



SECTOR GROUP AEROSPACE & DEFENCE PROFILES





AS&D Catalogue

EU-based institutions excelling in the field of aeronautics, space, security and defence looking for business and technology partners, or to undertake a new R&D Project under a EU-funded scheme. If you are interested in any of the profiles, please contact your local EEN-partner.



Aeronautics



UK Aerospace business seeks technology for high-power battery system for a hybrid Vertical Take Off and Landing Drone / Unmanned Ariel Vehicle (VTOL – UAV) (TRGB20250407011)

Type of profile: Technology Request

Summary: A UK aerospace business is seeking a high-power battery system to support the operation of a large hybrid VTOL – UAV. The system must provide peak power for vertical take-off and landing while meeting stringent size, weight, and performance criteria. Partners are sought for commercial agreements with technical assistance.

Expertise sought:

- Power & Energy: 300 kW peak, ≥ 75 kWh
- Total weight limit: Under 250 kg including cooling
- Fast Charging: Ideally within 30 minutes
- Discharge Rate: High ($\geq 5C$) with minimal
- Preferred Chemistry: Lithium-ion (NMC or similar)
- Voltage Range: 600–800 V DC
- Thermal & Safety: Active cooling, high reliability under load
- Durability: Long cycle life in demanding conditions

Type of partner sought: provider of a high-power battery system for a hybrid VTOL – UAV.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/uk-aerospace-business-seeks-technology-high-power-battery-system-hybrid>

Contact EEN: Tony Welch, EEN Innovate UK, Business West

Class I fixed wing electric vertical take-off and landing Unmanned Aerial Vehicle (UAV) for maritime surveillance with modifiable airframe to accommodate different payloads (TOGB20240828011)

Type of profile: Technology Offer

Summary: The UK Company manufactures a high-speed class I type 2 fixed wing high speed electric vertical take-off and landing unmanned aerial vehicle. The airframe is 3D printed out of a glass fibre filled resin and the manufacturing process facilitates a very wide range of sensor payloads. The UK SME seeks a commercial agreement with technical assistance with technology companies who specialise in custom sensors for mounting and adapting to the unmanned aerial vehicle.

Advantages and Innovations:

- The drones are smaller than comparable UAVs in the industry used for maritime applications. The compact wingspan enables take off from smaller areas (only require 3m x 3m)
- Detachable wings, rapid deployments without excessive costs.
- cruise speed of 160 km/h and peak speed of 200 km/h mph, enabling drones to operate in far worse wind conditions than other drones on the market

Type of partner sought: The company is looking for industry partners who develop specialised sensors and who require a high-speed drone platform for sensors to capture data at sea and from altitude or submerged under water. It is seeking a commercial agreement with technical input. EASA certification / licence can be sold to production partners

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/class-i-fixed-wing-electric-vertical-take-and-landing-unmanned-aerial>

Contact EEN: Tony Welch, EEN Innovate UK, Business West

Additive manufacturing of certified aircraft components: production and technology partners sought (TODE20231018015)

Type of profile: Technology Offer

Summary: A German startup, certified by the European Union Aviation Safety Agency (EASA) for the 3D-printing of aircraft components and focused on polymer cabin interiors, seeks companies who would like to be licensed as production partners. Company can deliver EASA certification and/or machinery. Also, partners are sought for the further development of the technology & hardware, especially regarding metals and composites. Commercial and R&D agreements are sought.

Advantages and Innovations:

- cost-efficient, fast and flexible production of small series on-site
- EASA certification / licence can be sold to production partners

Type of partner sought: MROs (maintenance, repair, and overhaul companies), equipment manufacturers (OEMs) and aviation suppliers that want to acquire an EASA certification and use additive manufacturing for the aviation industry, also R&D Partners

Expected role of the partner: integration of the technology and use for their own clients

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/additive-manufacturing-certified-aircraft-components-production-and>



Contact EEN: Johannes Böhmer, EEN Germany – North Rhine-Westphalia

Drone tethering- (linking) systems for a permanent (24/7) drone deployment (TODE20250310012)

Type of profile: Technology Offer

Summary: A German full service provider in the sector of unmanned aerial systems offers several innovative systems including a drone tethering system that links drones with the power supply. Cable length up to 120 metres. The company is looking for sales and service partners on the base of in form of commercial agreements with technical assistance

Advantages and Innovations:

- Solution enables permanent flight altitudes up to 120 metres
- high bandwidths for upstream and downstream can be provided for the first time (Up to 200 Mbit in both directions)
- cable supplies the copter with uninterrupted power (flight times of 24/7)

