INNOspace MASTERS



All about the INNOspace Masters competition round 2026

Engage on Earth, Unite in Space

Exploring Next Level Cross-Sector Innovations

Including

- All Winners 2026
- Overall Winner 2026
- Special “10 Years of INNOspace Masters”

DLR German Space Agency at DLR · Federal Ministry of Research, Technology and Space · INNOspace · esa · AIRBUS · OHB · IQIB · DLR Projektträger

10 Years of INNOspace Masters

You can find out all about our “10 Years, 10 Success Stories” anniversary campaign in our Special, which starts on page 8.



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“For ten rounds, the INNOspace Masters has demonstrated the potential of connecting ideas, industries and people – both on Earth and in space.”

Space innovation thrives on connections – between people, industries, technologies, and ideas. For a decade, the INNOspace Masters has been instrumental in catalysing these very connections, uniting space and non-space sectors to turn pioneering ideas into tangible solutions for our very future. This 10th anniversary round is therefore an opportunity not only to celebrate what has been achieved, but also a springboard for what lies ahead.

Under the theme **“Engage on Earth, Unite in Space – Exploring Next Level Cross-Sector Innovations”**, the anniversary round has showcased the INNOspace Masters’ growing international impact and innovative strength. An impressive **313 ideas from 38 countries** were submitted – setting an all-time record for both the number of submissions and geographic diversity. While these figures alone may speak for themselves, they also showcase the still-growing importance of international exchange and collaboration across industries for innovation today.

The challenges we face on Earth and in space are increasingly interconnected. Addressing them requires us to combine expertise,

technologies and perspectives from different sectors. Space technologies and applications are a driving force for new impulses for industries on Earth, while, in turn, advances in the sectors of mobility, energy, digitalisation, manufacturing and others can enable the next generation of space developments.

The success of the INNOspace Masters competition would not be possible without the strong commitment of our partners Airbus, OHB and Mercedes-Benz, the ESA Business Applications programme, and the ESA Business Incubation Centres in Germany. Together with the German Space Agency at DLR, they help promising ideas take decisive steps towards implementation. Equally important to the success of this anniversary edition has been the outstanding commitment of IQIB and the DLR Projektträger.
I would like to express my sincere appreciation for their excellent collaboration and dedicated support in bringing this special edition to life.

As we reflect on ten rounds of cross-sector innovation, we take pride in how the INNOspace Masters has evolved into an international platform for collaboration. At the same time, this anniversary is an invitation and call to action to continue exploring what is achievable when we think beyond established boundaries.

On behalf of the German Space Agency at DLR, I am delighted to congratulate all the winners and participants of this anniversary round, and invite all readers to discover the outstanding projects presented in this brochure. May they inspire new partnerships and ideas for shaping our future – both on Earth and in space.



Dr Walther Pelzer

Member of the DLR Executive Board

Director-General German Space Agency

Engage on Earth, Unite in Space: The INNOspace Masters Competition Round 2026

Full details here

INNOspace Masters is the international innovation competition organised by the German Space Agency at DLR, in cooperation with Airbus, Mercedes-Benz and OHB, as well as the ESA Business Application programme and the ESA Business Incubation Centres in Germany. Launched in 2015, it is open to companies of all sizes, start-ups, research institutions and universities, as well as individuals from all over the world.

The competition is part of the INNOspace® initiative (p. 28) and promotes ideas for the transfer of technology and expertise from other industries to the space sector (spin-ins) or from space to non-space sectors (spin-offs).

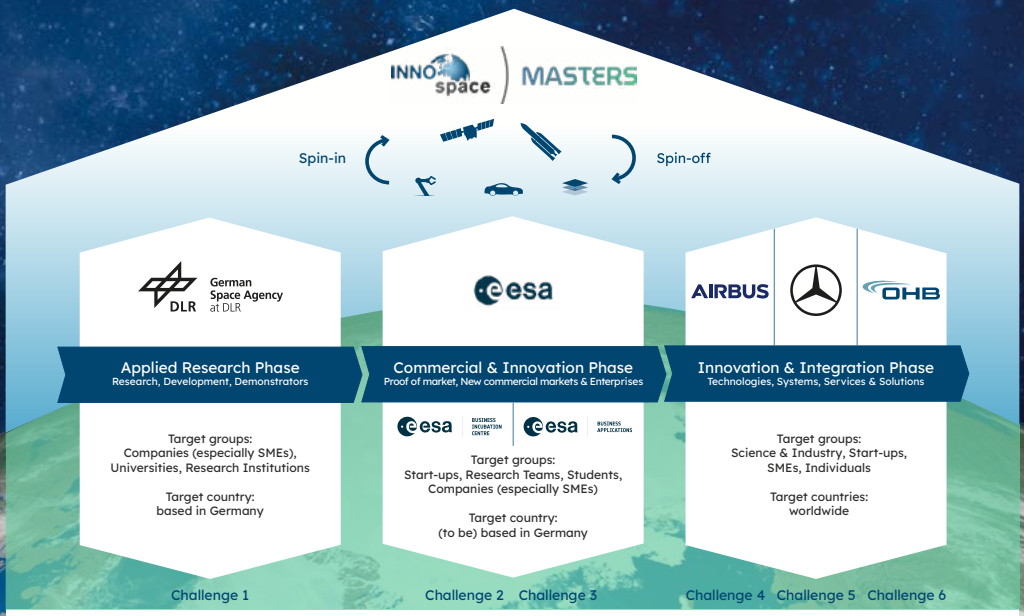
The overall theme for the 10-year anniversary competition round in 2026 was:

Engage on Earth, Unite in Space – Exploring Next Level Cross-Sector Innovations

Under this overall theme, the competition offered six different challenges to participate in. The challenges and their respective winners are presented on the following pages.



