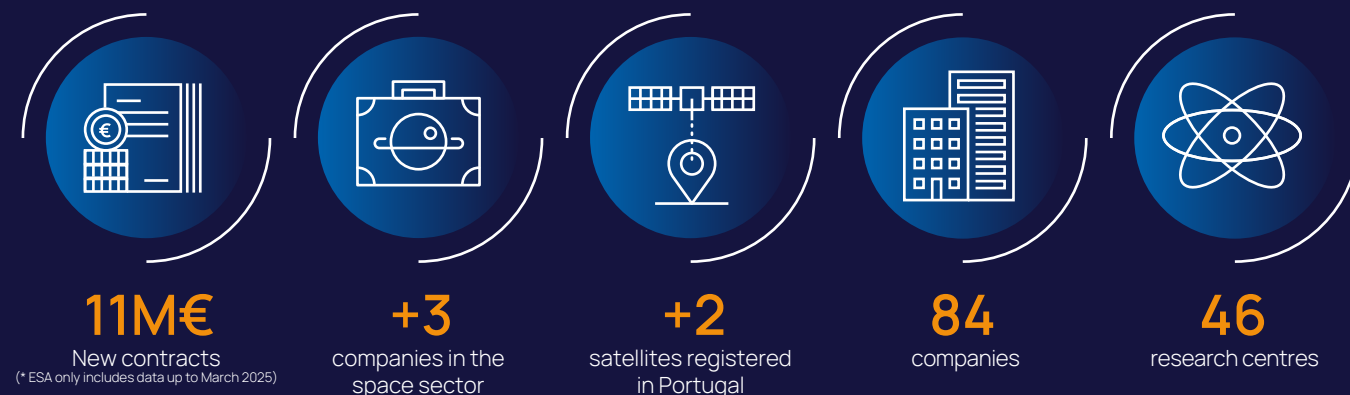


THE PORTUGUESE SPACE ECOSYSTEM

1st Semester of 2025

The first six months of 2025 confirmed the growth trajectory of the Portuguese space sector. In addition to the launch of two new satellites registered in Portugal and the start of several projects under PT2030, this quarter was marked by the award of the largest ever volume of ESA funding to Portugal for a single mission: the LISA mission. There was also the launch of ESA's Biomass mission, with the involvement of national companies, the entry of three new companies into the sector, and more than 20 visits to entities in the ecosystem, as part of the preparation for national participation in the ESA Ministerial.

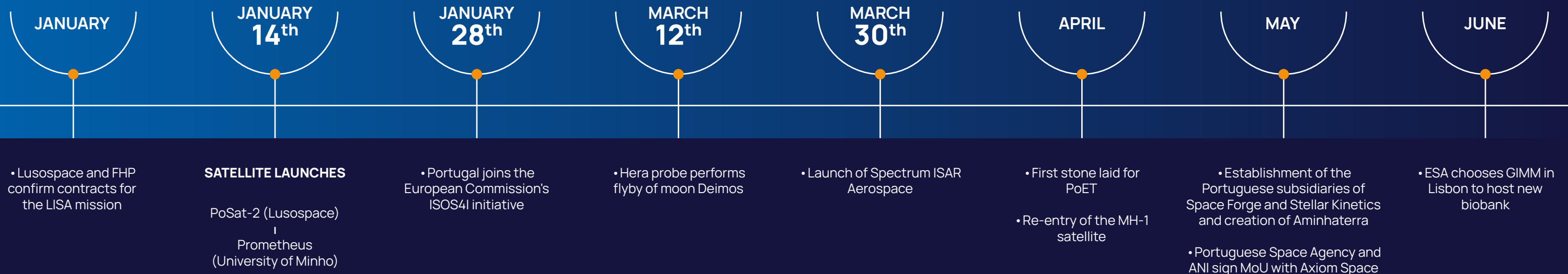
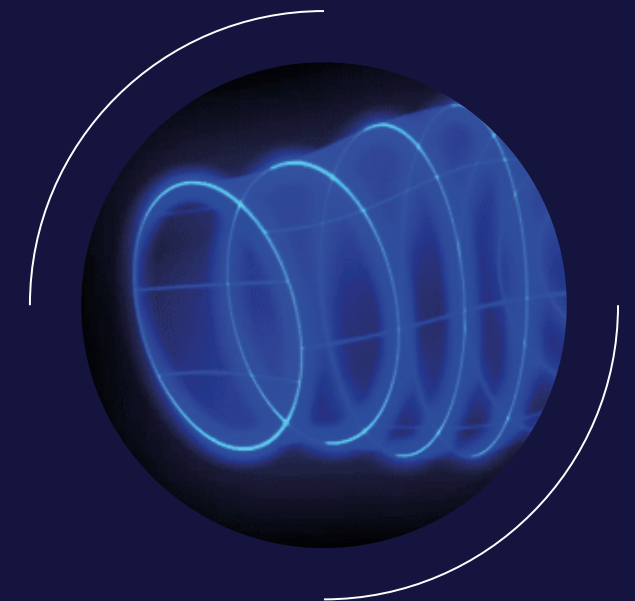
INDICATORS



