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POLICY & PROGRAMMES

17th European Space Conference



Credit: ESPI

On January 28th and 29th 2025, the 17th European Space Conference took place in Brussels. ESPI was present with an active role at the conference where, on top of a dedicated booth, **ESPI led two sessions, moderated eight, and presented the conference's key takeaways** in the concluding speech.

The European Commissioner for Defence and Space Andrius Kubilius opened the conference. In his welcome speech, he defined the 21st century as the century of space,

emphasising the strategic importance of autonomous capabilities in the sector for Europe to remain safe and in control of its future. While the content of the keynote remained mostly focused on institutional matters, Kubilius called for a decisive change in trajectory. Launch capabilities need a long-term vision, possibly with bulk purchases and service aggregation. Kubilius urged collective courage ahead of ESA's November Ministerial, calling for collaboration across Member States, the EU, agencies, and industry to tackle sector challenges.

ESA's DG Josef Aschbacher then addressed the audience. He urged stronger European leadership, echoed closer ESA-EU alignment, and increased funding, noting Europe's 11% share of global public space funding (€12 billion) is shrinking. Aschbacher affirmed the role of ESA subscriptions counting towards NATO's 2% spending – a mechanism already deployed by some of the agency's Member States. Finally, he emphasised ESA's role in autonomy, security, and resilience, key to Strategy 2040's goals: Earth protection, exploration, growth, and inspiring youth.

Several missions and contracts were announced. In EO, Ariane 6 will launch Copernicus' Sentinel-1D and EUMETSAT's first second-gen MetOp satellite. The Commission and ESA awarded OHB a third CO₂M satellite, while 19 companies joined Copernicus Contributing Missions. In science, ESA tasked Thales Alenia Space with developing EnVision to study Venus. ESA also contracted six smallsat manufacturers (Aerospacelab, Berlin Space Technologies, D-Orbit, ISISPACE, LuxSpace, Open Cosmos) under the IOD/IOV programme to enable rapid rideshare access for European innovations.

Other keynotes ensued. EU's High Representative for Foreign Affairs and Security Policy **Kaja Kallas identified three priorities constituting the development of a "new European Space Shield"**: Near-time threat awareness, attack response (identification, retaliation, protection), and enhanced cooperation within the EU, bilaterally (U.S., Australia, Japan, Korea), and multilaterally (UN, NATO). **Peter Kyle**, British Secretary of State for Science, Innovation and Technology, emphasised in his keynote address that European collaboration was vital, stating that by pooling resources and expertise, greater advancements could be achieved. He highlighted that after one decade, it is time to reset the UK's relationship with the European Union, to shape the future of science and defend shared values, which are also represented in space. Following this, he announced a **£20 million investment in launch company Orbex** as part of its Series D funding round. EIB's Head of Security and Defence Office **Catherine Bender called for a "convergence" of space, security, and defence**, and reiterated the support of the financial institution in supporting the competitiveness of the European industry.



EU, ESA sign IRIS² contract with SpaceRISE consortium

The European Commission awarded to the SpaceRISE consortium the contract to develop, deploy and operate the Infrastructure for Resilience, Interconnectivity and Security by Satellite (IRIS²). IRIS² is the EU's third flagship programme, following Copernicus and Galileo, and will enable secure communications services to European government as well as high-speed and global connectivity to citizens and companies. In doing so, the programme will enhance European autonomous capabilities in space and allow sovereign decision-making in several other strategic sectors. The multi-orbital constellation will comprise approximately 290 satellites positioned in both LEO and MEO, with initial launches planned for 2029 and full deployment targeted for 2030.

The 12-year-long concession is worth €10.6 billion and will be funded through a public-private partnership, with the EU contributing €6 billion, ESA €550 million, and SpaceRISE about €4 billion. The consortium is composed of three leads, European satellite operators SES, Eutelsat, and Hispasat, and several additional key partners including Thales Alenia Space, Airbus Defence and Space, OHB, Orange, and Telespazio.

Spanish Armed Forces launch two SpainSat NG-I satellites

The Spanish Armed Forces has launched the first of two Airbus-manufactured SpainSat satellites from Cape Canaveral, U.S. The satellite was launched on a Falcon 9 rocket and will enter GEO in the second half of 2025. Meanwhile, the twin satellite SpainSat NG-II, is scheduled for completion by the end of 2025. The satellites feature advanced technologies developed by Airbus, including a flexible X-band active antenna system and radiation-hardening for nuclear protection. Key technologies on the SpainSat NG-I were developed through the Pacis 3 ESA-Hispdesat Partnership, as part of the ESA ARTES programme, with support from the Spanish Space Agency. Hispdesat are tasked with the operation of the satellites, which are expected to strengthen Spanish and European sovereignty and significantly improve secure communications capacity.