The Competition at a Glance



Our Challenges 2026

International Success: Our Facts & Figures

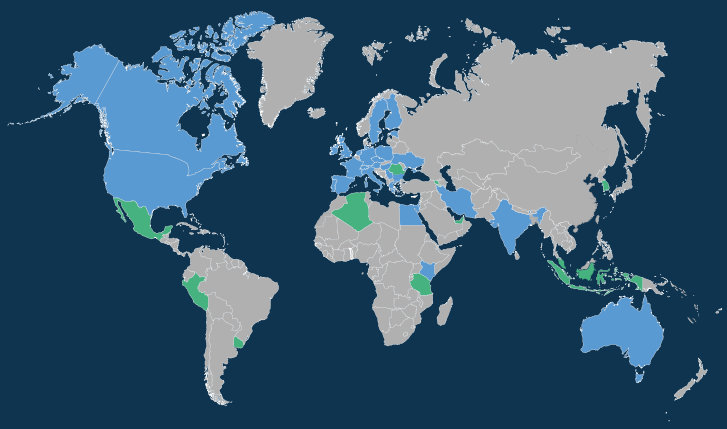
10 Years of INNOspace Masters
Facts & Figures

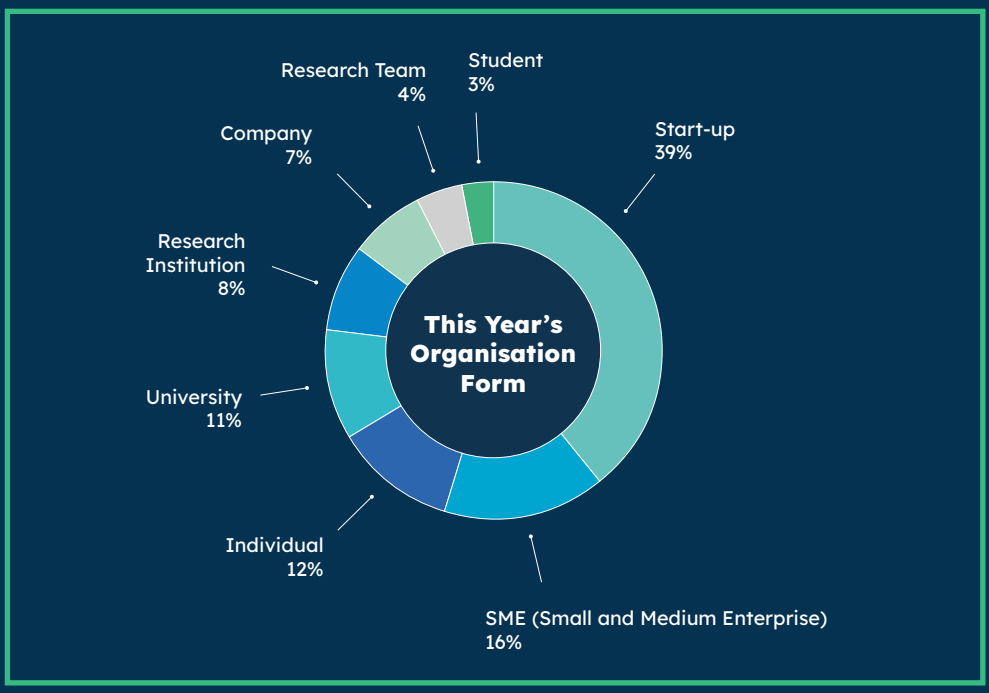
3,420	1,417	62	€16.595M
Participants	**Ideas**	**Countries**	**Prize money/Funding**

