

Abstract

Collaborating towards the integration of aerial services in multimodal transportation solutions: The IDI Platform

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Traffic and city operations are evolving faster than ever, and the demand for innovative, efficient, and sustainable traffic solutions founded on *Intelligent Transport Systems & Services (ITS)* as well as effective city operations, are at an all-time high. There is an imperative for the interoperability and integration of air and ground traffic data and services. The **ITS-Driven Innovative aerial services (IDI) Platform** accelerates this transition by:

- Integrating Aerial & Terrestrial Transportation Infrastructure and Services: *Harmonising drones and other emerging aerial services with existing transport and operational frameworks.*
- Fostering Collaboration: *Connecting public and private sectors, academia, and civil society to deliver next-gen solutions.*
- Driving Innovation: *Setting standards, addressing regulatory challenges, and promoting cross-sectoral initiatives to ensure safety, security, and sustainability.*



Figure 1: Visual representation of the context and ambition of the IDI Platform

Members of the IDI work on the nexus of collaboration and innovation, focusing on the intersection of Intelligent Transport Systems (ITS) and cutting-edge aerial services, including drone technologies and autonomous systems. The IDI Platform has been founded on the multi-faceted quadruple helix model of innovation, engaging with the Public Sector/Government, Industry, Academia and Society. As such, IDI has adopted a holistic approach to fully integrate, in a responsible and sustainable manner, *Innovative Aerial Services (IAS)* into ITS-driven deployments within the transport, mobility and public services context. IDI focuses on key concepts such as Urban Air Mobility (UAM), Innovative Air Mobility (IAM), Advanced Aerial Mobility (AAM), Unmanned aircraft system Traffic Management (UTM) and U-space.

The IDI Platform merits society-driven innovation and deployment targeting to bridge cutting-edge aerial services with existing city operations and public services, including the bridging of aerial mobility solutions with existing transport networks. It safeguards generation of purposeful business opportunities and societal impact for diverse stakeholders across communities throughout Europe and globally.

Beyond its vision of unlocking latent demand and accelerating purposeful deployment towards more accessible and sustainable transport solutions and public services in urban and regional areas, the IDI Platform leverage synergies between the innovation and business ecosystems of ITS and IAS. As a new Innovation & Deployment Platform of the ERTICO – ITS Europe, the IDI Platform builds upon the collective expertise and resources of ERTICO's Partnership to address emerging challenges and accelerate the development of ITS-Driven IAS. By leveraging synergies, the IDI Platform aims to unlock new opportunities for enhancing urban and regional, connectivity, accessibility and well-being in terms of mobility and critical public services.

The IDI Platform addresses a broad spectrum of services, from individual travel information and adaptive traffic management to city operations such as emergency medical services and surveillance of critical infrastructure, and connectivity of remote areas. It seeks to facilitate the sharing and protection of data, particularly in the realm of traffic management, and ensures convergence and alignment with cross-sectoral regulatory frameworks. A key focus is given on the adoption and development of standards and the integration of drones and aerial mobility into existing infrastructure.

Driving targets of the IDI Platform are summarised as to:

- Facilitate multi-stakeholder collaboration to drive the deployment of ITS-driven IAS solutions.
- Address regulatory, technological, environmental, and societal challenges linked to aerial mobility by leveraging on ITS advances.
- Promote the harmonisation of cross-sectoral standards and multilevel governance frameworks to enable responsible and sustainable IAS growth.
- Explore and facilitate collaborative business innovation through public-private partnerships.
- Establish local living labs to serve as pre-commercial fieldwork for introducing and scaling commercial deployment of IAS.

Biography

Dr Vassilis AGOURIDAS



Please provide here a brief professional biography
(approximately 50 words)

Dr. Vassilis AGOURIDAS is the Co-Chair of The IDI Platform (ITS-Driven Innovative aerial services) powered by ERTICO-ITS Europe. Previously, Dr AGOURIDAS had been with Airbus for 16 years, holding senior positions in Strategic Innovation and Corporate Development pioneering the Strategic Development of Urban Air Mobility.