Andrius Kubilius begins tenure as the Commissioner for Defence and Space



*Credit: European Union/
Philippe Buissin*

On December 1st Andrius Kubilius started his tenure as the European Commissioner for Defence and Space with a focus on boosting European competitiveness and security in space. Kubilius emphasised the importance of enhancing the capabilities of the EU's flagship space programmes to deliver specialised governmental services for security needs. Five new initiatives were announced focusing on strengthening EU access to space, enacting a new EU space law, enhancing global competitiveness of the EU space industry, preparing an ambitious next multiannual financial framework for the EU, and addressing increasing threats to space assets. Attention was given to the launcher crisis, indicating a greater role for the EU.

The IRIS² programme, a multi-orbit satellite constellation comprising of approximately 300 satellites, has been confirmed to be deployed starting in 2029. Iris² is the third flagship space programme for the EU following the Copernicus and Galileo. The contract spanning over the course of 12 years is supported by a €10.6 billion public-private partnership involving the European Commission, ESA and the SpaceRISE consortium. The programme aspires to enhance the EU's space capabilities through increasing EU sovereignty and autonomy in the space sector.



Poland takes over Presidency of the Council of the EU – Priorities for Space

On January 2025, **Poland took over the 6-month rotating Presidency of the Council of the EU**. The Polish presidency aims to protect European citizens and borders, enhancing security and resilience, maintaining support for Ukraine, promoting economic competitiveness and energy security and strengthening transatlantic partnerships with like-minded nations. Poland's Presidency's programme EU focus on seven security dimensions with a specific focus on the utilisation of the space sector. Key initiatives include:

- Work towards adopting Council conclusions on the utilisation of EO data while emphasising the importance of leveraging AI algorithms for security and crisis management in the space sector.
- Drafting of a EU space law.
- Hosting discussions on space policy concerning European security and crisis management.
- Hosting discussions on the use of satellite technology and assets for other sectors.

ESA budget for 2025 in numbers

ESA's 2025 budget is valued €7.68 billion. Contributions from member states amounted to over two thirds, (62.6%), with contributions from the European Commission, EUMETSAT, and other partners making up the rest.

Earth Observation receives the largest allocation, with €2.5 billion (33.6%) committed to this sector. Navigation comes second with €957 million (12.5%), and Connectivity and Secure Communications third, with an allocation of €815.4 million (10.6%). During the 17th European Space Conference,

EU Commissioner for Space and Defence Kubilius emphasised the importance of the space sector in enhancing European autonomy. His address noted however the **limitations of the current budget and affirmed that closer cooperation with ESA, working hand in hand in coordinating the next MFF and the ESA Council at Ministerial level**, with the same view shared by ESA Director General Josef Aschbacher.



Credit: Directorate-General for Defence Industry and Space

Jared Isaacman selected as next NASA administrator

U.S President, Donald Trump, nominated Jared Isaacman for the next administrator of NASA. Isaacman has taken command of two SpaceX commercial spaceflights and will take his first political position in NASA pending Senate confirmation. Isaacman has been critical of the Artemis Accords, advocating for more competition and the potential of breaking up defence contracts and renegotiating these for improved value. The nomination raised concerns on Isaacman's financial ties to Elon Musk alongside his critical stance on NASA contracts, specifically decisions on lunar landers, and while supportive of competition opposed NASA redundancy spending on Blue Origin's Lunar Landing.



ESA awards over €1.2 Billion in Contracts for Lunar, Launch, and Earth Observation Missions

Between December 2nd 2024 and January 30th 2025, ESA signed major contracts to advance lunar exploration, launch systems, and Earth observation. **Thales Alenia Space secured nearly €900 million to develop the Lunar Descent Element for Argonaut**, enabling precision landings on the Moon in the 2030s. Meanwhile, **Avio received €350 million** to enhance Vega C and complete the Vega E rocket, set to debut in 2027, ensuring Europe's independent launch access to space. For Earth observation, **ESA granted €35 million to Open Cosmos to develop NanoMagSat**, a mission to monitor Earth's magnetic field under the FutureEO programme. The three satellites will launch starting in 2027.