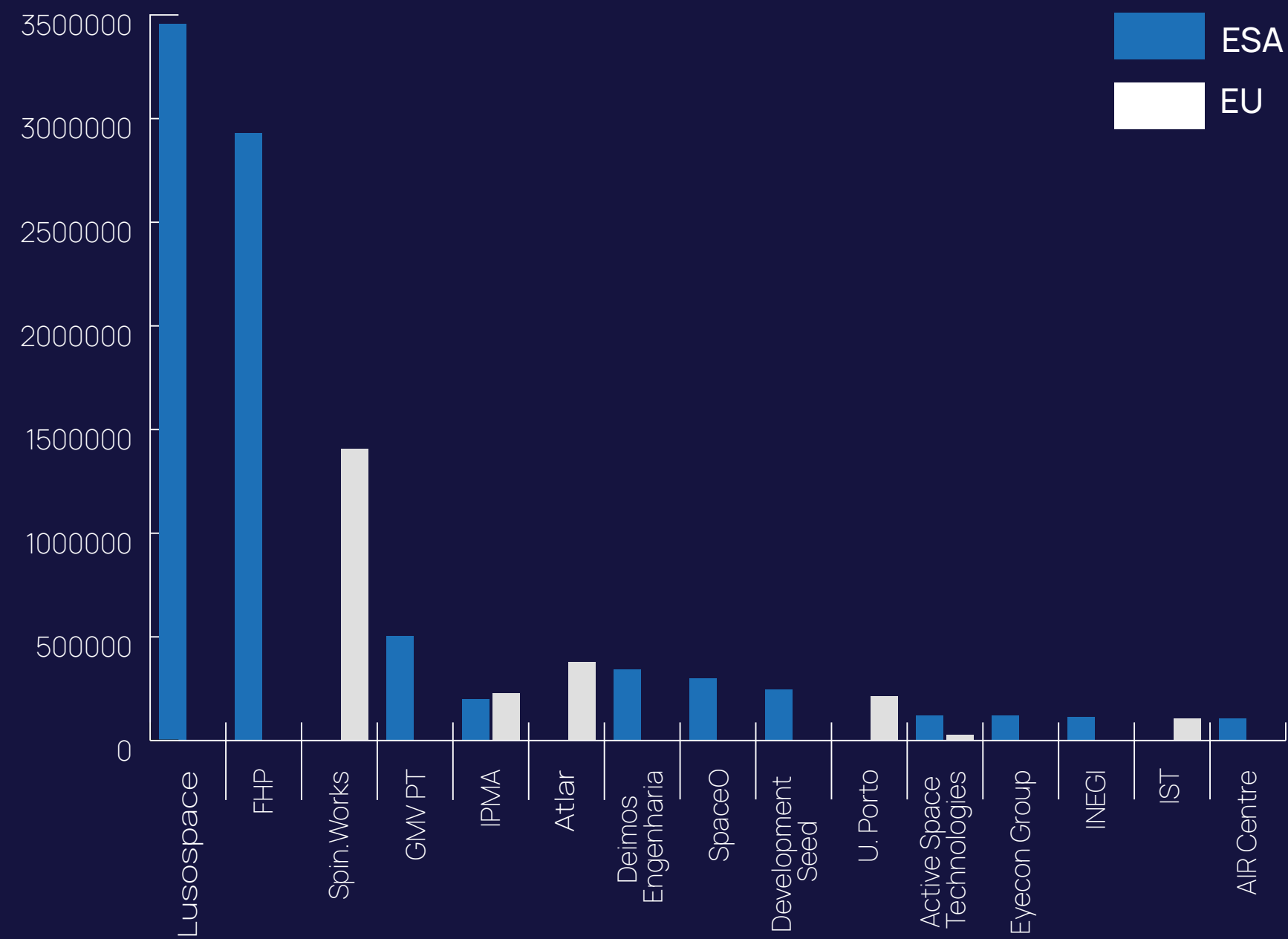
FEATURED PROJECTS

Missão LISA

ESA's future LISA (Laser Interferometer Space Antenna) mission is scheduled to launch in the 2030s and will be the first space mission to observe gravitational waves passing through the Solar System. The mission consists of three spacecraft flying in a triangular formation separated by 2.5 million km, with the distance being monitored precisely using lasers. Gravitational waves will be detected by measuring changes in the distances between the three spacecraft. Portuguese companies FHP and Lusospace have already signed contracts to supply components for the mission.



FEATURED PROJECTS

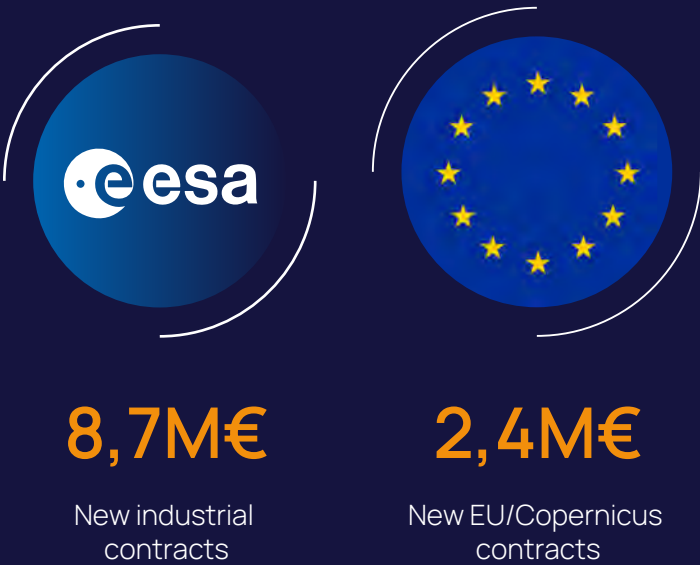


Commitments made in the first quarter of 2025 | Amounts in euros

Portugal's economic return on ESA reaches 102%

The commitments made during the first quarter of 2025 confirm the economic return of Portugal's subscription to ESA, demonstrating the maturity and competitiveness of the national industry in participating in high-value-added activities in European programmes.

Therefore, national participation in ESA programmes between 2019 and 2025 reached €110 million in industrial contracts, with an industrial geo-return of 102%.



FEATURED PROJECTS



First Portuguese solar telescope starts to take shape

The first stone of PoET (Paranal Solar ESPRESSO Telescope) has been laid. This is the first solar telescope developed in Portugal to be installed in a professional observatory. Designed by the Institute of Astrophysics and Space Sciences (IA), PoET will be mounted at the Paranal Observatory in Chile, part of ESO. Connected to the ESPRESSO spectrograph, PoET will enable high-precision spectra of the Sun to be obtained, which is essential for studying stellar noise and characterising Earth-like exoplanets.



ISCSP creates centre for space politics and diplomacy

In April, the School of Social and Political Sciences (ISCSP - ULisboa) launched the Centre for Space Politics and Diplomacy (CPDE), a new structure dedicated to academic and strategic reflection on the political, legal, and international dimensions of space. This centre aims to promote interdisciplinary research, build critical mass, and strengthen Portugal's presence in the global debate on space governance.



Biomass mission launched with Portuguese participation

ESA's Biomass mission was launched on April 29th, 2025, aboard a Vega-C rocket. The satellite, equipped with the first P-band radar placed in orbit, will measure forest biomass and monitor the carbon cycle. Portugal is represented by the companies Active Space Technologies, Lusospace, and Deimos Engenharia, which contributed with components and systems for the mission, reinforcing the national role in Earth Observation.



28 university teams selected for EuRoC'25

The sixth edition of the European Rocketry Challenge, organised by the Portuguese Space Agency, will see the participation of 28 university teams from 19 countries. This year, the competition received a record number of 56 applications, compared to 45 applicants in the 2025 edition. Portugal will be represented by three national teams, a presence that reflects the dynamism of aerospace engineering and rocketry in the country. EuRoC'25 will take place from October 9th to 15th in Constância.



