

DFS Aviation Services

DRONES & UAS



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**ADVANCED AIR
MOBILITY (AAM)**
IS EXPECTED TO
BECOME A **REALITY**
IN EUROPE BY **2030.**

*EASA 2024

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OVERVIEW.

Advanced Air Mobility (AAM)



Urban Air Mobility (UAM)

Regional Air Mobility (RAM)



ELEMENTS.



Infrastructure

- Vertiport location
- Communication, navigation, surveillance (CNS) infrastructure



Aircraft

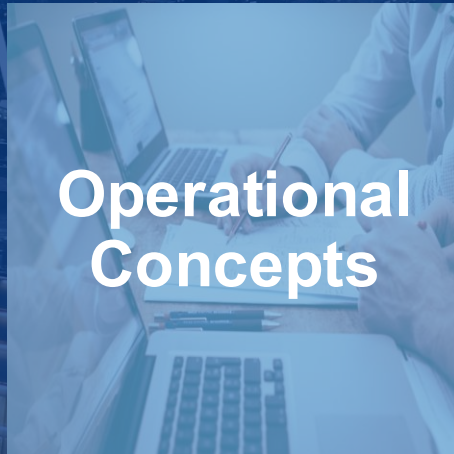
- eVTOL aircraft and drones
- Unmanned and manned operation



Airspace

- Air Traffic Management (ATM)
- Unmanned Traffic Management (UTM)

PORTFOLIO.



DETAILS.

Urban Air Mobility

Urban Air Mobility, a **megatrend** shaping tomorrow's air traffic, involves **electric aircraft operating in urban environments**. As UAM concepts proliferate globally, collaboration with the corresponding ANSP becomes crucial. **ANSPs facilitate seamless integration** of air taxi and drone projects into existing airspace structures, **ensuring safe and efficient operations**. For stakeholders less familiar with ATC topics, our expertise is available to support your UAM project.

Integration in controlled and uncontrolled airspace

Urban Air Mobility faces the challenge of **integrating air taxis and drones into existing airspace structures**. As air taxis become available in large urban areas, their unique selling point lies in connecting these regions. However, **complex airspace structures** - due to existing infrastructure like major airports - require careful integration. Consulting with a **capable ANSP** is essential. ANSP expertise ensures safe operations **near runways, taxiways, and aprons**. By collaborating with ANSPs, efficient flight paths and procedures can be developed, enabling **airport shuttle operations** to connect major airports with urban areas, revolutionizing travel time.



PROJECTS.

- Unmanned flight between the airports of **Mönchengladbach (MGL)** and **Paderborn (PAD)**
- Stopover at a **vertiport in Dortmund**
- UAS used as **Small-Scale-Demonstrator**



Development of the **operational concept** in cooperation with DRONIQ

Realization of **demonstration flights** between MGL and PAD

2023

2024

2025

Analysis of the airspace and evaluation of an **urban landing site in Dortmund**

Installation of **UTM terminals** and **training** of air traffic controllers

Validation of flight procedures and operational concept

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PROCESS.

01

Technology Deployment

Installation of **Unmanned Traffic Management (UTM) systems** in the respective Towers.

02

Seamless Integration

Conduction of risk assessment, **safety analyses** and design of **flight procedures**.

03

Flight Demonstration

Test of the operational concept with a UAS



Development of the concept for **simultaneous flight operations** of manned and unmanned air traffic, definition of **flight procedures**, operational ATC controller training.

Identification of threats and **possible implications**, development of **safety measures** to mitigate risks.

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EXPERTISE.



and
many
more

” *The first coffee - the start
of a strong partnership.*

” *Technology drives us.*

” *A network for success –
strong partnerships in aviation.*

” *We act today for the
aviation of tomorrow.*

AHEAD.

DFS GROUP
EXPERIENCE

INTER-
DISCIPLINARY
EXPERTS

ANSP & ATCO
PERSPECTIVE

INDEPENDENT
FROM
SUPPLIERS

TURNKEY
SOLUTIONS

KNOWING
PARTNER-
SHIPS

At **DAS**, we offer more than “just” consulting services! We guide you through the whole project implementation process starting from **strategy development** to the later **post implementation support**. Through close collaboration, we can take on challenges based on your desired level of involvement – whether this is a **turnkey solution** or **advisory services**.

“We support the customer **from early strategy inception until implementation** and later operations. As **certified ANSP** with experience in **AAM** we can assist in projects as an advisor for experienced guidance or take over the role as **full-service provider** including the technical infrastructure realisation. “



Your Contact

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