



**ESPI**

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Policy Institute

# ESPI Insights

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## POLICY & PROGRAMMES

### CDU wins German election, likely new Chancellor Merz increase space focus



**CDU has won the 2025 German Election**, emphasising digital transformation as a necessary driving force behind Germany's industrial resurgence. His vision aims to position Germany at the forefront of Europe's technological landscape by allocating 3.5% of GDP to research and development, with a strong focus on the space sector, quantum computing, artificial intelligence, and cloud technology. While space policy has not been a top political priority for German voters, it remains critically linked to key priorities, including Germany's economic growth, foreign policy and security, environment and climate, and technological sovereignty, as highlighted in ESPI's **recently published brief**. Despite budget constraints limiting

Germany's space investments in recent years, the election outcome and Merz's outlined priorities provide an opportunity to reevaluate Germany's long-term commitment to the sector and its role in enhancing European competitiveness.

### ESA awards Thales Alenia Space with €367 million contract for EnVision

**ESA has awarded Thales Alenia Space with a contract worth €367 million to lead the development of the EnVision spacecraft**, planned for launch in November 2031. Equipped with five scientific instruments and a radio science experiment, developed in collaboration with Italy, France, Germany, Belgium, and the U.S., EnVision is designed to provide a comprehensive study of Venus, from its inner core to upper atmosphere. The spacecraft will feature a SAR to map the planet's surface, a VenSpec suite for high-resolution, infrared, ultraviolet, and near-infrared observations, a Subsurface Radar Sounder (SRS) to probe beneath the surface, and an ultra-stable oscillator to support radio science experiments. NASA will supply the VenSAR sensor and will assist with spacecraft communications via the Deep Space Network.

### The UK Ministry of Defence awards Airbus £127 million contract

**The UK Ministry of Defence has contracted Airbus to develop two reconnaissance satellites**, which will make up the UK'S Oberon SAR constellation and form part of the ISTARI reconnaissance constellation. This is part of a broader £1.4 billion investment in space infrastructure focused on defence. The constellation will be used for enhanced global surveillance and intelligence capabilities for national military operations. ISTARI is projected to be fully operational by 2031.

### DLR signs contract as anchor customer for microgravity research

**DLR has signed a contract to become an anchor customer for a microgravity research service by The Exploration Company aboard its Nyx spacecraft**. Nyx is a modular, reusable space capsule designed for cargo transportation to and from LEO and for conducting in-orbit experiments. In May 2024, ESA selected The Exploration Company and Thales Alenia Space for a demonstration mission to deliver cargo to the ISS in 2028. The contract between DLR and The Exploration Company reserves 160kg of scientific payload space aboard the inaugural flight of the Nyx spacecraft in 2028.



*Credit: The Exploration Company*



## ESA and Finland initiate the establishment of a “supersite” for Earth observation



Credit: ESA

ESA, the Finnish government, and the Finnish Meteorological Institute have initiated efforts to establish a jointly funded “supersite” for Earth observation calibration and validation in Sodankylä, Finland. ESA will work closely with the Finnish Meteorological Institute to transform the Arctic Space Centre into the dedicated “supersite”. The facility aims to benefit both ESA and Finland by enhancing satellite data accuracy over high latitude environments while also creating new opportunities for Finnish businesses. The Arctic Space Centre’s high-latitude location and boreal forest surroundings make it well-suited for validating and calibrating satellite data. The site is projected to improve the accuracy of satellite-based information and support the development of new Arctic-focused services and applications.

## German Air Force awards Indra with contract for space surveillance radar

The German Air Force has awarded Indra, a Spanish defence technology company, with a contract to supply an advanced space surveillance radar. The system aims to enhance Germany’s capacity for LEO object detection and monitoring, strengthening space situational awareness. By monitoring potential collisions with space debris and detecting satellites approaching critical German assets, the radar will help to protect space-based services and operational security. Operated by the German Space Command (WRKdoBw), it will be remotely controlled from the Space Situational Awareness Centre (WRLageZ) in Uedem. This forms part of Germany’s “L-GUARD” programme under the national Space Surveillance System, aligning with broader European efforts to strengthen technological sovereignty in space monitoring. The contract encompasses production, integration, and delivery of the radar, as well as operational and technical support. The radar will be one of the world’s most advanced space debris detection systems, significantly enhancing Europe’s capacity to protect both military and civilian space infrastructure.

## Luxembourg plans next military satellite GovSat-2

Luxembourg is preparing to announce plans for the construction and launch of a new secure military and government satellite GovSat-2, as part of its broader efforts to enhance defence capabilities and increase military spending. The project is expected to exceed the costs of GovSat-1, which was launched in 2018 with encrypted communications and anti-jamming technology at a price of at least €225 million. The government is reportedly working closely with satellite operator SES to develop the proposal, which will require parliamentary approval. GovSat-2 is expected to build on the role of its predecessor GovSat-1 in supporting NATO operations, strengthening secure military communications, intelligence, and reconnaissance. In addition to reinforcing NATO’s operational abilities, the satellite is expected to create opportunities for Luxembourg’s domestic space industry through procurement contracts. The initiative aligns with Luxembourg’s commitment to raising defence spending to 2% of gross national income by 2030.



Credit: Luxemburger Wort



## European Commission and ESA to develop space communications network



*Credit: European Commission*

The European Space Agency and the European Commission have formalised their cooperation on the space component of the Europe Quantum Communication Infrastructure (EuroQCI), concluding negotiations and initiating the development phase. EuroQCI aims to strengthen data security and protect Europe's critical infrastructure using quantum communication technologies. While the broader initiative involves both terrestrial and satellite-based systems, ESA will lead the development of the space component, which will extend quantum-secure communications beyond the Earth's surface. This represents an advancement towards achieving the EU's Digital Decade target of being at the forefront of quantum capabilities by 2030.

## ESA to launch mission demonstrating in-orbit refuelling capabilities

ESA has announced a new initiative to develop and test a prototype in-orbit refuelling system for green, self-pressurising propellants. Managed by the Space Transportation and Connectivity and Secure Communications directorates, the project aims to extend satellite lifespans by more than 100%, reducing the propellant load required at launch by more than 50% and freeing up payload capacity. The initiative will consist of two phases, starting with design, manufacturing, and flight readiness, followed by an in-orbit demonstration mission to validate the docking interface and assess the propellant transfer performance. This is especially relevant for multi-orbit communication constellations, such as the IRIS<sup>2</sup> secure communications network.

## ESA awards AVS with contract for Dark Matter Probe Platform

ESA has granted Spanish engineering company Added Value Solutions (AVS) with a contract to design and develop a satellite platform for the ARRAKHIS dark matter astrophysics mission. The company will base its preliminary design on its LUR-100 bus as part of ESA's Fast Class program, focusing on efficient low-mass and low-cost technology. AVS is one of two companies competing for the final ARRAKHIS satellite bus contract, expected to be awarded in September 2026. ARRAKHIS is a Spain-led mission to gain a deeper understanding of dark matter by investigating galactic halos.

## ISRO releases Annual Report 2024-2025

ISRO has released its Annual Report 2024-2025, highlighting recent progress in space exploration and technological development. Key achievements included several successful launches, such as PLSV-C58 and GSLV-F14, as well as the Chandrayaan-3 lunar landing and Aditya-L1's deployment for solar observations. ISRO made advancements in reusable launch vehicle technology, hybrid propulsion systems, and LOX-Methane engine development. The report also notes an increase in global cooperation through joint missions with ESA, NASA, and JAXA, commercial satellite launches for international customers, and training programmes for international scientists.

Future plans include human spaceflight under Gaganyaan, lunar sample retrieval with Chandrayaan-4, Venus exploration through the Venus Orbiter Mission, and the development of a partially reusable launch vehicle. ISRO also aims to establish an independent space station by 2035.





## NASA selects SpaceX for NEO Surveyor launch



Credit: NASA

NASA has awarded SpaceX with a **\$100 million task order for the launch of the NEO Surveyor space telescope**, designed to search for near Earth objects (NEOs). The NEO Surveyor will launch aboard a Falcon 9 SpaceX rocket as soon as September 2027 and will operate 1.5 million kilometres from the Earth in the direction of the sun. The NEO Surveyor spacecraft will carry a 50cm infrared telescope to detect and track near-Earth objects (NEOs), aiming to identify two-thirds of NEOs over 140m within five years and meet a 90% detection mandate in 10–12 years. The \$1.2 billion mission advanced to assembly and testing after passing its critical design review, with its launch contract awarded soon after.