Upcoming European Launch Competition to test new approaches

ESA is considering introducing new procurement approaches to promote competition and innovation in the space sector, which will be tested with the **European Launcher Challenge**. This initiative uses a "fair contribution" model, where funding aligns with competitive results rather than pre-defined fixed country-based contracts. Germany has pledged €95 million to support its domestic launch companies, highlighting the need to strengthen Europe's technological independence.



Credit: Brian Berger / SpaceNews

ESA and Poland officially name Polish mission to the ISS 'Ignis'

ESA, the Polish Ministry of Economic Development and Technology, and Polish Space Agency POLSA have named their mission to the ISS 'Ignis'. This mission is part of the Axiom Mission 4, with Axiom Space's Peggy Whitson at the command and crew from Hungary and India alongside ESA project astronaut Sławosz Uznański. Uznański will become the second Pole in space and the first to visit the ISS. Ignis will host 13 Polish experiments in microgravity across technology, biology, medicine and AI, demonstrating the country's ambitions in the sector.

ESA and Estonia to build Space Cyber Range



Credit: Estonia Space Office

ESA and Estonia will develop the **Space Cyber Range** as part of the **ESA Space Systems for Safety and Security programme**. This project will see Estonia providing ESA with cybersecurity expertise for the utilisation of Europe's space security capabilities. This initiative will provide capabilities to analyse, authenticate and showcase space assets in a virtual environment, as well as provide a basis

for further research in the cybersecurity field relating to the space sector.



EUSPA awards two contracts worth over €144 million to Telespazio subsidiaries

Telespazio France and Telespazio Belgium have been granted two contracts to provide support services to EUSPA and the European Commission. The contracts will span over four years and see support in fields such as EO, Navigation and future space-based services. Telespazio France will lead the works on Operations and Service Provision and Management Support, while Telespazio Belgium will lead the work on Project Management and Quality Support. The scope of these contracts will extend to activities in the deployment, management and operations of ground and space segments, as well as the management of sites hosting services.



Credit: ESA

German Space Agency awards multiyear contract to constellr

The German Space Agency awarded a multiyear contract with German thermal data startup constellr, to supply DLR-affiliated researchers with high-quality thermal data images. The collaboration will provide data allowing further research in fields like climate change and food security. The company aims to begin the development of their "High-precision Versatile Ecosphere (HiVE) constellation in early 2025.

Italian Space Agency launches Selene project



Credit: ASI

The Italian Space Agency has launched its SELENE project. SELENE, led by the Italian National Agency for New Technologies, Energy, and Sustainable Economic Development (ENEA), will look into powering future lunar settlements through the creation of a Moon Energy Hub, with energy production tackled by miniaturised nuclear fission reactors. The project would establish a continued energy source aiding in exploration activities. The project will also look at the development on automation, wireless power transmission, and storage systems. Prime contractor Thales Alenia Space and the Polytechnic University of Milan are also contributors to the project.

Italian Space Agency enters partnerships with Thales Alenia Space for NASA's Surface Biology and Geology

The Italian Space Agency has selected Thales Alenia Space to assist with the NASA Surface Biology and Geology – Thermal Infrared mission. This mission will see the NASA thermal infrared radiometer and ISA VIR-NIR camera operate together to provide high-quality observations which will benefit various sectors. Thales Alenia Space will support the mission by integrating the SBG-TIR satellite, customising the PRIMA-S platform, and conducting essential tests to ensure mission success.



U.K. Civil Aviation Authority grants Rocket Factory Augsburg vertical launch licence



Credit: RFA

Rocket Factory Augsburg has been granted a vertical launch licence allowing them to conduct the inaugural flight of its RFA ONE rocket. Conducted from the SaxaVord Spaceport in Scotland, the launch is scheduled for 2025 but remains conditional to completion of several procedures. RFA ONE was delayed last year following a fire during testing which destroyed the rocket's first stage.

New CEOs appointed for Arianespace and CNES

Former CEO of Arianespace Stéphane Israël left the group on December 31st and has been replaced by David Cavaillolès as of January 2025. Cavaillolès has worked in various departments of the French public sector, including an appointment as the ministerial advisor for French space policy in 2017, as well as leadership positions for Capgemini.

Lionel Suchet has been appointed interim CEO of the CNES, commencing his position January 6th. Suchet will replace Phillippe Baptiste who has been appointment as French Minister for Higher Education and Research.