Type of partner sought: drone service providers (maintenance of drones), providers of drone flights (safety, security, damage and condition control, rescue) or dealers

Expected role of the partner: The partner should have an interest in using or trading the tethering system and in taking up, advising and supporting the customers.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/german-full-service-provider-sector-unmanned-aerial-systems-offers-drone-0>



EEN: Jörg Büsel, EEN Germany – Lower Saxony (Niedersachsen)

Flexible and modular industrial drones using AI (BOPT20240913002)

Type of profile: Business Offer

Summary: Beyond Vision is an industrial drones manufacturer. Its class 3 full electric hexacopter and VTOL hybrid aircraft are particularly interesting due to its flexibility and modularity which enables easy adaptations to new scenarios of operation, including AI-based procedures. Wide telecommunications portfolio enables long-range and wide availability.

Advantages and Innovations:

- AI capabilities on-board
- Wide communications portfolio
- Mechanical and electrical modular so to enable easy adaptation to new scenarios of operation

Type of partner sought: Partner capable of creating/adapting new scenarios for operation with drones, widening the portfolio that our drones have already shown good performance

Expected role of the partner: To work in the development of these new scenarios

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/partner-capable-creatingadapting-new-scenarios-operation-drones>

Contact EEN: Jorge Duque, PORTUGAL



Space



Tungsten-based materials and fiber-reinforced composites (Wf/W) for advancing ultra-thin armor coatings to protect critical components in space and other harsh environments. (TODE20250401011)

Type of profile: Technology Offer

Summary: A German research center is developing advanced tungsten-based materials with unique properties. Industrial partners are sought to apply these technologies in sectors with extreme conditions, such as Aerospace, concentrated-solar power, heat exchangers, high-temperature power plants and turbines.

Advantages and Innovations:

- High Temperature Resistance (up to 10 MW/m², maintaining structural integrity and suppressed oxidation at temperatures of 1000°C)
- Enhanced Safety (chromium oxide layer preventing the release of radioactive tungsten oxide)
- Increased Durability (Both materials withstand neutron radiation, extending their lifespan in fusion reactors)
- Improved Damage Resistance
- Lower Maintenance Costs

Type and role of partner sought: Especially sought are manufacturers with expertise in AI data-driven modelling and material design, advanced manufacturing technologies, and high-performance engineering to co-develop novel applications and commercial-scale production.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/tungsten-based-smart-materials-and-tungsten-fiber-reinforced-composites>

Contact EEN: Johannes Böhmer,
EEN Germany – North Rhine-
Westphalia

Development of innovative methodologies for the numerical treatment of carbon fiber-reinforced plastic (CFRP) components (TOIT20240509006)

Type of profile: Technology Offer

Summary: An Italian SME has developed methodologies to develop mechanical components and systems with new materials. The methodologies involve new production processes and new technologies for high-tech fields and space-applications even with Artificial Intelligence support. The SME is already working on both launchers and satellites market.

Advantages and Innovations:

- Capability to integrate simulation , optimisation services with 3D-printing manufacturing capabilities and validation on prototypes manufactured on customer design
- The use of AI and additive manufacturing technologies permit a very rapid and definitive results in prototypes manufacturing

Type of partner sought: Sought are public and/or private entities interested in Research activities and large space companies or R&D centres for partnering in research projects

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/development-innovative-methodologies-numerical-treatment-cfrp-components>

Contact EEN:
Claudio Testani, Italy –
Rome

Improved position determination and satellite navigation for logistics applications (TODE20240821014)

Type of profile: Technology Offer

Summary: A German university designed a multi-antenna receiver system designed as a ballast. It enables high-precision position determination with conventional global navigation satellite systems (GNSS) receivers down to a few centimeters. This is of great commercial benefit for motor vehicles in logistics or agricultural technology, among others. Licensees are sought.

Advantages and Innovations:

- High-precision positioning in the cm range
- Reduced interference
- Can be combined with conventional GNSS receiver systems
- Improved satellite navigation

Type of partner sought: Licensees from these industries are sought. Further development can be part of the cooperation.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/improved-position-determination-and-satellite-navigation-logistics>

Contact EEN:

Johannes Böhmer, EEN Germany,
North Rhine-Westphalia

An Italian company with extensive expertise in designing and developing space technologies offers research centers and life sciences companies the chance to experiment using a miniaturized self-operating laboratory system that functions in microgravity (TOIT20240911022)

Type of profile: Technology Offer

Summary: An Italian company provides advanced services in life sciences to public and private organizations interested in experimentation using a small, self-operating laboratory system that functions in microgravity. The MiniLab, which is space-qualified and autonomous microgravity laboratory capable of conducting scientific experiments through two separate fluid systems.

