















Navigating the future of urban air mobility

















Project

GAUSSIAN is an EU-funded project enhancing air navigation security.

With a focus on Urban Air Mobility, it uses advanced positioning modules powered by EGNSS. The project leverages Galileo signals with authentication features to improve resistance to spoofing and combines this with inertial navigation systems. It also explores innovative corrections from Galileo's high-accuracy service to deliver greater precision, paving the way for advancements in air mobility.

















Urban Air Mobility

Urban Air Mobility (UAM) refers to the use of aerial vehicles, such as drones, air taxis, or small aircraft, for transporting people and goods within cities or metropolitan areas.

This innovative concept envisions a future where these vehicles offer on-demand. point-to-point travel, reducing traffic congestion and providing faster, more efficient transportation solutions in densely populated urban spaces.















Mission

Ensuring the safety and security of these new aircraft through reliable navigation systems.

How?

Combining existing technologies - We integrate GNSS signals, inertial measurements for accurate positioning and robust navigation.

Enhancing security - We leverage new authenticated Galileo signals to prevent spoofing and ensure data integrity.

Improving accuracy - We investigate the applications of highprecision corrections from Galileo's High Accuracy Service for even greater reliability in UAM

















