5G!DRONES

Unmanned Aerial Vehicle Vertical Applications' Trials Leveraging Advanced 5G Facilities

ISSUE HIGHLIGHTS

The 12th issue of the 5G!Drones newsletter presents the project activities during the period March – May 2022. This issue focuses on the latest 5G!Drones dissemination and communication activities, new collaborations, and the upcoming participation of the project in the EuCNC 2022, the submitted deliverables, as well as the latest GA meeting.

5G!Drones activities in numbers:

- ➢ 3 Journal - Conference Papers
- ➢ 1 Presentation - Panel Discussion
- ➢ ICARUS project collaboration
- ➢ EuCNC & 6G Summit 5G!Drones Booth
- ➢ 3 Submitted Deliverables
- ➢ 10th 5G!Drones General Assembly

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DISSEMINATION AND COMMUNICATION ACTIVITIES

JOURNAL AND CONFERENCE PAPERS

The 5G!Drones conference paper entitled "Application of mobile networks (5G and beyond) in precision agriculture" has been accepted in the 5G-PINE workshop in the context of AIAI 2022 conference (17-20 June 2022). You may learn more about the event here: https://www.5g-essence-h2020.eu/Contact/5GPine.aspx
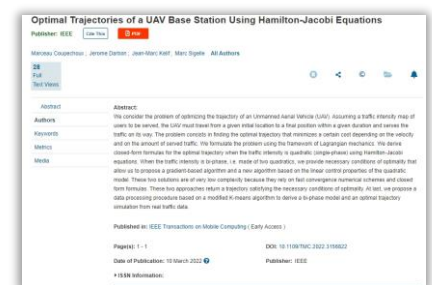

The 5G!Drones journal paper entitled "A New Framework for Multi-Hop ABS-Assisted 5G-Networks With Users' Mobility Prediction" has been accepted in IEEE Transactions on Vehicular Technology magazine. You may learn more information here: https://ieeexplore.ieee.org/abstract/document/9707619

The 5G!Drones journal paper entitled " Optimal Trajectories of a UAV Base Station Using Hamilton-Jacobi Equations" has been accepted in the IEEE Transactions on Mobile Computing magazine. You may access the paper here: https://ieeexplore.ieee.org/document/9732520

More information on 5G!Drones publications is available online at 5G!Drones website at https://5gdrones.eu/research-papers/

PRESENTATION-PANEL PARTICIPATION

Gokul Srinivasan, robots expert and 5G!Drones partner, made a 30 minutes presentation on "BVLOS missions & lessons learned" during the Amsterdam Drone Week. Insights and activities performed by the 5G!Drones Project were also communicated through the presentation. You may learn more about the event here: https://www.amsterdamdroneweek.com/.