Advantages and Innovations:

- Autonomous Miniaturized Laboratory system.
- Ensured Thermal Control.
- Conformity to SSP Standards.
- Fluidic Experiments guaranteed

Type of partner sought: Customers interested to do life science or biological experimentation campaign in Microgravity.

Contact EEN:

Simone Sparano, Italy –
Campania

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/italian-company-extensive-expertise-designing-and-developing-space>

A Spanish SME in the space sector has developed a technology for Thermally Enhanced Additively Manufactured Structures (THEAMS) and is looking for partners to test and implement THEAMS in satellites (TOES20240913015)

Type of profile: Technology Offer

Summary: A Spanish SME in the space sector has developed a technology to manufacture topologically optimized aluminum structures, balancing mechanical properties and mass. These structures integrate thermal devices, achieving dual optimization of thermal and mechanical performance.

Advantages and Innovations:

- Mass reduction, thanks to topology optimization and the use of additive manufacturing: typically, 30% improvement or above.
- Assembly, Integration and Testing effort reduction: no need to integrate the thermal solution on top of the original structure, but the hardware is delivered in a turnkey fashion.
- Purely passive solution: no need to supply any power to make it work.
- Enhanced cooling capabilities compared to those of the traditional structures: 20°C to 30°C decrease measured/calculate

Type of partner sought: Spacecraft or aircraft integrators / TIER 1 electronic equipment suppliers, aiming for an improvement in heat dissipation to avoid malfunctions of their components.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/spanish-sme-space-sector-has-developed-technology-thermally-enhanced>

Contact EEN:
Rosalía Vicente Alfonso
EEN-Madrid (Spain)

A Spanish company offers its advanced technology for Surface Coating with Ultra-Pure Nanoparticles with extensive applications in the aerospace sector (TOES20240911006)

Type of profile: Technology Offer

Summary: The Madrid-based company has developed a new methodology for synthesizing ultra-pure nanoparticles and surface coatings. This technology allows for a wide range of coatings in high value-added applications such as aerospace, electrodes, sensors or prostheses.

Advantages and innovations: The company's technology mitigates the limitations of traditional chemical methods of nanoparticle synthesis, such as the presence of impurities on the surface, poor homogeneity of coatings, and generation of toxic residues.

Type of partner sought: Device manufacturers who need to make coatings. Satellite, electrode, sensor, lens manufacturers, etc.

Expected role of the partner: as the company follows a B2B model, ideal partner should be able to market the devices enhanced with the surface coatings.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/spanish-company-has-developed-new-way-surface-coating-ultrapure>

Contact EEN:

Rosalía Vicente Alfonso
 EEN-Madrid (Spain)

Standard Interface for Robotic Manipulation (SIROM) (TOES20240327015)

Type of profile: Technology Offer

Summary: A Spanish company has developed SIROM, a family product of modular plug-and-play interfaces for on-orbit satellite servicing. SIROM is a multifunctional interface combining in a single and integrated form:

- Mechanical interface for capture and hard docking
- Electrical interface for power transmission
- Data interfaces for high-rate data transfer
- Telemetry and telecommand control interface
- Optionally, a resupply interface for refueling or heat regulation

Advantages and Innovations: Customization of

- Data protocols and number of data lines
- Active-Passive (X), only Active (A) or Passive (P) versions
- Configurable power supply for X/A SIROMs of families E, F and G.
- Electrical power transfer (number of lines, electrical performances)
- Integrated or distributed electronics to control several SIROMs with a single and modular electronics module.
- Visual servoing system (Marker based)

Applications: On-orbit servicing, Refueling, resupply, In-orbit assembly, Assembly of large structures or antennas in space, Payload upgrade or replacement for satellites, Robot tool exchange, Active debris removal

Stage of development: Already on the market

Type of partner sought: big companies, startups, Space primes

Expected role of the partner: commercial agreement with/without technical assistance

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/robotic-manipulation-standard-interface-space-applications>

EEN: Susana Larrea, Basque country / Spain

Enabling COTS for space radiation environment by optimized processes for characterization and testing (TODE20240521012)

Type of profile: Technology Offer

Summary: A German research institute has developed improved processes to perform radiation qualification of Commercial Off-The-Shelf (COTS) components for use in space. Advantages include a faster and more cost-effective testing and thus a higher reliability. Public or private partners are sought for research or technical cooperation agreements. Especially sought are producers and users of COTS components and partners with expertise in New Space, SmallSats and conventional satellite applications.