U.S. Pentagon awards SpaceX with contract to expand Ukraine's access to Starshield

The Pentagon contracted SpaceX under the "Proliferated Low Earth Orbit" programme to provide Ukraine with access to the militarised Starshield satellite network. Starshield adds an encrypted layer over Starlink's signal, providing secure connectivity to military forces. The deal grants Starshield access to 2500 additional Ukrainian Starlink terminals access, with 500 already connected in the country. The service has remained critical to keep Ukraine online amid frequent disruptions of terrestrial communication networks. The contract's value was not disclosed.



Credit: Cate Dingley/ Bloomberg

NASA Awards Contracts for \$4.82 Billion Near Space Network Communications

NASA has contracted Intuitive Machines, Kongsberg satellite Services (KSAT), SSC Space U.S. and Viasat for the provision of communications services under the NSN programme. NSN covers Earth orbit and lunar communications up to two million kilometres from Earth. Intuitive Machines will be in charge of two tasks for direct-to-Earth communications in support of NASA's lunar exploration initiatives. KSAT and Viasat will also offer services to this end, on top of another task which regards direct-to-Earth communications for satellites in Earth orbit. Finally, SSC Space has been tasked with LEO and elliptical orbit communications.



National Geospatial-Intelligence Agency award BlackSky Technology \$200 million contract

The U.S National Geospatial-Intelligence Agency has awarded BlackSky Technology with a **\$200 million contract**. This formulates part of the Agency's Luno B commercial data indefinite delivery, indefinite quantity contract. The five-year contract supports national security by enabling AI-driven insights into global activities and enhancing decision-making for military and political leaders.

NASA awards Firefly Aerospace \$179.6 million contract for lunar landing mission

NASA selected Firefly Aerospace under its Commercial Lunar Payload Services (CLPS) programme for a third lunar mission worth **\$179.6 million**. The contract will see Firefly's lander, Blue Ghost, deliver six scientific payloads to the lunar surface. Some of them will be deployed on a lunar rover whose provider remains unknown. Due to launch in 2028, the mission is to land near the Gruithuisen Domes region and set to analyse their formation, notably through the retrieval of regolith samples.



Credit: Firefly Aerospace

U.S Navy awards X-Bow \$60 million to upgrade solid rocket production facilities

X-Bow Systems received a **\$60 million contract** to modernise U.S solid rocket production at the Naval Surface Warfare Centre Indian Head Division in Maryland. 3D printing technology developed by X-Bow will be utilised to develop solid rocket motors and propellants which the company stipulates will enhance their efficiency. This deal comes as part of the Navy's \$2.7 billion project to upgrade aging defence infrastructure.

U.S Airforce awards Varda \$48 million to test payloads on re-entry capsules

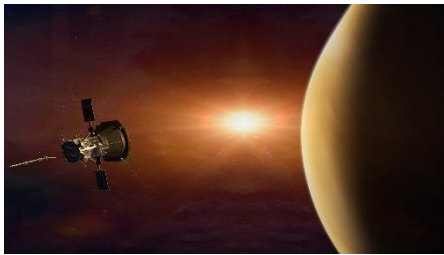
The U.S. Air Force Research Laboratory awarded Varda Space industries a **\$48 million contract to test military payloads on its re-entry capsules**. The startup develops satellites allowing manufacturing of valuable materials, such as pharmaceuticals, and return them in their own W-2 re-entry capsule, whose thermal protection material was developed in collaboration with NASA. The first mission was successful tested in February 2024 **with the second launched on January 14th**. The W-2 capsules are due to remain in orbit for several weeks before returning to the scheduled landing site in the Koonibba Test Range in South Australia.

ISRO appoints new Chief as Dr. Sreedhara Somanath steps down after historic achievements

Dr. Sreedhara Somanath has stepped down as the Chairman of the Indian Space Research Organisation (ISRO) after a career marked by significant achievements, including the successful Chandrayaan-3 mission to the Moon and India's signing of the Artemis Accords. His leadership has also seen the launch of India's first solar mission, Aditya L-1, despite facing personal health challenges. As he concludes his term, Somanath leaves behind a legacy of strengthening India's position in the global space arena.



NASA's Parker Solar Probe breaks record for closest distance from the sun



Credit: NASA/ John Hopkins APL/ Steve Gribben

The NASA owned and operated Parker Solar Probe passed over the sun's surface at a distance of over 6.2 million kilometres. The mission is expected to collect data for research on the sun's impacts on the solar system. The spacecraft was launched in 2018, recently reaching what is described as its "optimal orbit". The spacecraft has not yet reached a location where the data can be downloaded, but transmission indicates that the craft was not damaged during the mission.

