



**ALRIGHT2T**



GROUND OPERATIONS OF LIQUID HYDROGEN AIRCRAFT

# Press Release

**The ALRIGHT2T and GOLIAT projects will collaborate closely to accelerate the development of liquid hydrogen ground refuelling technologies for more sustainable aviation**



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## The ALRIGH2T and GOLIAT projects will collaborate closely to accelerate the development of liquid hydrogen ground refuelling technologies for more sustainable aviation

- Both projects are funded by CINEA under the EU Horizon Europe framework programme and are focused on hydrogen refuelling technologies and airport operations. They will implement large-scale demonstrations.

Recognised as a crucial enabler to achieve the EU's net-zero CO<sub>2</sub> goals<sup>1</sup>, low-carbon hydrogen offers a viable pathway to decarbonise short- and medium-haul flights while advancing low-carbon aviation ground operations. However, in order to integrate hydrogen into airport infrastructures and operations, a series of technological, regulatory and knowledge gaps need to be addressed. The ALRIGH2T and GOLIAT projects – both funded under the same Horizon Europe call dedicated to clean and competitive solutions for liquid hydrogen transport and distribution and running until December 2027 and April 2028, respectively – are driving progress in hydrogen-powered aviation by developing and testing high-flow LH<sub>2</sub> refuelling equipment and infrastructure; optimising ground operations and turnaround times; and assessing the economic feasibility of hydrogen adoption at airports.

**ALRIGH2T** focuses on developing and testing innovative technologies and processes for refuelling liquid hydrogen aircraft under real airport conditions, with demonstration activities taking place at two key airports: Milan-Malpensa and Paris-Orly. The project fosters innovation in H<sub>2</sub> technology by developing cost-effective and scalable methods for sustainable hydrogen utilization, addressing storage and transportation challenges to ensure safe and efficient handling, and aligning H<sub>2</sub> technologies with international regulations to facilitate widespread adoption.

**GOLIAT** is developing liquid hydrogen ground refuelling technologies needed for high-flow and high-performance A/C refuel in safe and competitive conditions. It will implement liquid-hydrogen aircraft refuelling and ground operations demonstrations at three airports sites: Stuttgart, Rotterdam and Lyon. The project will also address standardisation and certification aspects with a gap analysis of certification rules and requirements for ground operations and equipment. Finally, GOLIAT will assess hydrogen value chains for competitive hydrogen-powered aviation.

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<sup>1</sup> European Green Deal: [https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal_en)



## Building a long-term global collaboration

The two projects established communication from a very early stage. Following mutual presentations of objectives and workplans, an initial collaboration strategy was devised.

A key milestone was reached during the joint workshop held on 22–23 January 2025 at the Austrian Institute of Technology. This event provided an opportunity to discuss critical topics, including the feasibility analysis and authorisation procedures for proposed demonstrations, techno-economic assessments, the identification of standardisation gaps, and the development of common roadmaps to address shared technological challenges related to airport infrastructure, refuel time, boil-off gas management, and LH2 thermodynamics.

Both projects are working towards defining a concrete framework for collaboration in 2025 and beyond. This includes setting clear targets, establishing effective collaboration methods, and planning joint workshops and dissemination activities.

### Learn more

#### ALRIGH2T

Web: <https://alrigh2t.eu/>

LinkedIn: [@ALRIGH2T EU Project](#)

X: [@Alrigh2t\\_EU](#)

CORDIS: <https://cordis.europa.eu/project/id/101138105/de>

#### GOLIAT

Web: <https://research.airbus.com/en/products-systems/goliat>

LinkedIn: [@GOLIAT – Horizon Europe project](#)

CORDIS: <https://cordis.europa.eu/project/id/101138379>