## EU and Africa Launch New €100 Million Space Partnership Programme

The European Commission has signed the **Africa-EU Space Partnership Programme, a €100 million initiative aimed at strengthening space cooperation between Europe and Africa**. The programme will focus on three key priorities: advancing the green transition, enhancing institutional collaboration, and boosting private sector growth and innovation. ESA will play a central role as a key implementing partner, working alongside EUMETSAT, ECMWF, and the African Space Agency. The new initiative builds on more than 20 years of cooperation, during which the EU has committed €200 million to Africa's space sector. The programme will utilise key European space technologies, including Copernicus, Galileo, EGNOS, and GMES to provide space-based data for natural resource management and climate monitoring.

## U.S. Air Force Research Laboratory awards KBR with \$176 million contract

The U.S. Air Force Research Laboratory has awarded **Houston-based defence and government services contractor with a \$176 million contract** for the maintenance and modernisation of the Air Force Maui Optical and Supercomputing Site (AMOS). This high-altitude facility in Maui (3,000m) is a key part of the U.S. military's space surveillance network, supporting a seven-year contract for operations, maintenance, and sensor upgrades.

## U.S. Space Force expands defence, communications, and launch capabilities

The U.S. Space Force has advanced several initiatives in **missile defence, secure communications, and rapid-response launch capabilities**. Lockheed Martin has completed an Early Design Review for **the MUOS Service Life Extension (SLE) programme**, ensuring the continued provision of secure military communications. The programme will progress to Phase 2, covering the production and deployment of two new MUOS satellites by 2030. In missile defence, the Space Force is supporting the **"Golden Dome"** initiative, formerly known as "Iron Dome", by assembling an integrated planning team and procuring a network of missile-tracking satellites in LEO to strengthen U.S. defence against emerging threats. The U.S. Space Force has also awarded **Firefly Aerospace with a \$22 million contract to launch the VICTUS SOL TacRS mission**, building on its previous VICTUS NOX success and improving rapid-response capabilities for government and commercial missions. The Space Force has also awarded **Viasat a \$3.5 million task order** under the Proliferated Low Earth Orbit (PLEO) contract to integrate commercial satellite internet into defence operations. The contract ceiling was recently raised from \$900 million to \$13 billion, reflecting an increased demand for space-based military communications.



## NASA nominee Jared Isaacman expresses vision for NASA leadership



Credit: NASA

Jared Isaacman, the likely next leader of NASA, has provided insights into his vision for the future of the space agency. Referring to an image of Mars on his personal account on the social media site X, Isaacman commented: "When I see a picture like this, it is impossible not to feel energised about the future. I think it is so important for people to understand the profound implications of sending humans to another planet". In a series of social media posts, he outlines the far-reaching benefits of Mars missions, from technological advancements in propulsion, habitability, and power generation to the broader scientific and economic benefits for humankind. His statements come at a time of leadership changes within NASA, following Elon Musk's call for an **early ISS deorbit**.

## Vanessa Wyche to serve as NASA's new acting associate administrator

NASA has announced Vanessa Wyche as the new acting associate administrator, which is the third highest title with NASA. Throughout her 35-year career, Wyche has held various leadership roles, including deputy centre director for NASA's Johnson centre. In her new role, she will act as NASA's chief operating officer, overseeing approximately 18,000 civil servant employees and managing an annual budget exceeding \$25 billion.

## Space Norway signs contract with Thales Alenia Space for THOR 8 supply

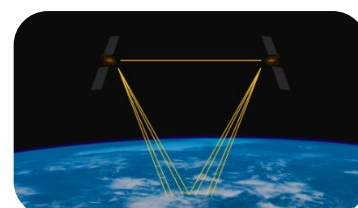
Space Norway has ordered the THOR 8 telecommunications satellite from Thales Alenia Space, aiming to meet the increasing demand for connectivity and ensure the continuity and large geographic coverage of Space Norway's broadcasting service. THOR 8 will provide top-tier connectivity and high-speed internet access for broadcasters and infrastructure, including maritime, terrestrial and aeronautical services. It will be built on Thales Alenia Space's Spacebus 4000B2 platform and is scheduled for launch in 2027 with an in-orbit service life of over 15 years.

## Nineteen satellite data companies join Copernicus Contributing Missions

At the 17<sup>th</sup> Space Conference in Brussels, ESA and the European Commission welcomed new EO data providers for the Copernicus Contributing Missions, a crucial element of the Copernicus Services. These include six European space industry leaders supplying European satellite data and four providers of commercial satellite data from outside of the EU. Nine European emerging CCM companies are now integrated into the Copernicus

## ESA awards an OHB-led consortium to develop optical technology for navigation

ESA has initiated a project designed to develop optical technology for positioning, navigation, and timing, with the aim to improve the accuracy and resilience of future navigation systems. ESA has contracted a consortium of European companies led by OHB System to conduct a Phase AB/B1 study and technology predevelopment for optical time synchronisation and ranging. This represents the first step towards an in-orbit demonstrator, which will be proposed at the ESA Council at Ministerial Level in November 2025.



Credit: ESA



## ESA signs contract with Thales Alenia Space for HydRON project



*Credit: ESA - S.Corvaja*

ESA has contracted Thales Alenia Space to develop the second element of the High-throughput Digital and Optical Network (HydRON) project, marking an advancement in space-based optical communications. The contract involves the development of a LEO satellite collector equipped with end-to-end optical communication capabilities and a comprehensive ground segment infrastructure. HydRON aims to advance the seamless integration of space and terrestrial networks.

## U.K. Government Invests £20 million in Orbex for Scottish Rocket Launch

The U.K. government has invested £20 million in spaceflight company Orbex for the construction and launch of Orbex Prime, which aims to be the first orbital rocket manufactured and launched by the U.K. The launch is planned to take place in 2025 at the SaxaVord Spaceport in Shetland, Scotland. The reusable rocket is powered by bio-propane fuel and designed to reduce carbon emissions compared to traditional rocket fuel. The launch aims to increase the U.K.'s presence in the space sector and inspire the next generation of space professionals.

## Thales Alenia Space signs contract with Mohammed Bin Rashid Space Centre

Thales Alenia Space has signed a contract with Mohammed Bin Rashid Space Centre for the design and development of the Emirates Crew and Science Airlock Module, which will be docked to the Lunar Gateway cislunar space station. The Airlock is designed to enable extravehicular activities for astronauts, as well as to enhance Gateway operations by providing additional docking capabilities and a science airlock for transferring scientific experiments between the pressurised environment and the space station exterior.

## CNES calls for proposals to develop reusable upper stage for heavy-lift rockets

CNES has issued a call for proposals under Project DEMASURE, which aims to develop a reusable upper stage for a two-stage rocket with the capability of delivering 20 tonnes to LEO. The initial call will encompass development phases 0 and A, involving a system concept review, technical requirements evaluation, cost estimation review, and a feasibility meeting.

## Germany commits additional €870,000 to offshore launch platform

Germany has committed an additional €870,000 to support the development of an offshore launch facility, which will operate from the North Sea. The North Sea launch platform will be constructed on the 170-metre-long Combi Dock I vessel, designed to support launchers weighing between 36 and 52 tonnes. A 2020 feasibility study estimated that the platform's development and operation would require an investment of €22 to €30 million over six years. The German government committed an initial €2 million to the project in September 2023.



*Credit: GOSA*



## China to train Pakistan's first astronaut for Tiangong Space Station



Credit: CCTV

China and Pakistan have signed an agreement to train a Pakistani astronaut for a future mission to China's Tiangong Space Station, marking the first time China will host a foreign astronaut aboard its space facility. The cooperation was formalised by the China Manned Space Agency (CMSA) and Pakistan's SUPARCO, highlighting China's commitment to expanding international partnerships in human spaceflight. The selected astronaut will undergo training in China over the next year before joining Chinese taikonauts for a short-term mission.

## China advances enabling technologies hoping to enhance its ISR capabilities

China has revealed its advanced laser-based ultra-high-resolution imaging system reportedly that could reportedly enhance their in-orbit surveillance capabilities in the future. Developed by the Aerospace Information Research Institute, the technology reportedly captures millimetre-level clarity from over 100km distance, tested in perfect conditions at the Qinghai Lake in NW China. As global space capabilities evolve, China's progress in surveillance technology represents a potentially significant advancement in remote sensing and space-based monitoring, particularly for security and intelligence purposes.