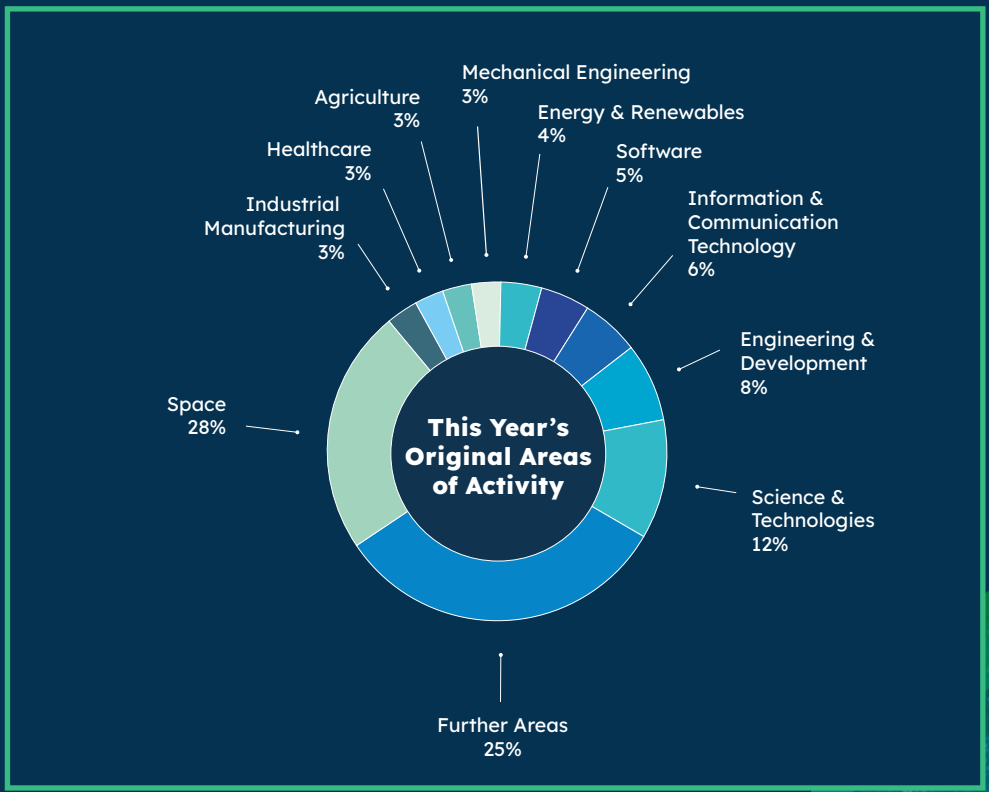
This Year's
Facts & Figures

864	313	38
Participants	**Ideas**	**Countries**

This Year's Participating Countries




This Year's Organisation Form
Research Team 4%
Student 3%
Company 7%
Start-up 39%
Research Institution 8%
University 11%
Individual 12%
SME (Small and Medium Enterprise) 16%


This Year's Original Areas of Activity
Mechanical Engineering 3%
Agriculture 3%
Energy & Renewables 4%
Healthcare 3%
Software 5%
Industrial Manufacturing 3%
Information & Communication Technology 6%
Engineering & Development 8%
Space 28%
Science & Technologies 12%
Further Areas 25%

10 Years of INNOspace Masters
“10 Years, 10 Success Stories”



Dr Franziska Zeitler,
Head of Innovation and New Markets at the German Space Agency at DLR, established the INNOspace Masters competition 10 years ago.

Watch our anniversary video

The 2026 competition marks 10 years of INNOspace Masters. Over the summer, our LinkedIn campaign, “10 Years, 10 Success Stories”, featured 10 special success stories from recent years: These were winners who, with the support of their challenge partners, embarked on a tailored journey to turn their ideas into a real innovation project or business. We would now like to recap these ten examples for you over the next pages.

We would like to express our sincere gratitude to all those who have contributed to the success of the INNOspace Masters, particularly our partners: Airbus, OHB, Mercedes-Benz, ESA Business Applications and the German ESA Business Incubation Centres. We would also like to thank the over 3,400 participants from around the world whose ideas and innovations make our competition possible. Thank you very much, and here’s to the next 10 years of INNOspace Masters!

Success Story 1

INNOCube (Combination of the two projects, SKITH and Wall#E)
Julius-Maximilians-Universität Würzburg, Technische Universität Berlin

- 1st Place DLR Challenge and Overall Winner 2016 (SKITH)
- 1st Place DLR Challenge and Overall Winner 2017 (Wall#E)
- Best Spin-in Idea 2023 (InnoCube)

InnoCube is a satellite concept in which internal data communication is performed wirelessly via radio. It also tests a novel experimental Carbon Fiber Reinforced Polymer (CFRP) structural battery in orbit. This multifunctional approach significantly reduces mass, volume, integration effort, and ultimately costs.

Contact: Prof Dr Enrico Stoll, e.stoll@tu-berlin.de
Prof Dr Sergio Montenegro, sergio.montenegro@uni-wuerzburg.de

Find details about the success stories here

Success Story 2

FibreCoat GmbH, Aachen

- 1st Place DLR Challenge 2019, Project “MoonFibre”
- 1st Place DLR Challenge 2025, Project “FibRaShield”
- Overall Winner 2025 in the category “Pioneering Technology”

FibreCoat develops advanced materials by coating radiation resistant metals onto fibres to shield humans and electronics from radiation in space.

Contact: Felix Schmidt, felix.schmidt@fibrecoat.de

Success Story 3

OKAPI:Orbits GmbH, Braunschweig

- 2nd Place ESA BIC Challenge 2019

OKAPI:Orbits offers a platform-as-a-service that enables governments and operators to establish in-house SSA and satellite operation capabilities, or to improve existing capabilities with state-of-the-art analytic features, across the entire satellite mission lifecycle.

Contact: Kristina Nikolaus, kristina@okapiorbits.com

Success Story 4

Orbit Recycling, Hauneck

- 3rd Place Airbus Challenge 2021

Orbit Recycling has developed a superior material blend: The aluminium-regolith composite, ALReCo, effectively overcomes the thermal and electrical conductivity limitations of pure regolith.

Contact: Frank Koch, info@orbitrecycling.space

Find details about the success stories here

Success Story 5

The Plasma Rocket Company GmbH, Gießen

- 3rd Place OHB Challenge 2022
- 1st Place ESA BIC Challenge 2024

The Plasma Rocket Company is developing a high-thrust electric propulsion system that combines the flexibility of a continuous electric thruster with the powerful behaviour of a chemical-like thrust level.

