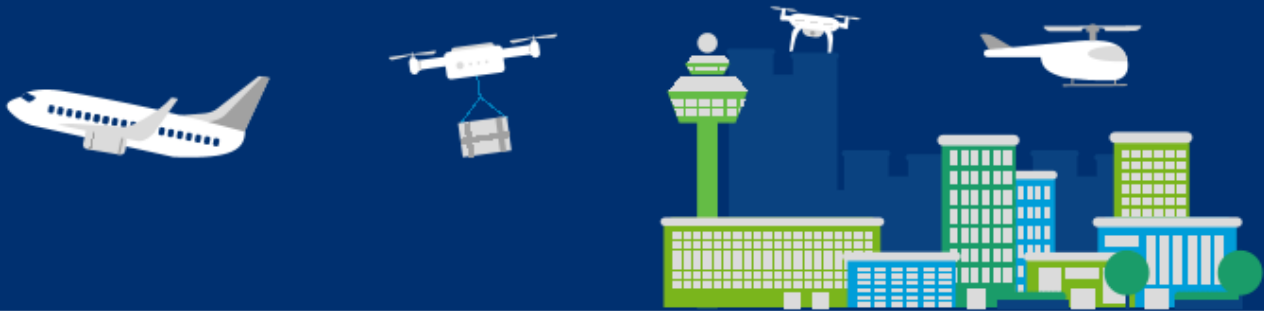
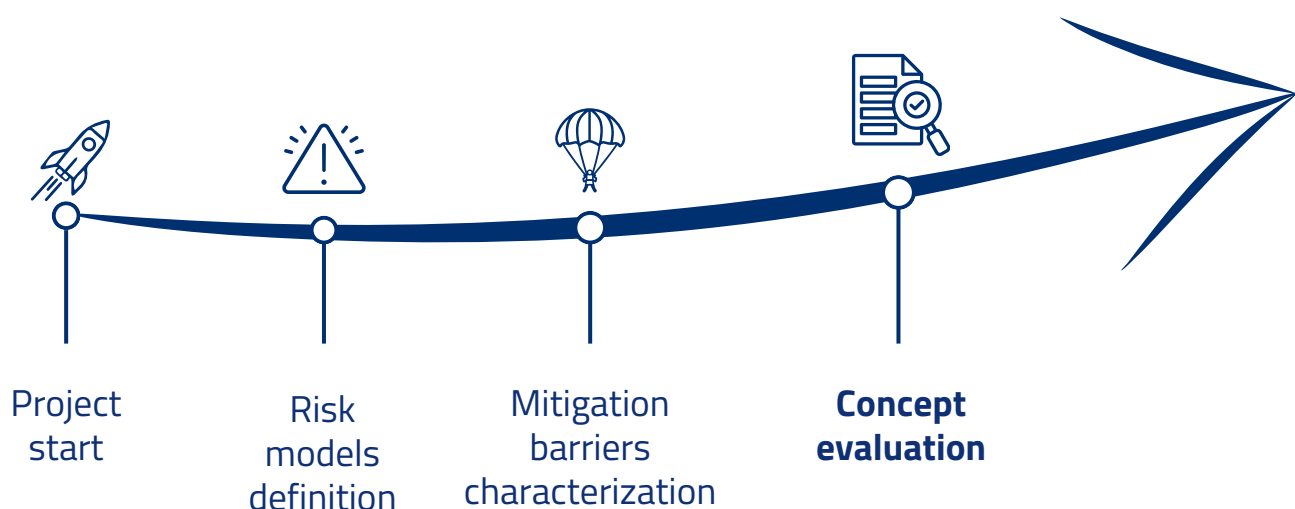




SOLUTION

U-AGREE aims to develop risk models linking the operations of unmanned aircraft systems (UAS), the hazards they are exposed to, and their effects in terms of severity and probability. Based on those models, the project assesses how U-space services could mitigate such effects, supporting the airspace risk assessment required by European Regulation and leading to swifter specific category operation approval processes enabled by digital tools.

PROJECT PROGRESS TO DATE





THE VALIDATION LEADER: ENGAGE SRL

ENGAGE coordinates the validation of the risk models and U-space service-based mitigations developed within the U-AGREE project with the support of Cranfield University, Universitat Politècnica de València, Collins, DLR and Ineco. In parallel with simulations of UPV and CRA, through its advanced PEGASUS simulator, ENGAGE tests these models in realistic operational environments, ensuring assessments that are both scientifically robust and data-driven. Each simulation is guided by specific KPIs and measurable metrics, ensuring results that are reliable, comparable, and verifiable.

THE FAST TIME SIMULATOR

The ENGAGE Fast Time Simulator is a web application providing a fast, reliable assessments of drone operations in the airspace. No installation required, it runs directly in any browser, processing complex scenarios and delivering results that can be immediately applied to operational and regulatory decisions.

Key features are:

- **Cloud-based simulation:** complex airspace scenarios are processed remotely, freeing users from any local computer constraints and users receive an automatic notification as soon as results are ready.
- **Operationally focused:** it is designed to support concrete decision-making, from operation approval to airspace risk assessment.
- **Measurable results:** every simulation is driven by specific KPIs and verifiable metrics, ensuring outputs that are reliable, comparable, and scientifically sound.

In U-AGREE the tool has been used to perform fast time simulations, to measure and quantitatively assess how U-space services contribute as mitigation barriers. The validation campaigns led by ENGAGE demonstrate how innovative models and U-space services can boost operational capacity in U-space airspace while maintaining the highest level of safety. More info at www.engagesrl.eu.

PARTNERS