## FCC Chairman appoints Jay Schwarz as new Chief of Space Bureau

The FCC has appointed Jay Schwarz to succeed Julie Kearney as the new Space Bureau Chief. Prior to this role, Schwarz served as Vice President of Public Policy at Comcast and held several positions at the FCC, including Wireline Advisor to former Chairman Ajit Pai. The Space Bureau, established in 2023, was created to enhance coordination between the FCC and the satellite industry.

## Ursa Major advances rocket engine development with U.S. Air Force funding

Rocket propulsion startup Ursa Major has accelerated the development and testing of its Draper liquid rocket engine in partnership with U.S. defence agencies and military contractors, aiming to position the engine for potential use in next-generation missiles linked to the Trump administration's Iron Dome missile-defence initiative. After completing ground tests last year, funded by the U.S. Air Force, the company is now preparing for flight tests. These aim to further refine the engine's design and assess potential military applications, as well as commercial uses in space tugs and in-space transportation.

## FCC Approves AST SpaceMobile Testing with partners Verizon and AT&T

The FCC has granted AST SpaceMobile with special temporary authority to test its satellite-to-cell service in the US. This approval enables the company's five BlueBird satellites, launched in September 2024, to begin testing communications with unmodified smartphones using the wireless spectrum from AT&T and Verizon. The five satellites are projected to provide coverage for 5,600 cells across the U.S. for non-continuous cellular broadband services.



Credit:AST SpaceMobile



## New South Wales Government-funded Waratah Seed considers second launch

**Six months after launch, seven out of nine payloads on New South Wales's Waratah Seed satellite are now operational.** In a recent update, the mission consortium described the mission as a major success and confirmed that discussions are in progress regarding a follow-up launch. The remaining two payloads, developed by Spiral Blue and Sperospace, are not yet fully operational, but are showing signs of activity. Launched in August last year aboard SpaceX's Transporter-11 mission, the Waratah Seed-1 satellite carries payloads from five winners of the Waratah Seed Payload Competition.

## China prepares Tianwen-2 spacecraft for asteroid sample return mission launch

**China's Tianwen-2 spacecraft has arrived at the Xichang Satellite Launch Center for final preparations** ahead of its planned launch on a Long March 3B rocket in May 2025. The mission aims to collect samples from near-Earth 40-100-meter-diameter asteroid Kamo'oalewa (2016 HO<sub>3</sub>) and deliver them to Earth around 2027. Researchers suggest Kamo'oalewa may be a fragment of the moon that has been launched into space by an impact event. The spacecraft will then rendezvous with main-belt comet 311P/PANSTARRS, which displays both asteroid-like characteristics and comet-like activity.

## The Space Development Agency to cancel contract with Tyvak

**The Space Development Agency has announced the cancellation of its contract with Tyvak Nano-Satellite Systems following a bid protest by Viasat.** In September 2024, Viasat challenged the August 2024 SDA contract awards to Tyvak and York Space Systems, each contracted with the development of 10 satellites for the Tranche 2 Transport Layer (T2TL). A government investigation found that unauthorised communications between an SDA employee and Tyvak influenced the award decision, violating the Procurement Integrity Act. However, this did not impact the contract awarded to York Space Systems, which will proceed as planned.

## Poland's Łukasiewicz Research Network tests their rocket engine

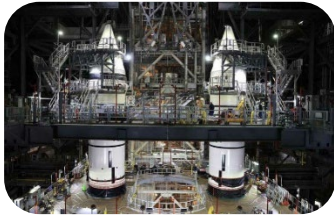
**Poland's Łukasiewicz Research Network – Institute of Aviation has successfully tested their Throttleable Liquid Propulsion Demonstrator rocket engine.** The engine will be used for the upper stages on small rockets and aims to vary thrusts down from 110% to 10% of its ideal operating conditions. The success of this test resulted in the project being continued over the next two years.

## House Committee holds hearing on NASA Artemis programme

**The House Science, Space, and Technology Committee held a hearing on NASA's Artemis programme on 26 February.** Artemis, aimed at returning U.S. astronauts to the Moon for the first time since Apollo, has faced delays, budget overruns, and political uncertainty under the Trump Administration. The hearing, titled "**Step by Step: The Artemis Program and NASA's Path to Human Exploration of the Moon, Mars, and Beyond.**" involved discussions surrounding the programme's progress, challenges, and future. The committee also addressed geopolitical challenges, international cooperation, and the role of industry in advancing the mission. While former Trump Administration official Scott Pace was present, NASA representatives did not attend, which was noted as a point of concern by committee members.



## NASA advisory panel examines potential risks during future Mars missions



*Credit: NASA*

The supervision of contractors and oversight of astronaut health for potential future Mars missions have emerged among the primary concerns outlined by the Aerospace Safety Advisory Panel (ASAP) in its most recent annual report. ASAP is an advisory committee reporting to NASA and Congress, which examines NASA's safety performance, achievements, and challenges. The safety implications of NASA's recent increase in its use of "service contracts" depend on

who assumes responsibility for risks. ASAP places a large focus on risk management through NASA's choice of contractors and encourages applying lessons learned to improve safety. ASAP also highlights the importance of understanding risks involved in long-term missions, including those to Mars, where one emerging risk is the potential for jugular vein blood clots.

## FAA tests Starlink terminals in the national airspace system

The Federal Aviation Administration (FAA) has begun testing the SpaceX Starlink satellite internet terminals in the national airspace system, potentially positioning Starlink to take over a \$2 billion contract currently held by Verizon. This follows Space X founder and CEO Elon Musk's claim on social media that the Verizon system is "not working" and poses risk to air travellers. Musk has called for urgent modernisation of the air traffic communications network. The FAA has stated that it has been considering the use of Starlink since the previous administration to improve satellite communications reliability in remote locations such as Alaska. Tests are currently underway at one FAA facility in Atlantic City and two non-safety critical sites in Alaska.

## Italy signs MoU with UAE

The Italian Space Agency has signed two Memorandums of Understanding with the United Arab Emirates Space Agency and the Mohammed Bin Rashid Space Centre to strengthen collaboration in lunar and interplanetary exploration. The agreements, signed in the presence of Italian Prime Minister Giorgia Meloni and UAE President H.H. Sheikh Mohamed bin Zayed Al Nahyan, focus on the Rashid Rover 3 mission and the Emirates Mission to Asteroids (EMA). ASI will contribute to the Rashid Rover 3 mission by supplying the Moon Infrared Spectrometer (MoonIS), a key instrument for analysing the lunar surface, while also providing its technical and scientific support to the EMA mission.

## Russian President Vladimir Putin dismisses Yuri Borisov as Head of Roscosmos

Russian President Vladimir Putin has dismissed Yuri Borisov as the head of Roscosmos after 2.5 years in the role. Borisov has been succeeded by Russia's former Deputy Minister of Transport, Dmitry Bakanov, who previously led Russia's GONETS satellite communications system. Borisov, who took over as head of Roscosmos in July 2022, oversaw the agency during a period of geopolitical challenges and programme setbacks, including the failure of the Luna 25 mission in August 2023, with a budget of €5 million. The project forms part of the ESA's Future Launchers Preparatory Programme.



*Credit: MAXIM SHIPENKOV/AFP*



### In other news

**ESA's Proba-3 mission to generate artificial solar eclipses for corona observations.** This will enable scientists to study the Sun's corona for extended periods longer than eclipses observed from the Earth allow. Proba-3 carries the ASPIICS (Association of Spacecraft for Polarimetric and Imaging Investigation of the Corona of the Sun) instrument, which was developed by Belgium's Centre Spatial de Liège for ESA.

**Ontario plans to terminate \$100 million Starlink contract with SpaceX due to U.S. tariffs on Canadian goods.** The contract, which aimed to provide Starlink satellite internet to 15,000 premises in rural and northern Ontario, is being terminated as part of Ontario's response to the trade measures introduced by U.S. President Donald Trump.

**Egypt and Kenya sign MoU to strengthen space cooperation.** Egypt's President Fattah El-Sisi and Kenya's President William Ruto have signed a Joint Declaration for a Strategic and Comprehensive Partnership.

**U.S. Secretary of Transportation invites SpaceX to provide input on FAA air traffic control system.** Space X has been invited to visit the command centre and contribute to modernising and improving the safety of the current system.

**Space Force Official highlights China's rapid advancements in defence technology.** While the U.S. government and military have scaled back investment in scientific and technical research, China has expanded its funding in the sector.