Contact: Dr Danny Kirmse, danny.kirmse@plasma-rocket.com

Success Story 6

Spherical, Rotterdam

- 1st Place OHB Challenge 2024

SPHERICAL designs dedicated, radiation-hardened microchips, and uses them to build deeply software-configurable, high-reliability electronic subsystems for satellites, such as Power Conditioning and Distribution Units (PCDUs) and motor controllers.

Contact: Thomas Campbell Parry, t.parry@spherical-systems.com

Success Story 7

StellarHeal,
Fraunhofer ISC, Fraunhofer ITEM, ILK Dresden

- 1st Place German Space Agency at DLR Challenge 2024

Wound healing in space is affected by radiation and microgravity. StellarHeal offers faster recovery, reduced risk of infection and resource efficiency. It also works on chronic wounds here on Earth.

Contact: Dr Dieter Groneberg, dieter.groneberg@isc.fraunhofer.de

Success Story 8

Hula Technologies GmbH, München

- 1st Place ESA BA Challenge 2024

Hula Earth is the most accurate and scalable biodiversity data platform to enable companies to quantify the impact of their business activities in light of forthcoming EU disclosing regulations.

Contact: Florian Geiser, florian@hula.earth

Success Story 9

FlyPix AI, Darmstadt

- 2nd Place Airbus Challenge 2025

Whether it is monitoring cities, forests or infrastructure, this SaaS platform provides businesses, municipalities and organisations of all sizes with access to advanced geospatial analytics, enabling them to make smarter decisions faster.

Contact: Dr Sergey Sukhanov, sergey@flypix.ai

Success Story 10

Yank Technologies, Inc., New York

- 1st Place Mercedes-Benz car2space Challenge 2025
- Overall Winner 2025 in the category “Ready-for-Market”

Yank Tech has developed a wireless charging solution for rovers from landers in space. Using its patented inductive resonant technologies, it can safely and efficiently transfer power through materials over distances of up to 0.5 metres, overcoming the limitations of traditional inductive solutions.

Contact: A. Edward Saenz de Viteri, edward@yanktechnologies.com



German Space Agency at DLR Challenge 2026: “Groundbreaking Cross-Sector Innovations”

The space sector continues to evolve: Increasing numbers of new concepts are becoming economically viable, giving rise to emerging markets and creating new opportunities for space industry innovation. At the same time, the space industry is integrating hardware, technologies, and approaches from terrestrial sectors, further accelerating its transition. In this context, the German Space Agency at DLR is seeking for ideas and concepts for space spin-ins and spin-offs that can lead to technologies, processes, and applications with cross-sector relevance.

The focus of the DLR Challenge is on technology with a pre-commercialisation TRL (Technology Readiness Level). Of particular relevance are collaborative projects from consortia that combine expertise from industry and research. This year, the DLR Challenge is open to various cross-sector innovation ideas. The following topics are provided for inspiration:

- Enabling the Use of Satellite Data
- Advanced Manufacturing
- Optical Space Systems
- Innovative AI Applications



The DLR Challenge awards four projects in two categories:

- **two projects submitted by a research consortium** (e.g. led by a university or research institution – integration of industry welcome)
- **two projects submitted by industry** (e.g. led by a SME or company – integration of research also welcome)

Rewards

The four winning projects are invited to submit an individual or joint proposal to receive funding from Germany's Space Programme for Innovation and International Cooperation. Verified proposals will receive:

- Up to EUR 500,000 in possible funding for each project over a period of up to 2 years (excluding own contribution)
- This funding is subject to the general funding guidelines of the German Federal Government
- The submission of a proposal does not constitute any legal entitlement to a grant

Full details here

The two winners of the German Space Agency at DLR Challenge 2026 in the category

„Projects Submitted by a Research Consortium"

1st Place:

Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institute, HHI



Scan to find out more

BLAST-WHITE – White Laser Structured Metal Surfaces with Maximized Thermal Emissivity and Minimized Visible Light Absorptivity: Thermal management is a major challenge for spacecrafts. In the vacuum of space, heat can only be dissipated by thermal radiation. However, good thermal emitters are typically also strong solar absorbers. An ideal surface therefore reflects visible sunlight to minimize heating while efficiently emitting thermal radiation. This project addresses this challenge by developing sustainable, white, highly reflective, and thermally emissive surfaces through femtosecond laser structuring of bulk materials.

Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institute, HHI
Contact: Prof Dr Eike Hübner, eike.huebner@hhi.fraunhofer.de

2nd Place:

Helmholtz Munich



Scan to find out more

SpaceOPUS for Venous Thrombosis Risk Monitoring – A Novel Optoacoustic–Ultrasound Platform for Venous Thrombosis Risk Monitoring in Space and Transformative Cardiovascular Care on Earth: Long-duration spaceflights cause persistent fluid shifts towards the head of astronauts, increasing the risk of thrombosis. SpaceOPUS uses ultrasound examinations alongside functional optoacoustic oxygen saturation monitoring to provide novel, spaceflight-derived biomarkers and mechanistic insights into specific veins and surrounding tissues. This enables the early detection of problems and the initiation of countermeasures.