End of the Earth Observation for Municipalities conference cycle

On May 8th, the Algarve region hosted the last session of the Earth Observation for Municipalities conference cycle, promoted by the Portuguese Space Agency over the last two years. With six editions held throughout the country, including the Azores and Madeira, this cycle involved over 400 participants and more than a dozen partner entities.



Tekever is the first Portuguese unicorn in the space sector

Tekever has become the first national unicorn in the aerospace sector, exceeding a valuation of one billion dollars. The company, which develops autonomous systems based on artificial intelligence and has participated in several ESA missions, namely PROBA-3 and HERA, with its GAMALINK communication system, was also awarded the Space Science and Technology Innovation Award in May.

FEATURED PROJECTS



Portuguese space sector gains three new companies

The Portuguese space sector has gained three new companies, two of which are registered and operating on the island of Santa Maria in the Azores. Space Forge and Stellar Kinetics will work on the development of in-orbit manufacturing technologies and the launchers segment, respectively. Aminhaterra will operate in the downstream segment. These new entities reinforce the dynamics of the national space ecosystem.



New Space Atlantic Summit reinforces Portugal's role in the space sector

The 8th edition of the New Space Atlantic Summit took place on May 13th and 14th in Lisbon, bringing together more than 60 national and international speakers and around 300 participants. The event established itself as one of the main forums dedicated to space in Portugal, promoting debate on public policy, innovation, science, and industry, with a focus on the upcoming ESA Ministerial.



Portuguese Space Agency and ANI sign MoU with Axiom Space

The Portuguese Space Agency and ANI have signed a strategic agreement with Axiom Space with the aim of strengthening cooperation in low Earth orbit, boosting R&D, and integrating Portuguese industries into the global space economy. The partnership, presented at the 8th edition of the New Space Atlantic Summit, aims to integrate traditional sectors into the space value chain, promoting innovation, technological development, and new opportunities for companies, universities, and research centres in Portugal.



Space innovation recognised for the first time

The first edition of the Space Science and Technology Innovation Award, promoted by the Portuguese Space Agency, recognised Tekever's GAMALINK project. The ESPRESSO project, from the Institute of Astrophysics, received an honourable mention, and Professor Carlos Fernandes was awarded the Career Award.



CubeSat Portugal competition boot camp

Between May 19th and 21st, the Portuguese Space Agency brought together the seven teams participating in CubeSat Portugal in Lisbon for an intensive learning and knowledge-sharing experience. Created in 2024, CubeSat Portugal challenges higher education students to design, develop, and launch a small satellite. The initiative, promoted by the Agency with the support of D-Orbit and IST NanosatLab, will end in a year's time with the selection of a team that will launch its CubeSat through ESA.



European astronauts inspire young people during visit to Portugal

In late May, 13 astronauts from the Association of Space Explorers (ASE) visited Portugal for the association's European general assembly, held in the country for the first time. In partnership with ASE, the Portuguese Space Agency promoted activities in various locations, involving more than a thousand young people and children, with a view to bringing the population closer to space through direct contact with those who have already explored it.

FEATURED PROJECTS



SAR Aerospace launch

The launch of Spectrum, the first orbital rocket to take off from European soil, took place in Andoya, Norway, and ended with its explosion 30 seconds after take-off. Despite the failure, Isar Aerospace considered the test an important milestone, highlighting the technical value of the mission, which allowed for the validation of systems and reinforced the role of test flights in the development of commercial solutions. This moment represents an essential step in the construction of an autonomous European ecosystem in access to space.



uPGRADE-next Project

Spin.Works received €1.4 million in funding from PT2030 for the development of uPGRADE-next, an innovative system for measuring Earth's gravitational field. The project uses miniaturised satellites in orbit and high-precision sensors to collect data relevant to applications in geodesy, environmental monitoring, and natural resource management.



Preparation for the ESA Ministerial

During the first semester, the Portuguese Space Agency began a series of technical visits as part of preparations for national participation in the ESA Ministerial Council, scheduled for November 2025. Visits were made to around 30 companies and research centres throughout the country, marking the start of the process of gathering contributions for the programme proposal and strengthening strategic alignment with the sector.