**ESA has awarded Redwire with a study contract for the development of a preliminary spacecraft design for an upcoming astrophysics mission** aimed at imaging galaxies in the nearby universe and advancing our understanding of dark matter

**The Exploration Company tests pre-burner for high-thrust rocket.** With co-financing from CNES, The Exploration Company has successfully completed the first test campaign of a pre-burner after initiating the development of its Typhoon rocket engine in early 2024.

**NASA workforce reductions remain unconfirmed.** Despite expectations that NASA would release 1000+ employees, including "probationary" civil servants, on 18 February, there have been no reports of large workforce reductions across NASA facilities.

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### In other news

**China hosts seminar on China-Africa cooperation in satellite remote sensing applications.** The seminar brought together officials from various African nations and representatives from the African Union Commission to strengthen China-Africa satellite cooperation.

**The Bahamian government will assess the environmental impact of SpaceX landings.** The government has published an Environmental Management Plan defining strategies to minimise the environmental impacts of SpaceX's Falcon 9 rocket booster landing.

**Rocket Lab completes Critical Design Review for U.S. Space Force VICTHUS HAZE Mission.** Rocket Lab has successfully cleared the Critical Design Review for VICTHUS HAZE, the U.S. Space Force Space Systems Command's Tactically Responsive Space mission.

**Asteroid 2024 YR4 poses minimal risk to Earth but may impact the Moon.** Further observations of asteroid 2024 YR4 have reduced the probability of it hitting Earth to nearly zero. However, NASA has not completely ruled out the possibility of a Moon impact, which currently stands at 1.7%.

**NASA terminates international climate science support.** While global leaders gathered in Hangzhou, China to plan the next major IPCC climate assessment, the U.S. was notably absent after the Trump Administration declined to send officials and terminated a technical support contract.

**U.S. accelerates partner integration into military space operations.** The U.S. is accelerating the integration of partners like New Zealand into its military space operations and growing strategic global competition.

**U.S. and India establish space innovation partnership.** The U.S. and India have announced their joint development of INDUS Innovation to support cooperation between the defence industries of the two countries.

**Roscosmos Progress 89 spacecraft departs from ISS.** The Roscosmos 89 cargo spacecraft has undocked from the International Space Station on 25 February 2025, moving away to perform a deorbit manoeuvre before its destructive re-entry into Earth's atmosphere, carrying disposed waste from the crew.

**China's Shenzhou-19 crew successfully completes in-orbit test of pipeline inspection robot on space station.** China's crew aboard the Tiangong space station has successfully completed the first in-orbit test of a pipeline inspection robot, laying the foundation for future maintenance operations.

**The UK Space Agency has awarded a share of £16 million to two innovative projects to enhance UK benefits of satellite constellations.** EnSilica (£10M) develops UK/EU-compatible chips and software. Excelerate (£6M) builds a user terminal for flexible operator/orbit selection via app.



## INDUSTRY & BUSINESS

### Eutelsat Expands LEO Focus, Trials NTN, Updates Board, and Signs ATSS Deal



*Credit: Eutelsat Group*

On February 14<sup>th</sup>, Eutelsat reported a strategic shift further away from consumer broadband, citing increasing competition from Starlink's expanding LEO network. In response, the company is repurposing its high-capacity Konnect VHTS satellite to focus on premium mobility markets, such as maritime and aviation connectivity. Eutelsat continues investing in OneWeb, planning to deploy hundreds of LEO satellites while reviewing future GEO spending. Financially, the company reported €606.2 million in revenue for the last six months and recorded a €535

million goodwill impairment on GEO assets. Additionally, **Eutelsat Group, MediaTek, and Airbus Defence and Space have successfully conducted the first trial of 5G Non-Terrestrial Network (NTN) technology using Eutelsat OneWeb's LEO satellites.** This demonstrates the potential for integrating satellite and terrestrial networks, aiming to make satellite broadband more accessible for 5G devices globally. The trial involved connecting a 5G user terminal to the 5G core network via a satellite link, facilitating data exchange. This development is expected to enhance connectivity options for smartphones, the automotive sector, and the Internet of Things.

Furthermore, **Eutelsat has provided satellite internet to 1 million people in Sub-Saharan Africa under their Partner2Connect Digital Coalition pledge.** The communication is provided via Eutelsat's Konnect satellite, and aims to provide affordable, high-speed internet to individuals, school, businesses and healthcare centres in rural areas of Sub-Saharan Africa. The service was delivered two years ahead of schedule and forms part of the International Telecommunication Union's Partner2Connect program to advance connectivity across the globe.

**Eutelsat Group and Saudi Arabia based company ATSS renewed their satellite capacity agreement on the EUTELSAT 8 West B satellite.** The signing took place at the LEAP event in Riyadh, Saudi Arabia. ATSS will continue using the satellite's Ku-band coverage to provide broadcast services in the Middle East and North Africa. The agreement reinforces Eutelsat's position in regional video distribution.

Lastly, **Eutelsat has changed their board composition.** The Board will now have 12 members, including seven independent directors and 42% female representation.

### Loft Orbital and Helsing enter strategic partnership

French and American-based, Loft Orbital and German-based Helsing have entered a strategic partnership for the creation of a LEO constellation. The project aims to enhance military capabilities through leveraging AI-driven technology to deliver real-time intelligence. This will allow software to be updated in orbit enabling missions to be adapted to evolving threats. The companies have both received significant financial backing from investors, with a combined funding exceeding €1 billion. Loft Orbital received €300 million, while Helsing obtained €770 million.



*Credit: Planet Lab*



## Exolaunch to Deploy 27 Satellites with Quadro System and Expands Offices



**Credit: SpaceX**

Exolaunch prepares to debut their new hardware the Quadro four-point separation system with the deployment of 27 satellites launch on board SpaceX's upcoming Transporter-13 rideshare mission. The Quadro four-point system hopes to advance flexibility and performance of satellite deployments and will be utilised alongside other Exolaunch flight-proven hardware. The hardware was the recent winner of the European Space Forum's "Innovation in Space" Award. **Exolaunch expanded their presence and opened offices in Nice, France.** Christian Weber will be the managing director for Exolaunch France, bringing 20 years of experience in the space sector, The company believes this move will strengthen Exolaunch's presence in the region.

## Globalstar awards MDA Space with a \$768.1 million contract and outlines plans for C-3 satellite constellation

Canadian based company, MDA Space has secured a \$768.1 million contract with Globalstar for the development of 50+ AURORA satellites. This will be the next generation of satellites for the American based company Globalstar. These satellites will form a constellation in LEO, but the company is yet to make any public comments on a time frame for delivery or launch. **Globalstar later outlined their plans for the C-3 satellite constellation in a filing to the US Federal Communications Commission.** The company has been working on the constellation since October 2023, with MDA Space being the prime contractor for the constellation. C-3 aims to enhance connectivity in vehicles and buildings with improved signal strength and dynamic beamforming. Apple is investing \$1.1 billion towards the project, allocating 85% of the network's capacity for its service.

## SKY Perfect JSAT is listed as Planet Lab's previously unnamed partner investing \$230 million for LEO constellation

American based Planet Lab lists SKY Perfect JSAT as their previously unnamed partner investing \$230 million in their Pelican satellites forming a constellation in LEO. The constellation is expected to enhance SKY Perfect JSAT's market capabilities, improving their competences in areas of defence and intelligence, as well as disaster prevention and mitigation. The partnership forms a decade of collaboration between the two companies, and this investment will be revenue for Pelican for over approx. seven years.

## Isar Aerospace awaits launch of first Spectrum rocket after completing tests

Germany-based Isar Aerospace has completed testing for their first Spectrum rocket and is awaiting launch licence approval. The tests involved a static-fire test of the rocket's first stage, firing the rocket's nine engines for 30 seconds. This follows similar tests to the rocket's upper stage last year. The company hopes to launch the Spectrum rocket from Norway's Andøya Spaceport once launch license is obtained.



*Figure 1 Credit: Isar Aerospace*



## **Infinite Orbits sign contract with Exotrail for collaboration on CNES study**

Infinite Orbits has signed a contract with Exotrail to collaborate on the phase A study awarded by CNES, as part of the France2030 orbital mobility programme. They will cooperate on designing a modular Rendezvous and Proximity Operations servicer platform, which will integrate Exotrail's spacevan vehicle and Infinite Orbit's RPO Rendezvous Autonomous Vision-Based Navigation Solution for enhanced in-orbit servicing capabilities.

