

PRESS RELEASE

Palaiseau, July 1st, 2025

GARUDA Project Coordinated by ONERA Selected by the European Defence Fund to design future Unmanned Collaborative Air Combat Systems

The European Commission has selected the GARUDA project with its innovative design-and-simulate process to develop modular autonomous and collaborative combat aircraft, under the European Defence Fund (EDF).

Coordinated by ONERA, the French Aerospace Lab under the supervision of the French Ministry of Defence, this project brings together a European consortium of nine partners, including six SMEs (Small and Medium-sized Enterprises), two Mid-Cap Companies, and one research organization: ONERA.

GARUDA aims to lay the architectural foundations for future collaborative combat drones through a modular and versatile platform, capable of adapting and creating multiple variants of aircraft that meet the operational and evolving needs of European armed forces.

The project will adopt an innovative design-simulation methodology, aiming to combine system design and operational simulation within iterative cycles. This approach seeks to accelerate the exploration and validation of new configurations, ensuring the development of an adaptable, resilient, and evolving platform to meet operational requirements, and establishing new standards for lean and economic development, operation and evolution of the systems.

Through GARUDA, ONERA continues its longstanding contribution to the development of future air combat systems. Leveraging its experience in finalised research for the defence domain, ONERA will be able to provide its expertise and assistance in designing new collaborative combat drones, as part of a broader research trajectory encompassing several initiatives on future air combat, some of which were presented at the 2025 Paris Air and Space Show.

Consortium Partners are:



About ONERA, the French Aerospace Research Centre:

ONERA, a central player in aeronautical and space research, employs approximately 2,200 people. Under the supervision of the Ministry of the Armed Forces, it has a budget of €336 million (2024), with over half coming from commercial contracts. As a state expert, ONERA prepares for tomorrow's defence, addresses future aeronautical and space challenges, and contributes to the competitiveness of the aerospace industry. It masters all disciplines and technologies in the field. All major civil and military aerospace programs in France and Europe carry a part of ONERA's DNA: Ariane, Airbus, Falcon, Rafale, missiles, helicopters, engines, radars... Internationally recognized and often awarded, its researchers train many doctoral students.

Website: <http://www.onera.fr>

About DATA MACHINE INTELLIGENCE SOLUTIONS GMBH - Germany:

Data Machine Intelligence (DMI) is the key partner for automation in the Aerospace and Defence (A&D) industry, enabling organizations to create, deploy, and update automated systems with unparalleled speed. DMI facilitates the transition to intelligent automation through its comprehensive AI engineering platform, DMI Labs. This platform offers rapid AI development, complex system simulation, integration, and validation in a fluid and evolving environment. The DMI Automation Library further optimizes A&D projects by providing ready-to-use blocks such as scenarios, pre-trained models, human-AI interfaces, and one-click testing. DMI enables major defence players, system suppliers, and sector innovators to achieve development speed and technological superiority, delivering advanced autonomous solutions faster, with fewer resources, and without requiring in-depth internal AI expertise.

Website: <https://datamachineintelligence.eu>

About AERO VODOCHODY AEROSPACE AS - Czech Republic:

AERO Vodochody AEROSPACE a.s. focuses on the development, production, maintenance, and modernization of civil and military aircraft, and is the largest aircraft manufacturer in the Czech Republic as well as one of the oldest aircraft manufacturers worldwide. Concerning its own aircraft, Aero is a permanent partner to several military air forces and holds a strong position in the market for military training and light combat aircraft. With over 11,000 aircraft produced during its 100-year existence, hundreds of L-39 Albatros aircraft still in service with dozens of military operators and demonstration teams, and especially with its new L-39 Skyfox aircraft, Aero positions itself as a leader in the global market for jet training aircraft. In civil aviation, Aero collaborates with leading aircraft manufacturers on a wide range of projects and is a partner in several risk-sharing programs, where it is responsible not only for the production and assembly of aerospace components but also for their development.