Helmholtz Munich
Contact: Dr Heiko Ott, heiko.ott@helmholtz-munich.de

The two winners of the German Space Agency at DLR Challenge 2026 in the category „Projects Submitted by Industry"

Scan to find out more

BESTalain
deep space radioprotector

1st Place:
Merck

Find out more on page 26

BESTalain – Deep Space Radioprotector: Harnessing and Optimising Nature's Radiation Shield to Protect Astronauts in Deep Space: Radiation is one of the greatest barriers to human space exploration. Beyond Earth's magnetic field, high-energy particles damage cells and threaten astronaut health – with no effective pharmacological solution yet available. BESTalain addresses this gap by developing radioprotective compounds inspired by natural pigments, then optimising them through advanced pharmaceutical chemistry. The result: a safe, orally administered radioprotector purpose-built for astronauts, with future potential in aviation, nuclear medicine and emergency response.

Merck
Contact: Dr Alexander Sommerkamp, alexander.sommerkamp@merckgroup.com

Scan to find out more

CoolCerAM

2nd Place:
NUWAM GmbH

CoolCerAM – Additive Manufacturing of Ceramic Transpiration Cooling: Additive Manufacturing of High-Performance Ceramic Components with Integrated Graded Porosity for Transpiration Cooling: High-performance electronics must be cooled precisely where heat is generated and where materials are subject to maximum thermal stress. The CoolCerAM project develops heat-resistant ceramic components with integrated cooling by building a complete manufacturing process, from ceramic powders and 3D printing to post-processing and testing. By creating controlled porosity, the new ceramic components provide more effective cooling than conventional heat sinks while reducing weight and improving efficiency.

NUWAM GmbH
Contact: Dr Uwe Scheithauer, uwe.scheithauer@nuwam.de



BUSINESS INCUBATION CENTRE

ESA BIC Challenge 2026: "Join the New Space Economy"

The ESA Business Incubation Centres (ESA BICs) in Germany are looking for teams with innovative business ideas that strengthen the space ecosystem or utilise space data for secure and scalable cross-sector applications. The teams will receive support to turn their ideas into a viable company. Potential innovation areas and use cases are:

- Resilient Infrastructure
- Industrialisation of Space
- Trusted Data Ecosystems
- Space Safety & Sustainability
- Sovereign Component
- Any other ideas for the space sector or use of space data

Rewards
The 3 winning teams will receive:

- 1st Place: EUR 12,000, 2nd Place: EUR 5,000, 3rd Place: EUR 3,000
- Access to an Europe-wide network of experts who can provide both technological and business support
- Support in applying to one of the German ESA BICs. If accepted, the start-up will benefit from EUR 60,000 in funding

Full details here

1st Place:
Linq Photonics GmbH

Scan to find out more

Linq Photonics – Chip-Level Integrated Photonic Light Modulators that Split a Laser into 3X more Channels than Current Solutions: Linq Photonics develops compact, high-performance photonic components for quantum computing, optical satellite communication, and space applications. These systems require precise and stable electro-optic laser modulation for laser control, timing, encoding, and communication. Unlike conventional setups, Linq's chip-integrated photonic modulators provide three times more channels while using only 10% of the space.

Linq Photonics GmbH
Contact: Jade Robinson, jade@linq-photonics.com

2nd Place:
Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institute, HHI

Scan to find out more

SpaceBLAST – Laser Surface Structuring of Hard Metals to Increase the Built-in Emissivity of the Material for Thermal Management in Space: Overheating of spacecraft systems and components is one of the main reasons for space missions' failure. The patented femtosecond laser surface structuring technology enhances the emissivity of hard metals, enabling reliable and robust thermal regulation for space applications. The femtosecond laser increases the built-in emissivity of the material up to 99%, while preserving other properties of the bulk material.

Fraunhofer Institute for Telecommunications, Heinrich-Hertz-Institute, HHI
Contact: Hanan Al-Haddar, hanan.al-haddar@hhi.fraunhofer.de

3rd Place:
erable.systems

Scan to find out more

Blade – Autonomous Controlled Descent System (ACDS): Autorotation System for Controlled Deployment of Lightweight Systems and Mesh-Networks: Blade is an autonomous, efficient sensor deployment platform for scalable in-situ data collection in areas where distributing sensors manually is too complex, risky, or costly. Nowadays critical information is mainly gathered via drones or satellites. As a result, local data is often missing exactly where decisions must be made. Blade's system deploys sensors precisely, affordably, and at large scale.

erable.systems
Contact: Clemens Riegler, clemens.riegler@erable.systems

BUSINESS APPLICATIONS



ESA BA Challenge 2026: “Space for a Resilient Society”

In a drive for a sustainable future, the ESA Business Applications and Space Solutions (ESA BA) supports businesses of all sizes and across all sectors to develop innovative solutions for Earth using space data and technology. We are looking for ideas that can lead into commercially sustainable services or applications supporting such as:

- Resilient Agrifood Systems (Stable access to food, resilient response to climate change impacts, transparent supply chain tracking and logistics optimisation, sustainable farming practices)
- Resilient Energy Systems (Continuous power supply for citizens and industry, protection of critical energy infrastructure, energy sovereignty and sustainability)
- Finance and Insurance for a Resilient Society (Climate risk resilience, rapid recovery through verified claims, infrastructure resilience planning, performance-linked insurance coverage)

Rewards

- Up to EUR 75,000 zero-equity funding each (for a project scope of max. EUR 100,000)
- Personalised support from a member of the ESA team
- Technical & commercial guidance

Full details here

1st Place:
LARABICUS

Scan to find out more

LARABICUS FoulCast – Satellite-Optimised Autonomous Hull Cleaning for Maritime Decarbonisation and Biofouling Compliance: Biofouling on ship hulls can increase fuel consumption by up to 25%. The initial slime layer (biofilm) takes hours to weeks to form, depending on environmental conditions. LARABICUS solves this problem using autonomous robots that remove the biofilm continuously during normal sea passages, before it can cause damage. This service is enhanced by a satellite-based fouling analysis module that uses vessel-specific parameters.