## **Arkadia Space enters commercial contract with MaiaSpace**

Arkadia Space has secured a commercial contract with MaiaSpace for the delivery of 250N monopropellant thrusters for the Reaction Control System of MaiaSpace's thruster. These thrusters will be used for what is to be expected to be Europe's first reusable mini launcher. The thrusters are being developed under the ARIEL contract awarded by ESA. This marks the first commercial contract for Arkadia Space.

## **Inmarsat Maritime upgrades satellite communications for Maersk's global fleet**

Viasat's company, Inmarsat Maritime, and Maersk agreed to upgrade their satellite communications across the global fleet of approx. 340 container ships. The deal will see the upgrade of bandwidth across the fleet during 2025-2026. Maersk will upgrade fleet bandwidth (2025-2026) to enhance autonomy and create "floating offices" by 2027, with Inmarsat providing global Ka- and L-band communications.

## **Vodafone, AST SpaceMobile and Málaga University set to open research facility**

Vodafone is set to open a research facility alongside AST SpaceMobile and the University of Málaga in Spain, which aims to integrate LEO satellite and terrestrial mobile broadband. The hub received initial funding from the Spanish Space Agency and is scheduled to open in summer 2025. The facility will focus on designing and testing open-source hardware, software, and chips to enable efficient network switching between satellite and cellular on smartphones.

## **PLD Space secures Oman's for its second global launch base**

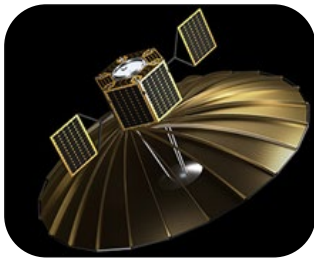
Spain-based PLD Space has secured the Etlaq spaceport in Oman for their second global launch base for their MIURA launch vehicle family. The inaugural MIURA 5 flight from Etlaq is scheduled for 2027. This strategic partnership aims to enhance service capabilities, meeting growing demand for commercial launchers, especially throughout the Middle East. Etlaq's location in Duqum provides access to various orbital inclinations such as GEO, SSO and polar orbits.

## **Kongsberg NanoAvionics' MP42 microsatellite platform to perform SuperSharp's Blue Moon mission**

SuperSharp, a subsidiary of Satlantis group, has chosen Kongsberg NanoAvionics MP42 microsatellite for its Blue Moon thermal infrared mission. The satellite will carry SuperSharp's Hibiscus instrument, an 80kg payload for long-wave infrared imaging. Blue Moon is scheduled for launch in late 2026 aboard SpaceX's Transporter with support from the UK Space agency support. NanoAvionics will also provide two more MP42 satellites for Satlantis' Earth observation missions.



## Auxilium Biotechnologies 3D prints medical devices on the ISS



*Credit: iQPS*

California-based medical device company, **Auxilium Biotechnologies**, has demonstrated its bioprinting technology on the ISS. The company has used its 3D bioprinter to manufacture eight medical devices in microgravity within two hours. This was a first for the ISS and required minimal input from the astronauts present. The mission lasted for six weeks and aimed to test the hypothesis that the 3D bioprinter would be more efficient due in microgravity. Gravity hinders production by causing uneven distribution of essential particles, while microgravity conditions allow for even distribution. The company's next step is to obtain FDA approval to initiate clinical trials for the medical devices.

## Rocket Lab secures multi-launch deal with Institute for Q-shu Pioneers of Space (iQPS) for iQPS's Satellite Constellation

Rocket Lab has secured a multi-launch deal with iQPS for the launch of four synthetic aperture radar (SAR) satellites. These satellites will form part of iQPS 36 SAR satellite constellation capable of delivering high quality images through cloud in both day and night. The deal follows Rocket Labs' previous launch of the second iQPS SAR satellite. Three of the launches are due for 2025, with the final one scheduled for 2026.

## Falcon 9 launches payloads from AstroForge and Intuitive Machines

California-based startup, **AstroForge**, has prepared for the launch of their robotic spacecraft, **Odin** aboard **SpaceX Falcon 9**. The spacecraft is expected to reach the far side of the moon within five days. Odin will then spend 300 days traversing deep space towards the targeted asteroid on a journey spanning approximately 649,000km. The company believes the asteroid to be rich in platinum. **Intuitive Machines lunar lander, Athena, will accompany Odin before breaking away for their respective journeys.** Athena will attempt a landing on the Mons Mouton flat top mountain located approx. 160km from the lunar south pole. The lander is expected to attempt the landing on March 6.

## Launch and logistics startup, Reaction Dynamics progress in Meet the Drapers contest

Canadian launch and logistics startup, **Reaction Dynamics** has won the first round of the **\$1 million international Meet the Drapers contest**. The contest follows a tournament style format, where venture capitalists listen to pitches from entrepreneurs with backgrounds in a variety of fields. From this, a winning pitch is selected to advance to the semi-finals and ultimately the final round. The winning company will be awarded \$1 million, while the runner-up receives \$500,000 and third place receives \$250,000. Companies also gain public exposure from the competition.



*Credit: Reaction Dynamics/  
NASA/ SpaceQ*



## 4iG Space and Creotech Instruments S.A sign MoU



*Credit: GK Launch Services*

Hungarian 4iG Space and Polish Creotech Instruments S.A signed a non-binding MoU to identify potential regional cooperation in the European industrial space sector. The Hungarian-Polish collaboration will see continued discussions between the two companies on areas of potential cooperation for the benefit of their space programs and the European space sector.

## Japanese company iSpace's RESILIENCE lander completes Moon flyby

Japanese based iSpace's RESILIENCE lander completed a successful Moon flyby, reaching a distance of 8,400 km. The lander is currently traversing through deep space before orbital manoeuvres will guide it back to the Moon to attempt a lunar landing sequence. RESILIENCE was launched on board SpaceX's Falcon-9 and this mission forms part of iSpace's HAKUTO-R programme, carrying multiple scientific and commercial payloads. This is the first lunar flyby conducted by a commercial Japanese company, with future missions planned for 2026 and 2027.

## China's Spacesail signs MoU with Malaysia's Measat to expand to Southeast Asia

Chinese LEO megaconstellation operator, Spacesail signed a MoU with Malaysia's Measat for the advancement of satellite broadband services. The partnership encompasses LEO broadband services via Spacesail's Qianfan megaconstellation, Direct-to-Device communications, and satellite-enabled IoT solutions. This partnership highlights the potential to enhance Malaysia's space and communications sector, expand digital connectivity, and strengthen Malaysia-China cooperation while positioning Spacesail as a key player in the global satellite industry.

## Digantara and Ariane Group sign MoU for improved space traffic management

India's Diganatara signed a MoU with Ariane Group for the creation of a comprehensive space traffic management system. The partnership aims to advance space situational awareness, providing electro-optical sensor data solutions for both Indian and international markets. This will lead to the provision of precise, real-time data for space missions with goals to improve global space traffic management contributing to larger goals of ensuring a safe, sustainable and secure space environment.

## Luxembourg's SES reports €15 million profit in 2024

The Luxembourg-based satellite firm SES has reported a €15 million profit in 2024, reversing a €905 million loss from 2023, despite a 1.4% revenue drop to €2 billion and a sharp decline in US payments for C-band clearing. Adjusted net profit fell 42% to €126 million, and the company plans to double its 2024 dividend and finalise its Intelsat acquisition in late 2025, aiming for €2.7 billion in synergies. With competition from Starlink and Kuiper, SES aims to expand satellite operations and enhance services for customers, preparing to resupply its mPower satellite constellation.



*Credit: SES/ SpaceX*



## ATLAS Space Operations and HawkEye 360 enter strategic partnership



*Credit: Globalstar*

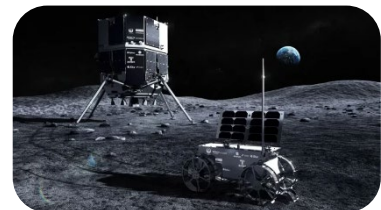
ATLAS Space Operations and HawkEye 360 sign partnership for the integration of ATLAS' Mingenew Australia and Awarua, New Zealand ground stations into HawkEye 360's existing ground network cover. These locations were selected for their strategic positioning and operational readiness, enabling efficient communication with HawkEye 360's mid-latitude satellite clusters. This partnership forms part of a larger HawkEye 360 initiative to reduce data latency and increase their ground station network throughout 2025.