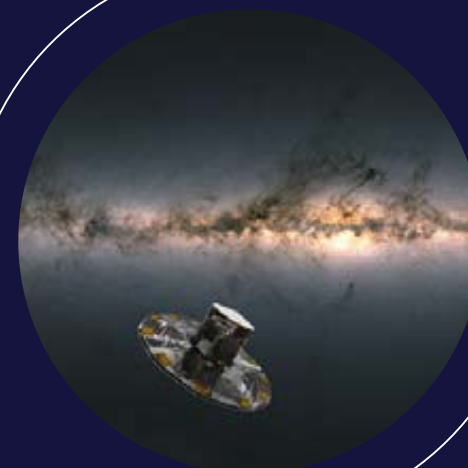
Hera probe performs flyby of moon Deimos

A 12 de março de 2025, a sonda HERA realizou uma manobra de assistência gravitacional em Marte, passando a 5.000 km da superfície e a apenas 1000 km da lua Deimos. A aproximação permitiu calibrar os sensores a bordo em órbita, permitindo o ajuste fino de todos os pixéis dos sensores. Como bônus, o flyby permitiu obter imagens inéditas de Deimos, a mais pequena lusa de Marte, observada pela primeira vez a partir do espaço.



ISOS4I Initiative – In-Space Operations and Services for Europe

Portugal has joined the ISOS4I initiative – In-Space Operations and Services for Europe, launched by the European Commission with the aim of developing autonomous capabilities in orbit operations. The joint declaration, signed in the first quarter of 2025, establishes a European strategic vision for services such as inspection, refuelling, maintenance, and removal of space debris.



Gaia mission comes to an end after more than a decade

ESA's Gaia mission came to an end on March 27th, 2025, after more than ten years of mapping the Milky Way with unprecedented accuracy. Portugal has been involved in the project from the very beginning, with Teresa Lago playing a decisive role in its approval in 2000. During the scientific phase, the work of André Moitinho, from the Institute of Astrophysics and Space Sciences (IA), stood out. The mission leaves behind the most complete stellar catalogue ever, whose analysis will continue until 2030.

FEATURED PROJECTS



Submissions are now open for Terra em Foco 2026

The dates for the next edition of the national Earth Observation conference – Terra em Foco – have been announced, with the event returning on March 17th and 18th, 2026. Applications are now open for oral presentations, posters, workshops, and stand proposals. The event is organised by the Portuguese Space Agency, with the support of the University of Coimbra, the Inter-municipal Community of the Coimbra Region and the Instituto Pedro Nunes.



Portugal launches international space capacity-building programme

The Portuguese Space Agency, alongside the Ministry of Foreign Affairs and Camões – Institute for Cooperation and Language, and with the support of UNOOSA, has launched the UN-Portugal Outer Space Fellowship, an international capacities-building programme designed to support developing countries in the formulation of space strategies. This initiative reinforces the role of space as a driver of cooperation, innovation, and sustainable development.



ESA chooses GIMM in Lisbon to host new biobank

The Gulbenkian Institute for Molecular Medicine (GIMM) in Lisbon has been chosen by the European Space Agency (ESA) to host the Agency's new biological sample repository. The contract, signed in late June, marks the beginning of an unprecedented collaboration, making GIMM the only place in Europe where biological samples collected by ESA during space missions and experiments on Earth will be stored.



Agency promotes national debate on the EU Space Act

On September 12th, in Lisbon, the Portuguese Space Agency is promoting a workshop dedicated to the EU Space Act, the proposed European regulation for the safety, resilience, and sustainability of space activities. This initiative aims to gather contributions from the national sector to build a solid position in the European negotiation process. The inquiry launched by the Agency is open until August 31st, 2025.



Finalists chosen for the fourth edition of Astronaut for a Day

The 30 finalists for the 2025 edition of the Astronaut for a Day initiative have been announced, following a selection process that received more than 600 applications from all over the country. The final phase will take place this year on Santa Maria Island, Azores, and will include group dynamics and training sessions at the headquarters of the Portuguese Space Agency. The initiative, which culminates in a parabolic flight on September 21st, reinforces the involvement of the Autonomous Regions in the space sector, with the support of the Regional Government of the Azores.



Space is part of the University of Coimbra's network of partners

The Portuguese Space Agency has signed a protocol to join the FEUC Partners Network, strengthening cooperation with the Faculty of Economics of the University of Coimbra in areas such as promotion, research, and training in the space sector. The agreement provides for the joint organisation of events, workshops, and academic initiatives related to defence economics and space opportunities.