Website: www.aero.cz

About CYBERNETICA AS - Estonia:

Cybernetica builds mission-critical systems for a smart and secure world. Our technologies are used in more than 35 countries globally, utilised on almost every continent. Cybernetica has partners and clients in government, enterprise and defence domains. We have over 25 years of experience in building future-proof products and systems that rely on R&D. Cybernetica has been a key partner in developing e-Estonia, making our country known as the most advanced digital society in the world. Our unique expertise ranges from digital identity and secure data exchange, Internet voting, e-customs and information security to cyber situational awareness, as well as surveillance systems on land and at sea.

Website: <https://cyber.ee/>

About GLOBAL DESIGN TECHNOLOGY - Belgium:

GDTech is an engineering services company expert in numerical modelling and simulation, as well as the execution of complex engineering projects. GDTech is present in the aerospace, defence, transportation, energy, and general industry sectors. GDTech supports its partners in design activities (CAO: Catia, SolidWorks, NX CAD, ...) and Computer-Aided Engineering with a finite element approach (CFD fluid dynamics analysis, structural mechanics analysis, material modelling including composites, flexible multi-body system modelling, thermo-mechanical analysis, process simulation, numerical optimization...), as well as the modelling of multi-physical 0D/1D systems including digital twins (connection to real physical assets). Over the years, GDTech has participated in numerous research projects (at regional, national, and European levels) to maintain innovation at the heart of its activities.

Website: <https://www.gdtech.eu/>

About GRAFREN AB - Sweden:

Grafren AB is a company specialized in advanced materials, equipped with unique technology for processing nanomaterials and integrating them into composite materials. Grafren's key innovation is based on over 15 years of research in Materials Science and Nanotechnology, protected by a vertically integrated patent portfolio. The company has a complete team of experts, its own nanolaboratory, and a world-unique pilot production line. Grafren's main innovation concerns stealth composites - composite materials with low radar observability. The solution can be customized to achieve the desired level of discretion and tuned to specific radar frequencies. Its implementation adds negligible weight while offering robust and maintenance-free stealth functionality for UAVs and other concerned vehicles. The stealth composite technology has been verified by defense research institutes and approved by industrial users. Recently declassified, it is now in active development to become a future standard in low observability technologies.

Website: www.grafren.se

About PIDSO - PROPAGATION IDEAS & SOLUTIONS GMBH - Austria:

PIDSO - Propagation Ideas & Solutions GmbH is an innovative supplier and manufacturer of high-end antennas, systems, and radio frequency solutions for aerospace, security, and industrial applications. By combining technical excellence with a passion for cutting-edge technology, PIDSO enables its global customer base to overcome even the most complex RF challenges. PIDSO's product portfolio ranges from custom-designed antennas to intelligent panels, tracking systems, radar technology, and exceptional communication solutions. Founded in 2010, based in Vienna, and part of the Riedel Group since 2017, PIDSO serves clients worldwide through its continuously evolving network.

Website: <https://www.pidso.com/>

About PBS GROUP

PBS GROUP, the aerospace manufacturer, is synonymous with innovation in the field of high-precision engineering. It is a renowned manufacturer of jet engines. With its main production headquarters in Velka Bites and growing production capacities in the USA and India, the company has become a major global player in the field of defence and civil technology. PBS GROUP has long been involved in the development of advanced aerospace technologies that support the defence projects of NATO and its allies, as well as in civil aviation.

Website: www.pbs.cz/en/

About XYSENSING SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA - Poland:

XY-Sensing is an entity specialized in designing and preparing tailored solutions to meet client expectations in the domain of technologically advanced radar systems. XY-Sensing offers innovative, cutting-edge solutions from a broad range of products and services in radar detection and microwave technology. With over 30 years of experience in developing advanced radio signal processing techniques, we are capable of providing global, unique solutions in areas such as situational awareness, detection and acquisition, digital RF signal processing, as well as the creation and implementation of advanced algorithms utilizing artificial intelligence.

Website: xy-sensing.pl

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