## Space42 and EDGE sign MoU for joint venture for EO ecosystem in the UAE

Space42, the UAE-based connectivity and geospatial data company, and FADA, an EDGE entity dedicated to advance the country space capacities, have signed an MoU for the establishment of a joint venture. The new company will spearhead the development of an EO ecosystem in the UAE addressing both governmental and commercial customers. The UAE Space Strategy 2030, which seeks to foster the country's economic development and sovereignty in the sector, notably through industrial and scientific collaboration, frames the initiative.

## King Fahd University of Petroleum & Minerals & ispace sign MoU

Saudi Arabia's King Fahd University of Petroleum & Minerals (KFUPM) has signed a memorandum of understanding with ispace to collaborate on the development of lunar exploration technologies, lunar science and research, space craft development, and capability development, including the potential for transporting KFUPM payloads to the Moon.



*Credit: ispace*



### In other news

**Verizon and AT&T have each achieved milestones in cellphone-to-satellite video calls through collaborations with AST SpaceMobile.** Verizon completed its first live video call between a satellite-connected device, while AT&T conducted a similar call using satellites intended for commercial network.

**SatVu integrates thermal imaging archive into Global Data Marketplace.** SatVu has made its archive of high-resolution thermal imagery from HotSat-1 available to U.S. government agencies through the Global Data Marketplace.

**Eutelsat's U.S. subsidiary and Hughes to develop LEO modem for L3Harris RASOR Ecosystem.** Eutelsat America and Hughes Network Systems are developing a LEO modem transceiver for a defense contract with L3Harris.

**Avio conducts initial test of Multi-Purpose Green Engine with ASI grant.** Avio successfully tested its new bipropellant rocket engine, funded by a €55 million PNRR grant, for in-orbit logistics.

**Blue Origin terminated contracts of 10% of their workforce:** This saw cuts in engineering, R&D, program management, as well as management. Approx 1400 people were impacted in the layoffs. **Blue Origin extended its list of spaceflights to 50 with its tenth suborbital flight aboard New Shepard rocket.** The flight lasted for ten minutes and included the first person to not be fully identified prior to entering space.

**ATMOS Space Cargo is Cleared for Re-entry.** German-based orbital re-entry startup, ATMOS Space Cargo, has been granted regulatory approval for the first test flight of its Phoenix re-entry capsule, which will mark the first attempt by a European company for re-entry from space.

**Myriota expands its IoT constellation with four new LEO nanosatellites in collaboration with Spire:** These satellites were launched on the Transporter-12 mission with SpaceX and will facilitate in expanding Myriota's global markets. Myriota IoT constellation enables global data monitoring and collection for industries such as logistics, utilities, and agriculture.

**Dan Lloyd has been appointed CEO of the Space Industry Association of Australia.** This follows Australian government's axing of the \$3 billion JP9102 SATCOM project and other high profile space contracts during 2023. Lloyd brings experience from various senior global positions at Vodafone for 15 years as well as advising the communications federal minister.

**Viasat in-flight connectivity (IFC) to be rolled out across Aeromexico 787 Dreamliner fleet.** Viasat will provide the airline with in-flight Wi-Fi via their Ka-band satellite network. **This follows a deal with Viasat and luxury Taiwanese Starlux airline for IFC.** The luxury airline will be one of the first airlines in the Asia-Pacific region (APAC) to utilise Viasat's IFC. The IFC is supported by ViaSat-3 multi-orbit constellation and the Viasat's GM-40 terminal. **Viasat will further expand its presence in APAC through SES partnership providing connectivity to an offshore vessel.** This will see the o3b mPOWER satellite system in MEO to provide high-performance connectivity. This marks the companies first adoption of MEO connectivity.

**ThrustMe secures U.S. customers:** the French company, which designs small, iodine-based propulsion systems, has expanded to the U.S. market and signed contracts with several companies such as Turion Space, Lumen Orbit, and Starfish Space. ThrustMe has already provided about 150 propulsion systems following production debut in mid-2023, with more than half of them currently in operation.



## INVESTMENT & FINANCE

### Indra Group to acquire Hispasat, consolidates as European prime



*Credit: Hispasat*

Spanish IT and defence systems conglomerate **Indra Group** has reached an agreement to buy Redeia's 89.6% equity stake in Hispasat for €725 million, consolidating its ambitions to expand into the European space sector. The acquisition also increases Indra Group's stake to 50% at Hispasat's defence division, Hidesat Servicios Estratégicos S.A., which launched SpainSat NG-1, Spain's first military satellite communications, into GEO last January. Indra says it secured €700 million in financing and will cover the rest with

the remaining amount to be covered with existing cash on balance. The acquisition is subject to regulatory clearance.

Indra Group plans to consolidate these two companies and Deimos, acquired in 2024, into a new entity called Indra Space. The objective is to create a European space prime with end-to-end capabilities involved in major European space programmes and projects. Hispasat is part of the SpaceRise consortium, tasked by the European Commission with developing, deploying and operating Iris<sup>2</sup>, Europe's secure connectivity and communications services. The Spanish operator, which is to invest €600 million in the project, is tasked with the VLEO layer of the constellation.

### Mynaric files for bankruptcy and enters restructuring process

The German manufacturer of laser communications systems has delisted from NASDAQ **and filed for bankruptcy**, effectively entering financial restructuring under the German Corporate Stabilization and Restructuring Act. As of January end, Mynaric reported €8.4 million in cash with no financing opportunities "available nor in sight", forcing the company to reach an agreement with its creditors to receive a \$25million loan and complete the restructuring process by mid-year. Mynaric has found it difficult to scale the production capacity of laser communication terminals, including problems with the quality control in the supply chain. The company, which remains listed in other stock exchanges, faced a steep decline in its primary exchange in Frankfurt leaving the company with a market capitalisation of €6.29 million.

### Spire Global launches legal action against Kpler for uncompleted acquisition

The U.S.-based satellite operator has stated its intention to sue and force the Belgian analytics company to close the acquisition of its maritime division. Announced last November, the deal would have seen Kpler disburse \$241 million to gain exclusive rights over the sale of Spire's 100-plus satellites' data and existing U.S. government customer base. The U.S. company has claimed in front of the Delaware Court of Chancery that no "governmental order" prevented the closing of the transaction, and that Kpler, in violation of the Purchase Agreement, was not "using] best efforts" to clear relevant regulatory hurdles. Spire intended to use the funding to clear about \$100 million in debt and strengthen and invest in its other divisions. The Belgian company has not commented the affair.



*Credit: Spire Global*



## Unio Enterprise gets acquired by undisclosed buyer



*Credit: Unio Enterprise*

The German startup, established in 2022 as a Joint Venture between SES, Isar Aerospace, Mynaric AG and Reflex Aerospace, **was acquired by an undisclosed partner “active in space, cybersecurity, and tech”**.

Originally, Isar, Mynaric and Reflex established the UN:IO Consortium (a separate entity) in the framework of the European Commission’s call for proposals for what was to become IRIS<sup>2</sup>, ultimately awarded to the SpaceRISE Consortium. Even before the final decision by the European Commission, UN:IO decided that it would pursue the plans for a constellation even if not selected and the companies established the JV with SES to develop a “meta-constellation” comprised of sub-constellations, which ended up focusing on IoT connectivity. In October 2024, Unio Enterprise entered insolvency proceedings and since then looked for a buyer.

## ADA Space files for IPO in Hong Kong

**ADA Space has filed for an Initial Public Offering on the Hong Kong Stock Exchange.** The Chinese company produces computing satellites and offers derived services. ADA Space eventually seeks to build an integrated space-ground AI infrastructure for advanced data processing and communication. The company declared revenue growth of about 200% between 2022 and 2023, reaching CN¥507 million (roughly \$90 million), but also net losses and net operating cashflows during the period.

## K2 Space raises \$110 million for larger satellite buses

U.S. startup K2 Space has secured **\$110 million in a Series B round** co-led by Lightspeed Ventures and Altimeter Capital. The company designs and manufactures its Mega class of large satellites, which it states maximise power performances for low cost and rapid procurement. Even though the company highlights MEO as an underserved orbit, it states its satellites can operate in LEO, MEO, GEO and Cislunar orbits. K2 is to fly its first mission Gravitas for the Space Force in 2026, where one of its spacecraft will bring defence payloads to LEO before raising its orbit to MEO. The investment will fund the expansion of its production capabilities and workforce.

## ICON secures \$56 million for 3D-printed habitats

The U.S. company dedicated to 3D-printed habitats has raised **\$56 million in a Series C round** co-led by Norwest Venture Partners and Tiger Global.