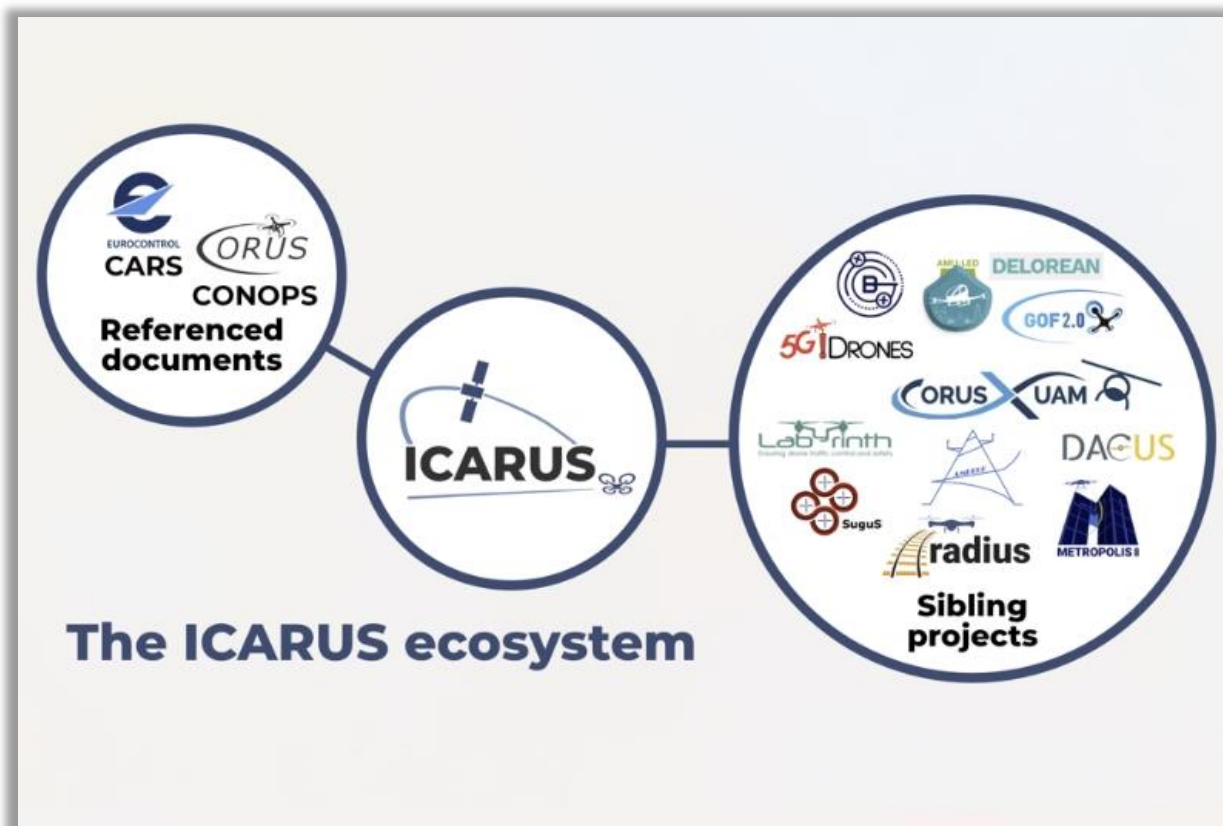# ICARUS PROJECT COLLABORATION

5G!Drones is part of the ICARUS ecosystem! The scope of this initiative is to explore new possibilities, outside of preconceived ideas. Successful business ecosystems are characterised by the free interchange of ideas between different actors that translate into new products and services. The clearest benefit of cross-fertilization is the identification of redundant areas of research that are being actively pursued by other projects, thus ensuring the most effective use of resources is allocated, reducing wasteful duplication of efforts as much as possible. The main benefits can be summarized as follow: Optimisation of resources, Specify and refine requirements, Validate the approach and Cross-promotion.

You may learn more about the collaboration here: https://www.u-spaceicarus.eu/reaching-better-research-outcomes-using-the-cross-fertilization/

The ICARUS ecosystem

PANEL DISCUSSION

Gokul Srinivasan, robots expert and 5G!Drones partner, participated in a panel discussion at the mainstage related to the topic "Autonomous Drone Networks" on the 31st of March 2022 during the Amsterdam Drone Week. 5G!Drones project was represented sharing insights about the role of network related to autonomy, BVLOS & certification standards. You may learn more here: https://www.amsterdamdroneweek.com/

EUCNC & 6G SUMMIT 2022

5G!Drones project will participate in the upcoming EuCNC & 6G Summit with a booth. This year's EuCNC event will take place in 7th-10th of June 2022, in Grenoble, France. This year the event builds on putting together two successful conferences in the area of telecommunications: EuCNC (European Conference on Networks and Communications), supported by the European Commission, and the 6G Summit, originated from the 6G Flagship programme in Finland, one of the very first in its area. The conference is sponsored by the IEEE Communications Society and by the European Association for Signal Processing, and focuses on all aspects of telecommunications ranging from 5G deployment and mobile IoT to 6G exploration and future communications systems and networks, including experimentation and testbeds, and applications and services. It brings together cutting-edge research and world-renown industries and businesses, globally attracting in the last years more than 1 300 delegates from more than 40 countries all over the world, to present and discuss the latest results, and an exhibition with more than 70 exhibitors, for demonstrating the technology developed in the area, namely within research projects from EU R&I programmes.

The conference is intended to be held for in-person attendance, with remote attendance in a Hybrid mode. The conference has a not-for-profit organisation, hence, registration fees are as low as possible and all surplus will be made available in grants. Best Papers and Booth Awards will be granted. Accepted and presented papers for regular sessions will be published in the Conference Proceedings and submitted to IEEE Xplore and other Abstracting and Indexing (A&I) databases.

For more details: https://www.eucnc.eu/

The 5G!Drones project will be at the Booth #45.