LARABICUS
Contact: Thomas Schomberg, thomas.schomberg@larabicus.com

2nd Place:
OMEGA Space Technology GmbH

Scan to find out more

SecureEye – Satellite-Powered Crop Monitoring Platform for Agricultural Insurers to Enable Proactive Damage Prevention across Europe: Rather than simply reacting to losses, insurers can become proactive partners in damage prevention. The AI platform delivers field-level crop health monitoring, drought stress alerts and growth anomaly detection for farmers. For insurers, it provides aggregated crop health analytics, regional risk heat maps and early warnings.

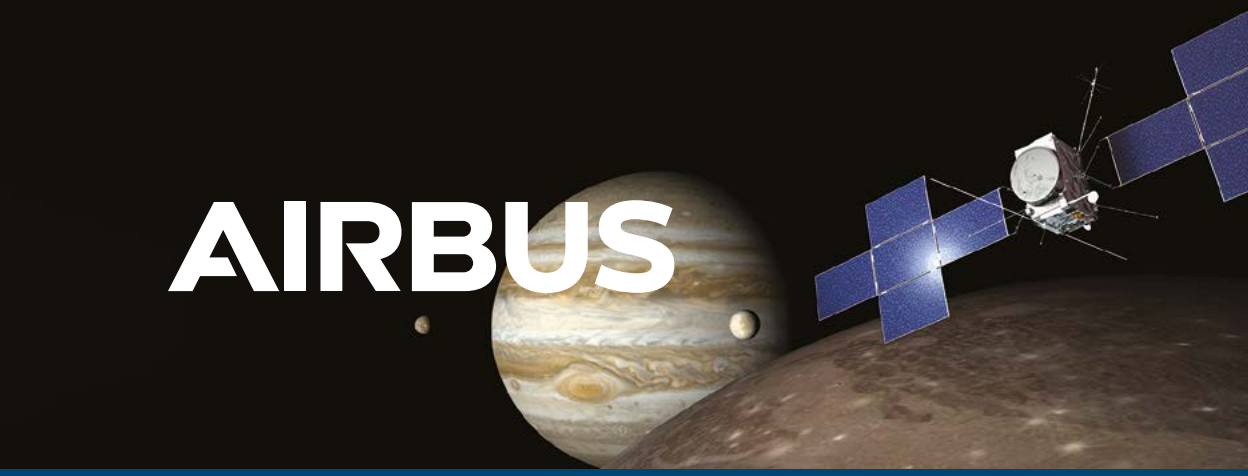
OMEGA Space Technology GmbH
Contact: Marcel Winzen, marcel.winzen@omega-space.eu

3rd Place:
TWT GmbH – Science & Innovation

Scan to find out more

Resilient Food Water Mapping – AI Enhanced Mapping for Sustainable Food and Drinking Water Resilience: Integrated Satellite and Ground Sensor Analytics for European Agriculture: This project offers a resilient agricultural system that uses Earth observation data and smart ground sensors to enable proactive, resource-efficient decision-making. It provides real-time resource maps and classifies every agricultural parcel according to the optimal food type, water demand and expected yield under current and forecast conditions.

TWT GmbH – Science & Innovation
Contact: Carsten Kübler, carsten.kuebler@twt-gmbh.de



Airbus Challenge 2026: “Boosting Earth-Space Industry Partnerships”

Airbus is looking for innovators with ideas for exceptional hardware, industrial processes, applications, or business models relevant to space that promise to have a lasting impact on our daily lives. The focus is on smart solutions enabling sustainable and commercially viable innovations on topics such as:

- Search for new innovative and commercial use cases for a next-generation space station like Starlab
- Space-based Earth observation and environmental monitoring
- Ubiquitous and secure space-based end-to-end connectivity solutions
- In-orbit infrastructure and services for a sustainable space economy

Rewards

- Support from Airbus internal network of experts
- Access to space qualified tools, simulation and test equipment
- Development of a mission proposal (with the aim of a joint application for public funding)
- Opportunity to pitch to Airbus Ventures

Full details here

1st Place:
Tomorrow's Motion GmbH

Scan to find out more

Generic Magnetic Propulsion (GMP) – A Propellant Free, Fully Electric Lorentz Force System for VLEO/LEO Small Satellite Mobility: GMP is a fully electric, propellant free propulsion system for small satellites. It generates thrust by driving controlled currents through air core coils that interact with the geomagnetic field, producing Lorentz force impulses without fuel, valves, or plume contamination. This enables lighter, simpler, and more sustainable spacecraft.