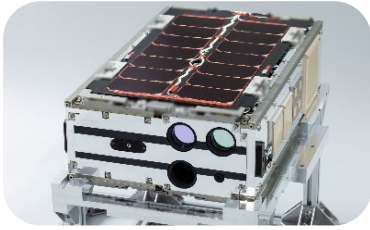
Even though the company also serves markets on Earth, having already built around 200 homes and structures across U.S. and Mexico, it is collaborating with NASA on the Olympus project, which sees the development of engineering systems designed to support lunar exploration through ISRU-leveraged 3D printing of structures. The company will use the funding to intensify the work on Phoenix, its series of multi-level 3D printers.



*Credit: ICON Build*



## ArkEdge secures €49 million for multi-purpose satellite bus



*Credit: ArkEdge*

The Japanese start-up has raised **¥8 billion (approx. €49 million) in a Series B round** led by Incubate Fund KK. ArkEdge develops a standardised bus allowing for the integration of multi-purposed mission components, like remote sensing, IoT data collection, or maritime satellite communications and is currently engaged in several relevant projects with partners such as the U.S. Small Business Administration or JAXA.

The design and testing phases of the system have been completed and the company is now moving towards orbital demonstration. ArkEdge plans to use the investment to launch constellations targeting maritime communications and situational awareness, remote sensing, but also in R&D and expanding the team.

## Skylo raises \$30 million for device-to-device connectivity

The U.S. startup has secured **\$30 million in an oversubscribed funding round** led by NGP Capital. Skylo operates a direct-to-device network, aiming to ensure continued connectivity via satellite during lack of terrestrial coverage. The company claims an integrated approach through agreements with partners positioned across the value chain, such as chipset makers, device manufacturers, and SIM providers. Skylo recently offered commercial services in Brazil, Australia, and New Zealand, but has not precised how it intended to use the funding.

## Karman+ raises \$20 million for asteroid mining

The U.S. startup has secured **\$20 million in a seed round** led by Plural and Hummingbird. Karman+ aims to extract resources from near-Earth asteroids to power the space economy, with an initial focus on regolith excavation and processing, which could then serve for in-orbit refuelling to serve deep-space exploration missions. Karman+ initial mission, High Frontier, is planned for 2027 and will demonstrate autonomous navigation and asteroid interaction capabilities. The funding will be directed towards that effort.

## ATMOS Space Cargo secures €13 million for inflatable re-entry technology

ATMOS Space Cargo has secured **€13.1 million in blended finance from the European Innovation Council Accelerator**, with €10.6 million as equity investment, equally divided by the Commission and private investors and the remaining €2.5 million as a grant. ATMOS develops PHOENIX, a return capsule, able to perform re-entry through inflatable heat shields.



*Credit: ATMOS Space Cargo*

The first test flight of PHOENIX 1, able to carry payloads of up to 100kgs, is expected to occur on SpaceX' Bandwagon-3 mission no earlier than April 2025. The funding will be used to develop the capsule's second iteration, PHOENIX 2, designed to return entire rocket stages as part of the EU-backed ICARUS consortium, as well as the expansion of manufacturing and testing capacities.



## MagDrive secures \$10.5 million for electric propulsion



Credit: MagDrive

The British startup has raised **\$10.5 million in a seed round** led by redalpine. MagDrive develops a family of electric plasma thrusters allowing LEO spacecraft to change orbits, longer RPOs, as well as collision avoidance manoeuvres and de-orbiting. A first test unit of their Rogue model is scheduled for launch in June aboard D-Orbit's ION Satellite Carrier. The seed funding will allow additional in-orbit demonstrations, the opening of a manufacturing facility in the UK and a subsidiary in Los Angeles.

## Jiutian Xingge raises over €13 million for launcher components

Jiutian Xingge, or R.Space, has secured **over CN¥100 million (approx. €13 million) in an 'A++' round** led by Beijing Fortune Commercial Aerospace and Low-Altitude Economic Industry Investment Guidance Fund. R.Space is a manufacturer of core components like cryogenic storage tanks for Chinese launchers' stages, which it also tests and integrates. The company will use the money to enhance R&D and scale production capacities.

## Hongqing Technology secures nearly €13 million for constellation supply

Chinese company **Hongqing Technology has raised about CN¥100 million in a Series 'A3' round** led by the Xiong'an Science and Technology Innovation Growth Equity Investment Fund. Hongqing Technology had **plans to build and launch its own constellation**, Honghu-3, but has pivoted towards the supply of small LEO satellites for China's mega constellation operators. The company opened a factory last year in Wuxi to support SpaceSail (formerly Shanghai Spacecom Satellite Technology) in building its satcom constellation, which is set to compete with Starlink. The latest investment will allow Hongqing to open yet another facility in Xiong'an to serve China Satnet in developing Guowang, the country's second mega constellation.

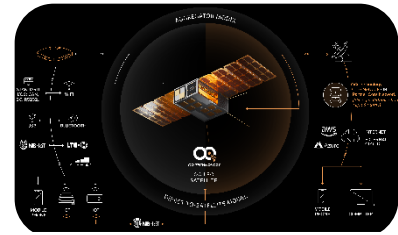
## Floodbase raises \$5 million for flood insurance

The U.S. startup secured **\$5 million in an investment round** led by Ecosystem Integrity Fund. Floodgate leverages satellite data to develop flood mapping technology designed for insurance brokers. The company, which has covered over 40 countries since its 2023 Series A, collaborates with a range of private and public partners, including the Federal Emergency Management Agency in the monitoring of hurricanes. The funding will enable the company to continue developing its solutions and offers.



## OQ Technology receives €2.5 million grant for direct-to-smartphone efforts

The European Innovation Council (EIC) Accelerator programme has awarded Luxembourg's OQ Technology with a €2.5 million grant for its ongoing Series B funding round. OQ Technology aims to connect smartphones via its small satellite constellation, with the first satellite planned for launch in 2026. Its Series A round in 2022 raised approximately \$13 million, which enabled the deployment of ten LEO satellites that connect directly to existing, commercially available IoT monitoring and tracking devices.



*Credit: OQ Technology*

## Kapta Space secures \$5 million for radar imaging



*Credit: Kapta Space*

U.S.-based Kapta Space has secured **\$5 million in a seed round** led by MetaVC Partners. The startup develops electronically steered antenna radars for Earth Observation, namely by leveraging Interferometric Synthetic Aperture Radar (InSAR), which monitors Earth surface deformation and maps it in 3D, and Ground Moving Target Indication (GMTI), which permits the tracking of slow-moving objects. The investment will go towards in-orbit demonstrations of Kapta's technology.



### In other news

**DPHi Space raises €2.2 million for payload aggregation:** the pre-seed round was led by QBIT Capital. The Swiss startup builds ClusterGate, a standardised and spacecraft-agnostic platform that can aggregate multiple hosted payloads, complemented by computing and software systems which allow in-orbit data analytics and processing operations. The start-up will leverage the funding to launch the first ClusterGate and expand its services offer.

**Oso Semiconductor secures \$5.2 million in a seed round.** The company develops phased array chipsets which they say will improve efficiency and reduce power consumption of electrically steerable antennas for satellite communications, 5G, and radar systems. The funding will enable further development of the technology.

**OurSky and PlaneWave Instruments merge for integrated space observation:** PlaneWave Instruments, a telescope manufacturer, and OurSky, developer of a platform for space observation data and applications, have merged to create Observable Space. The new company, building on the assets of its founders, offers a line of products enabled by the vertical integration of hardware and software.

**Fugro acquires EOMAP for water monitoring:** Fugro, a Dutch provider of geotechnical and geoscience services, has acquired German company EOMAP, which leverages satellite-derived bathymetry technology to map and monitor aquatic environments. Both companies have a history of collaboration on projects such as ISPRA Seagrass Coastal Restoration, where Fugro mapped the Italian coastline. The acquisition will enhance Fugro's EO capacities and deepen their reach on the water market.

**U.K based ETL Systems acquires Canadian satellite company IRT Technologies:** The acquisition is to strengthen ETL System's presence across North America and broaden its product range. IRT Technologies facility remains operational in Canada under its new ownership.