Advantages and Innovations:

- COTS components can be purchased faster and cheaper
- Higher Reliability of radiation results
- Can contribute to the faster and more cost-efficient development of space missions
- Availability of state-of-the-art testing facilities and measuring tools.

Type of partner sought: companies, research institutions or public entities having expertise in the above-mentioned technology field.

Expected role of the partner: Technological cooperation or R&D Projects

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/enabling-cots-space-radiation-environment-optimized-processes-0>

Contact EEN: Johannes Böhmer, EEN Germany – North Rhine-Westphalia

Sustainable CubeSat structures made of high-performance polymer PEEK instead of aluminium (TODE20240724019)

Type of profile: Technology Offer

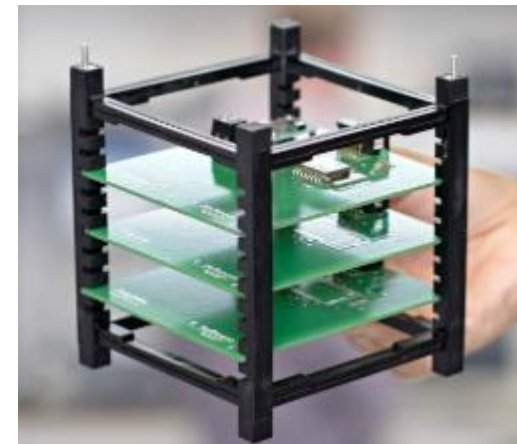
Summary: A German Start-up has developed sustainable and lightweight CubeSat structures made of the high-performance polymer PEEK using injection molding. Compared to conventional aluminum structures, production time, costs and use of resources are reduced. Other advantages are a lower mass, better corrosion resistance, improved damping capacity and lower CO2 emissions. The company seeks to integrate bio-polymers or recycled materials.

Advantages and Innovations:

- Less use of raw materials and reduction of CO2 emittance
- Cost-efficiency
- Avoidance of space debris by using polymers instead of metal (burn faster and in a higher atmosphere)
- Burns up without residue when entering the atmosphere

Type and role of partner sought: companies, research institutions having expertise in the above-mentioned technology field for technological / R&D Projects. Also sought are manufacturers of cube-sats and satellite integrators to speed up market entry.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/sustainable-cubesat-structures-made-high-performance-polymer-peek-instead>



Contact EEN: Johannes Böhmer, EEN Germany
– North Rhine-Westphalia

Greek SME offers an innovative, smart, patented personal radiation dosimeter with a platform allowing for instant measurement for persons working in radiation environment conditions such as in healthcare, space, nuclear industry (TOGR20240526001)

Type of profile: Technology Offer

Summary: A Greek SME has developed and offering a patented, innovative, smart, personal radiation dosimeter capable of measuring all key types of harmful radiation (X-rays, Gamma, Heavy ions, Beta and Neutrons), with higher sensitivity and accuracy, in real time. The company is looking for distribution agreements with medical or safety equipment providers. Or commercial agreements with technical assistance with end-users such as hospitals, aerospace agencies, nuclear industry facilities etc.

Advantages and Innovations:

- The offer dosimeter can help people to protect their health, at last, effectively from radiation. Compared to passive dosimeters, it has much higher sensitivity, it can detect the lower limit radiation that the passives simply cannot. It has also increased accuracy to pulsed radiation , the main source of radiation in healthcare. It can detect all types of harmful radiation. It can continuously record and transfer automatically the data. The dedicated platform used allows the process of data and to prepare reports. Healthcare organizations and Radiation Protection Authorities are able to comply with legislative requirements and make administration easy, fast, less costly and secure.
- As a piece of evidence, the product is used by 3 well-known aerospace agencies, a large aerospace company, an atomic federation and many hospitals globally. The company has also received the Seal of Excellence for the innovative design and significant impact of the dosimeter.