Tomorrow's Motion GmbH
Contact: Lutz May, lutz.may@tomo-systems.com

2nd Place:
Cogninn

Scan to find out more

DELTA6G – A Delay-Tolerant, Secure, Multi-Orbit 5G/6G Connectivity System: As 5G/6G networks expand beyond terrestrial infrastructure, integrating satellites into global connectivity becomes essential. Current 5G/6G Non-Terrestrial Networks (NTN) integration assumes continuous connectivity, but real multi-orbit environments suffer from intermittent links, mobility, and cross-domain trust issues. DELTA6G proposes a delay-tolerant 5G/6G NTN connectivity platform that enables reliable and secure multi-orbit communication.

Cogninn
Contact: Antonis Grammenos, antonis@cogninn.com

3rd Place:
Latitudo 40

Scan to find out more

EarthDataInsights – From Orbit to Adaptation Decision: An Urban Physics Engine Turning Satellite Data into Prescriptive Urban Climate Resilience Intelligence: Urban decision-makers allocate adaptation budgets based on coarse risk scores and static hazard maps. EarthDataInsights introduces a causally-coupled Compound Urban Risk Index (CURI) that physically models interactions between thermal stress, flooding, and air quality, and an AI simulation layer that autonomously synthesises and physically validates optimal mitigation portfolio.

Latitudo 40
Contact: Gaetano Volpe, gaetano.volpe@latitudo40.com



OHB Challenge 2026:
“Sovereign End-to-End Systems”

Are you ready to push the boundaries of space technology? We’re looking for fresh ideas on how to design space system architectures and solutions based on end-to-end value chains. Whether through increased on-board computing, seamless connectivity via inter-satellite links or a LEO economy, the future space systems will look very different from those of today. We are seeking disruptive ideas in the following areas:

- Industrialisation
- Security & Sovereignty
- Orbital Economy
- Artificial Intelligence & Machine Learning
- Enabling Space Technologies
- Exploration

Rewards
The 3 winners gain the opportunities to jointly shape space for a better future with the support of OHB, including:

- OHB Venture Capital support opportunities
- Depending on the ranking, specific hours of expert support
- Support from relevant experts from the OHB Group
- Opportunity of a joint technology development programme
- Cooperation opportunities at European level through companies in the OHB Group
- Invitation to meet the OHB Group and the space community at a fair

Full details here

1st Place:
SpaceComputer

Scan to find out more

Space Fabric & Orbitport: Orbital Trust – On-Orbit Confidential Computing with Dual-Vendor Trust Anchors and PQC-Secured Ground-to-Space Communication Gateway: Space Fabric & Orbitport offers a sovereign end-to-end architecture that combines on-orbit confidential computing with a secure ground-to-space communication gateway, delivering a complete trust chain for next-generation space systems.

SpaceComputer
Contact: Filip Rezabek, filip@spacecomputer.io

2nd Place:
CMATERIALS

Scan to find out more

EUSpacePrepreg – Development of EU Sourced Composite Prepregs for Space Applications: EUSpacePrepreg focuses on the development and qualification of EU-sourced composite prepregs that combine pristine and waste-recovered carbon fibres with conventional and bio-based resin systems, reducing reliance on petroleum-derived feedstocks while preserving space-grade performance. A solution that strengthens European technological sovereignty in space materials, and accelerate the secure availability of sustainable composite prepregs for current and next-generation European space systems.

CMATERIALS
Contact: Celeste Pereira, celeste.pereira@cmaterials.pt

3rd Place:
MAXIHERTZ TECHNOLOGIES LTD

Scan to find out more

Multi-Function RF Payload – Software-Defined Multi-Function RF Payload Enabling Integrated Sensing, Communication and Signal Intelligence for Sovereign End-to-End Space Systems: Current space architectures rely on multiple single-function payloads, limiting performance under spectrum congestion and stringent size, weight, power, and cost constraints. MaxiHertz proposes a software-defined, multi-function Radio Frequency (RF) payload enabling the integration of radar, communications, and protection functions through a shared RF aperture, enhanced with adaptive waveform and machine learning.

MAXIHERTZ TECHNOLOGIES LTD
Contact: Erick Lima, erick.lima@maxihertz.com



Mercedes-Benz car2space Challenge 2026:
“Space up your Drive”

Mercedes-Benz is looking for smart innovation for future mobility enabled by space solutions, e.g.

- Power innovations incl. energy efficiency
- Digital tech & AI
- Autonomous systems & robotics
- Connectivity & telecommunication
- Earth observation & navigation
- Outside-the-box innovations

Rewards

- Opportunity to learn about how to meet consumer needs (“downstream”)
- Implement a Proof of Concept co-funded by Mercedes-Benz and supported by inhouse experts
- Opportunity to pitch Proof of Concept to company executives and receive coaching, mentoring, and support for creating an automotive product and/or service
- Opportunity to learn about potentials of technology transfer and an industrial scale-up opportunity
- Access to and support from experts at Mercedes-Benz Research and Development departments

Full details here

1st Place:
INNER BV

Scan to find out more

New Standard for Quality in Batteries – AI-Driven X-Ray Inspection Platform for High-Throughput EV Battery Quality Assurance and Life-Cycle Diagnostics: Around 5% of battery packs are sold with physical faults created in the assembly process which can lead to catastrophic failure or high warranty costs. INNER provides a patented platform combining high-speed X-ray imaging with AI-driven pattern recognition at production speed to ensure every battery pack is fault free, safer, lasts longer, and is optimised for repair and second life.