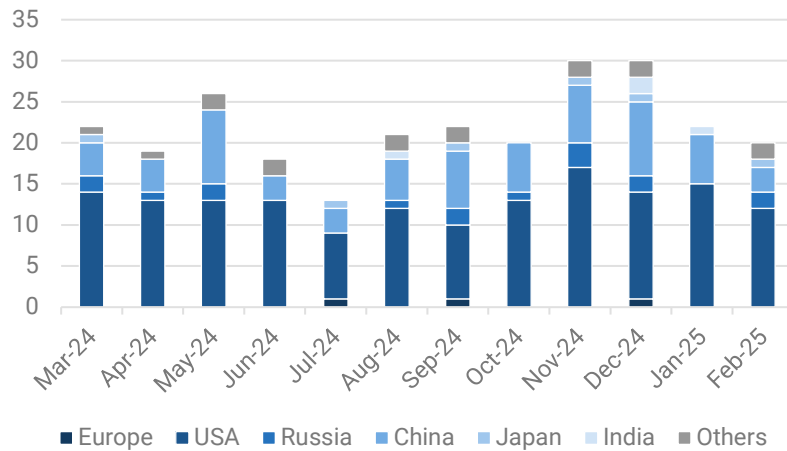


# LAUNCHES & SATELLITES

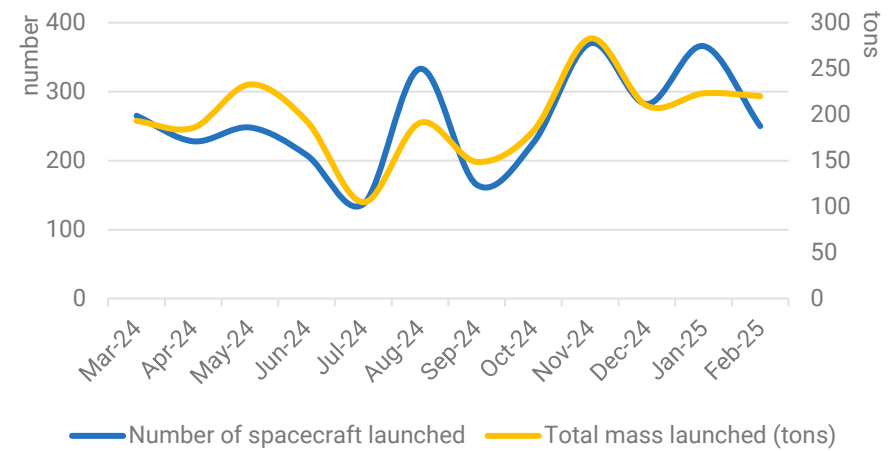
## Global space activity statistics

February 2025	USA	China	Russia	Japan	Others	Total
Number of launches	12	3	2	1	2	<b>20</b>
Number of spacecraft launched	227	12	4	1	6	<b>250</b>
Mass launched (in kg)	191 774	15 180	8180	4900	206	<b>220 240</b>

## Launch activity over the year



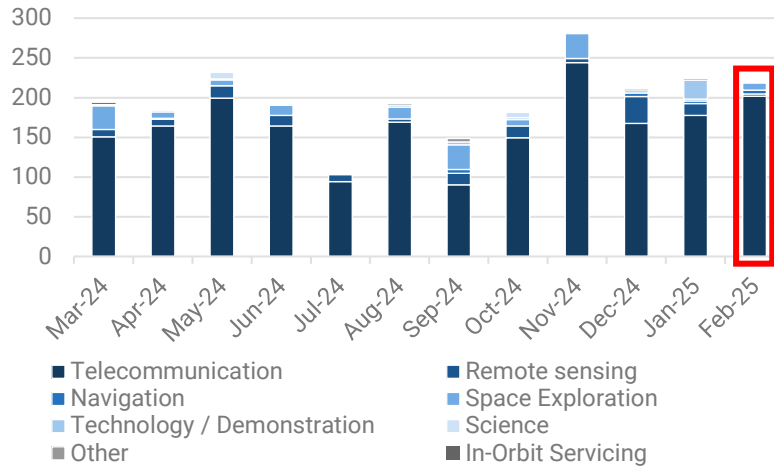
**Evolution of the number of launches per launch country**



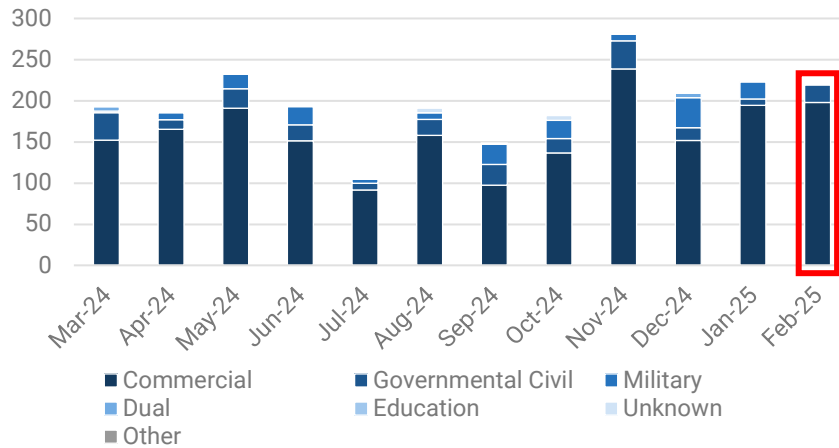
**Evolution of launch activity over the year 2024-2025**



### Satellite missions and markets



Evolution of the total mass launched (tons) per mission (Mar. 2024-Feb. 2025)



Evolution of the total mass launched (tons), per market (Mar. 2024-Feb. 2025)

February 2024	Telecom	Remote sensing	Navigation	Space Exploration	Science	Tech / Dem.	Other
Europe	150						
USA	187 660	1556		2213	100	300	
China	14 100	1080					
Russia				7280			900
Japan			4900	1			

Total mass (kg) launched by mission and customer country

February 2024	Commercial	Governmental Civil	Military
Europe	150		
USA	191 829		
China	6180	9000	
Russia		7280	900
Japan	1	4900	

Total mass (kg) launched by market and customer country



## LAUNCH HIGHLIGHTS

### SpaceX Falcon9 sends IM-2 Lander towards the Moon

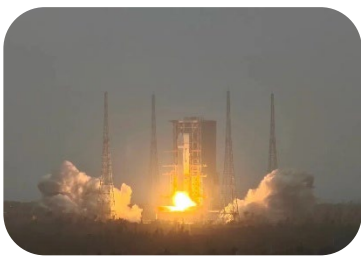
Intuitive Machines' second lunar lander, IM-2, is en route to the moon following a successful SpaceX Falcon 9 launch on February 26th. IM-2 is targeting Mons Mouton, a plateau in the lunar south pole region, with a planned landing attempt on March 6. The previous IM-1 lander, which landed nearly a year ago, experienced a hard landing that caused it to tip over after its altimeter failed to function properly. IM-2 is transporting a NASA science payload,



*Credit: Intuitive Machines*

Polar Resources Ice Mining Experiment 1 (PRIME-1), designed to drill up to a meter beneath the lunar surface in search of water ice and volatile compounds, and a laser retroreflector. IM-2 marks the fourth NASA Commercial Lunar Payload Service (CLPS) mission to launch. Beyond IM-2, the Falcon 9 deployed three secondary payloads: (i) Lunar Trailblazer, designed to map lunar water distribution from orbit, (ii) Odin, intended to fly by a near-Earth asteroid to evaluate its potential for future resource extraction, and (iii) Chimera, an orbital transfer vehicle.

### First Launch of Long March 8A deploys second batch of satellites of Guowang megaconstellation



*Credit: CASC*

**China successfully conducted the maiden launch of the Long March 8A on February 11th, deploying a new set of satellites into orbit for the national Guowang (SatNet) broadband megaconstellation.**

No official images or technical specifications—such as size, mass, or capabilities—have been released following either of the Guowang launches. This lack of transparency has led to speculation regarding the specific nature and objectives of the spacecraft within what is described as a civilian broadband megaconstellation. Oversight of the Guowang initiative is handled by the China Satellite Network Group Co., Ltd. (China SatNet), with plans for a constellation of approximately 13,000 satellites to provide global broadband coverage. The Long March 8A is an enhanced version of the Long March 8, which first launched in December 2020. The updated rocket is designed to carry payloads of up to 7,000 kilograms to a 700-km Sun-synchronous orbit (SSO). Together, the Long March 8 and 8A provide payload capacities of 5,000 and 7,000 kg to SSO, strengthening China's ability to deploy large-scale satellite constellations. These rockets are likely to play a significant role in launching China's Guowang constellation, as well as the Thousand Sails/Qianfan megaconstellation.

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