Type of partner sought: The Greek company is seeking for distributors of medical or security equipment. These partners should be able to connect to sectors such as healthcare, space, aviation, nuclear industry and other similar sectors, in which radiation poses a risk for health. The company is also open to conclude commercial agreements with technical assistance with end-users (such as hospitals, atomic or space federations) that wish to provide directly the dosimeters.. Excluded countries: Belgium, Netherlands, Luxemburg, Greece, Italy, Portugal and Brazil in which the company has distributing partners.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/greek-sme-offers-innovative-smart-patented-personal-radiation-dosimeter-0>

Contact EEN: Achilleas Barlas, Greece

A Spanish company offers a software suite for Mission & Space Mobility Analysis, simulated environments and spacecraft Digital Twins (BOES20241014027)

Type of profile: Business Offer

Summary: A Madrid-based company seeks commercial partners to expand internationally its innovative mission and space mobility analysis software for small satellites. It incorporates high-fidelity models and advanced optimization algorithms to solve both propagation and design problems.

Advantages and innovations: Key features of the software include a Tunable High-Fidelity Environment Model, a Spacecraft Builder, Behavior Modeling, Advanced Plotting and Visualization. Advantages include its versatility, a focus on Space Mobility, Flexibility and its accurate Operations Behavior Simulation.

Type of partner sought: system integrators, companies involved in mission analysis and satellite operations

Expected role of the partner: testing and scaling the software globally

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/spanish-company-offers-software-suite-mission-space-mobility-analysis>

Contact EEN:
 Rosalía Vicente Alfonso
 EEN-Madrid (Spain)

Advanced ocean modelling and high-resolution hydrodynamic simulations for marine and coastal monitoring using space data (TOES20250217005)

Type of profile: Technology Offer

Summary: A Spanish SME specialized in ocean dynamics and modelling provides solutions for coastal protection, environmental preservation, and security operations with extremely high accuracy. Sought are coast guards, environmental agencies, and defense departments in target countries across Europe, Africa, Asia and the Americas.

Advantages and innovations: The technology allows to predict spills and drifting objects at sea. Its scalable SaaS product addresses key environmental and economic challenges, providing real-time forecasting tools to enhance maritime safety, coastal protection, and pollution management for government agencies and environmental organizations. The company provides advanced ocean modeling, real-time oil spill prediction, forecasting and contingency planning, along with data integration and visualization through remote sensing, satellite imagery, and interactive dashboards.

Type and role of partner sought: coast guards, environmental agencies, and defense organizations to enhance maritime safety, develop pollution control strategies, and secure coastal areas.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/madrid-based-company-specialized-advanced-ocean-modelling-and-high>

Contact EEN:
Rosalía Vicente Alfonso
EEN-Madrid (Spain)



Defence & Security



Anti-UAS mobile system (TOPT20240314004)

Type of profile: Technology Offer

Summary: Portuguese start-up that develops deep tech equipment with dual use capability for the public security and defense sector. It has developed two working prototypes (SPG Vanguard System) that have been tested and demonstrated with military entities interested in the system's capability. The SPG Vanguard System targets the recent problem with unauthorized unmanned aerial systems (drones) that has increased over the years around the world.

Advantages and Innovations:

- hand-held counter unmanned aerial system with jamming & spoofing technology.
- intelligent jamming technology system so as not to interfere with other systems.

Type of partner sought: investment partners, not only bring financial resources but also offer strategic guidance and industry connections to propel the start up's growth in the counter drone market.

Expected role of the partner: A partner who will accompany the start-up and help to scale the development of its projects, who has a good connection to the market and area in which the start-up develops its projects, and who may have the ability to enter the counter drone market.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/anti-uas-mobile-system>

Contact EEN: Jorge Duque, EEN
Portugal – Lisbon

Development of a Software module to reduce fraud in applications exchanging encrypted and authenticated information end-to-end (TOES20250217007)

Type of profile: Technology Offer

Summary: A group of researchers from a leading University in Madrid (Spain) aim to develop and commercialise a software module and associated interface that implements their already patented secure communications protocol, suitable for its application in IoT platforms, online banking authenticators (2FA authenticators) or messaging.

Advantages and innovations: Enhanced Communication Security: The protocol ensures secure communication by meeting key security requirements, including confidentiality, integrity, mutual authentication, and non-repudiation, while providing end-to-end security and an additional security layer over the network protocol. Economic Impact: By reducing cybercrime costs, estimated to save over \$36 billion from 2024 to 2028, and supporting compliance with European online payment regulations (PSD2), the protocol enhances both security and economic efficiency.

Type and role of partner sought: They are looking for partners with experience in the development and integration of secure software products into applications.

Link to the profile: <https://een.ec.europa.eu/partnering-opportunities/development-software-module-based-patented-protocol-drastically-reduce>

Contact EEN:
Rosalía Vicente Alfonso
EEN-Madrid (Spain)

#EENCanHelp

Thanks!

Follow us @EEN_EU



een.ec.europa.eu