You may find all related information here: https://www.eucnc.eu/patrons-exhibitors/exhibitions-and-demos/
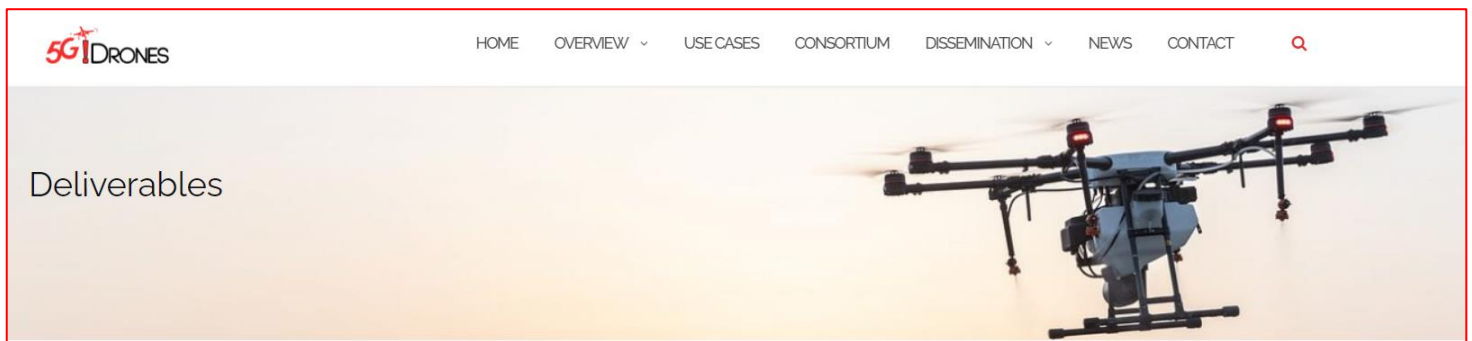
Come and visit us!

SUBMITTED DELIVERABLES

D3.3 5G!Drones Enablers Software Suite – M35: A software suite containing all the 5G-infrastructure-level enablers that were developed in tasks T3.1-T3.3.

D3.4 UAV use case service components - M36: Implementation of the vertical-service-level components that constitute the use case scenarios to trial.

D6.5 Annual report, year 3 – M36: The 3rd annual report of the project containing the project results and their evaluation
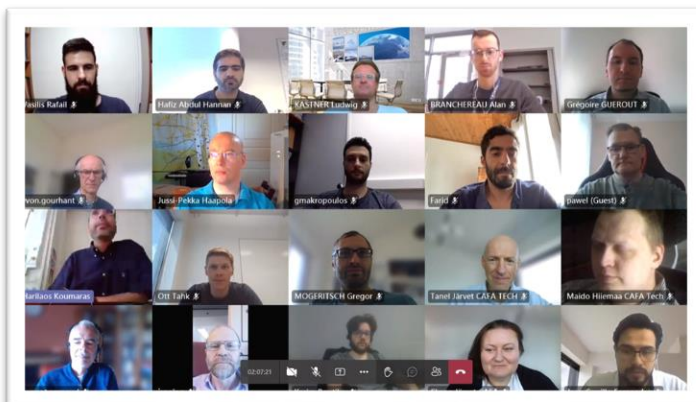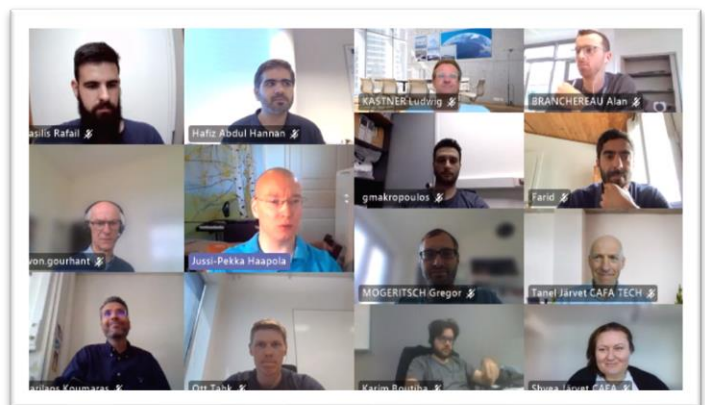
If you wish to learn more about the submitted and upcoming deliverables of 5G!Drones, you may visit the official website on the corresponding deliverables' page, using the following link: https://5gdrones.eu/deliverables/

10TH 5G!Drones GENERAL ASSEMBLY (24-25 MAY 2022)

The 10th 5G!Drones virtual GA meeting took place on 24th and 25th of May 2022 and lasted two full days. During the first day of the meeting, WPs progress and technical specifications of the project were presented. Also, upcoming deliverables and the participation of the project in EuCNC 2022 were discussed. On the second day of the meeting the discussion was focused on trials planning and administrative issues. Also, during the second day, the group photos of the consortium members were also taken in a virtual way.