Second Public Workshop

Urban Air Mobility and eVTOL propulsion systems: mission profiling, simulation techniques and experiments

29th January 2026 - Online

PROGRAMME

09:00 Registration

09:15 *Welcome Address*

09:30 Overview of the eVTOLUTION project
Christophe Schram (VKI)

10:00 **Session 1 - UAM mission statement, preliminary design and system integration**
Numerical assessment and testing of convective PGMs
Umberto Iemma (Roma Tre University)

10:30 Coffee break

11:00 **Session 2 - Mock-design and operation for eVTOL research**
QuadRotor Test Rig for Vehicle Dynamics
Dionisys Rouvas (GKN)

Aeroacoustic wind-tunnel testing of a tandem rotor configuration
Andrea Colli (University of Bristol)

12:00 Lunch break

13:30 **Session 3 - Multi-fidelity simulations of eVTOL noise emissions**
Validation of a Multi-Fidelity Framework for UAM Rotor Aeroacoustics
Tobias Lade (DLR)

Aerodynamic and aeroacoustic characterisation of multi-rotor configurations
Caterina Poggi (Roma Tre University)

Impact of building-induced turbulence on UAM noise variability and its prediction using Ray tracing method
Jatinder Goyal (TU Delft)

14:30 Round table discussion

15:00 End

Register here by 26/01/2026



ABOUT THE eVTOLUTION PROJECT

eVTOLUTION (eVTOL mUlti-fideliTy hybrid design and Optimization for low-Noise and high aerodynamic performance) is a groundbreaking four-year project focused on advancing the design and optimization of electric Vertical Takeoff and Landing (eVTOL) aircraft. Our goal is to develop the essential knowledge, data, tools, and methods necessary to understand and improve the aerodynamic performance and noise emissions of these next-generation aircraft. With a particular emphasis on propulsion-airframe interactions, we aim to enhance both aeropropulsive efficiency and minimize noise. The project will also explore critical areas such as energy management, cooling systems, regulatory compliance, sound quality, psycho-acoustic impact, and certification. This workshop provides a unique opportunity to learn about the project and its first outcomes.

For more information: https://evtolution.eu/

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