INNER BV
Contact: Efrat Avnet Steinberg, efrat@innertech.ai

2nd Place:
Splatica

Scan to find out more

Sim2Real Twins for Future Mobility – Digital Twins for Autonomous Mobility and Robotics Training: Splatica converts short video clips from the real world into structured, simulation-ready digital twins for autonomous mobility and robotics. Instead of relying on expensive three-dimensional laser scanning (LiDAR) or manually created synthetic environments, Splatica reconstructs real-world spaces using footage from standard cameras and converts these into object-aware, physics-ready OpenUSD scenes that can be used for training, validation and preparation for deployment.

Splatica
Contact: Andrey Shelomentsev, andrey@splatica.com

3rd Place:
HolistiCRM

Scan to find out more

SpaceFlow – Swarm Mobility Intelligence: At 130 km/h, automated driving systems have only 2.3 seconds of awareness beyond their 300-metre sensor range. SpaceFlow addresses this limitation by extending hazard prediction up to 100 kilometres ahead. By combining satellite radar with real-time, anonymised object-level detection data from vehicle fleets, the system generates hazard forecasts up to 120 minutes in advance.

HolistiCRM
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We are proud to present:
The 2026 Overall Winner



Dr Alexander Sommerkamp at the Winner's Pitch in Bonn

BESTalain embodies the spirit of the INNOspace Masters. Inspired by nature, it combines biotechnology and pharmaceutical research to develop an innovative approach to radiation protection for deep-space exploration. At the same time, it demonstrates innovation from Earth to space and back, with advances developed for space offering potential benefits on Earth. This combination of interdisciplinary technology transfer, bold thinking, and impact beyond the space sector makes BESTalain an outstanding example of what the INNOspace Masters stands for – and the Overall Winner of the competition round 2026.

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BESTalain
deep space radioprotector

Smile for the Camera



The winners, partners, and the INNOspace Masters team at the Winner's Pitch in Bonn on 30 June/1 July 2026.



The partners and team members of the INNOspace Masters (from left to right): Fabian Spieth (Mercedes-Benz AG), Rebekka Freitag-Li (DLR Projektträger), Janusz Heitmann (German Space Agency at DLR, ESA BIC), Anke Freimuth (German Space Agency at DLR, ESA BA), Dr Andreas Kanstein (Centrum für Satellitennavigation (cesah), ESA BIC), Dr Anja Simon (German Space Agency at DLR), Florian Appel (bavAIRia e.V./German ESA Business Applications Ambassador), Nadine Krawietz (Airbus Defence and Space), Dr Vladislav Janecek (Airbus Defence and Space), Vishwa Shah (AZO GmbH, ESA BIC), Niklas Voigt (OHB System AG), Dr Arne Sönnichsen (IQIB), Andreas Linmann (Airbus Defence and Space)

The INNOspace® Initiative

Full details here

INNOspace Masters is part of the INNOspace® initiative launched by the German Space Agency at DLR in 2013.

The initiative is part of the Space Programme for Innovation and International Cooperation of the Federal Ministry of Research, Technology and Space (BMFTR) and of the German government's High-Tech Strategy 2025. It promotes cross-sectoral innovation through the transfer of know-how and the exploitation of new markets.



The INNOspace® initiative comprises the following instruments, which are implemented in close coordination with the BMFTR and various federal states:

- Intersectoral conferences to initiate cooperation projects
- INNOspace Masters innovation competition in cooperation with ESA BA, the German ESA BICs, Airbus, OHB and Mercedes-Benz AG
- Technology and cooperation networks "Space2Motion", "Space2Agriculture" and "Space2Health"
- Expert and user workshops on new markets
- Promotion of innovation and transfer projects with funds from the Space Programme for Innovation and International Cooperation
- The mobile exhibition INNOspace-EXPO "ALL.täglich!" effectively raises public awareness of space applications in everyday life

The INNOspace Networks

Since the launch of the INNOspace® initiative in 2013, the activities have been expanded with complementary modules and networks:

Space2Motion

Space2Motion is the first German network to systematically link the aerospace and automotive sectors. Launched in 2013 under the INNOspace® initiative, it fosters cross-sector collaboration and the transfer of technologies between space and mobility sectors. Key topics include lightweight materials, alternative propulsion systems, EEE components, and digital engineering. **www.space2motion.de**

Space2Agriculture

Space2Agriculture connects the space and agriculture sectors to promote technology transfer through cross-industry collaboration. The network supports the commercialisation of innovative solutions and explores how space technologies, data, and services can address current and future agricultural challenges, helping to create farming systems that are more environmentally sustainable, resilient, and economically viable. **www.space2agriculture.de**

Space2Health

Space2Health connects the space and healthcare sectors to drive innovation through shared technologies and expertise. The network brings together stakeholders from industry, research, healthcare, and policy to explore applications in diagnostics, AI, sensors, health data, the replication of medical compounds, and the 3D bioprinting of human tissues. It also facilitates knowledge exchange on validation, regulation, and certification processes across both sectors. **www.space2health.de**

INNOspace MASTERS

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