NASA receives delivery of two Airbus units for NASA's Gateway HALO module

The first two units of the Power Management and Distribution (PMAD) Subsystem for NASA'S Gateway Lunar Space Station were delivered by Airbus Defence and Space. The PMAD will be situated in the stations Habitation and Logistics Outpost (HALO) module. This will be one of the first modules to launch, alongside the Power and Propulsion Element. Northrop Grumman is the prime contractor of the HALO module who contracted Airbus Cirsa for the development of the PMAD system.

Rocket Lab Urges New Trump Administration to Open MSR Competition

Rocket Lab has called on the new Trump administration to expediate the next step of the MSR and open this up to commercial competition. The request followed the announcement of NASA to continue MSR studies for another year and a half to study two alternative architectures for this mission. RocketLab stated their improved architecture, which is similar to earlier NASA architecture, would be approx. \$1.8-3.7 billion cheaper to produce and capable of returning samples between 2035 and 2039.



Credit: RocketLab

China allows first private participation in lunar exploration mission

China has allowed the participation of STAR.VISION Aerospace Group in the upcoming Chang'e-8 mission. This will be the first time the Chinese National Space Administration has allowed participation from a commercial company in their lunar exploration program. The participation will see joint ventures of the corporation with the Yhejian University and Middle East Technical University for the development of lunar surface robots.

Japan awards Astroscale Japan to develop in-space refueling technologies

The Japanese Cabinet Office along with the Japan Science and Technology Agency has awarded Astroscale Japan with a contract to develop in-space refueling technology. This formulates part of the "Key and Advanced Technology R&D through Cross Community Collaboration Programme" (K Programme) and will span over the course of five years with a ceiling budget of approx. €73.22 million. This initiative will work towards developing in-space refueling technologies for satellites in LEO.



UAE Government awards Space42 \$5.1 billion contract

The UAE Government awarded a \$5.1 billion contract to Space42 for the provision of satellite capacity and related management services until 2043. The contract follows two previous agreements between the company and the UAE government, extending these contractual arrangements a further 17 years. The contract also encompasses the construction of two satellites.

Türkiye signs MoU with Axiom Space



Credit: IHA Photo

Türkiye and Axiom Space signed a MoU to boost Türkiye's space sector.

The agreement frames advancements in several areas such as supply chain development, space station collaboration, astronaut training, and innovation in space technologies. Six foundational goals for the space sector are framed within the MoU, which will see the development of laboratories and facilities to aid this sector, as well as the development of astronaut training facilities. This aspires to aid in Türkiye's National Space Program's ten targets for the next decade.

EU opens negotiations with Norway for GOVSATCOM participation

The European Union has initiated negotiations with Norway for its participation in the GOVSATCOM programme, aiming to extend governmental satellite communication services. The European Commission has been designated as the lead negotiator, with the Council Working Party on Space overseeing the process. GOVSATCOM, which IRIS² will expand and enhance, provides secure, resilient, and cost-effective satellite communications for critical governmental and security-related missions to its members. Norway and European member states and institutions have strong ties in the space sector. The Nordic country is a member of ESA and of the European Union Space Programme, notably hosting two Galileo ground stations in Svalbard and Jan Mayen.

Germany and Norway strengthen bilateral ties in the space sector

Germany and Norway signed a MoU which will see both countries increase their cooperation in the space domain. The MoU will expand the countries' space capabilities, notably in answering to threats in the sector along three main pillars. Responsive launch capabilities must be implemented, notably in replacing failed systems, protecting existing spacecraft, and providing new satellites and capabilities when needed. Enabling innovation in a civil-military approach through research on materials and safeguarding critical supply chains is a second priority. Finally, the sustained use of space in both peace and war time should be insured through strengthening critical capabilities such as ground stations or data links.

U.S and Norway sign agreement for technology safeguarding of U.S assets in Andøya

This technology safeguards agreement (TSA) will allow the export of American hardware, like launch vehicles or satellites to be launched from Norway's Andøya Spaceport. The Norwegian government, which granted last August the license allowing the Spaceport to conduct orbital launches, sees potential in the military use of the installations and notably through enhanced coordination with the U.S. and NATO. American companies have yet to express interest in the



facilities, which should however see **the inaugural flight of German start-up Isar rocket Spectrum** in the first months of 2025.

Angola signs financing agreement with France for the construction of EO satellite system

Angola's Ministry of Finance has secured the financing of its first high-resolution EO satellite, ANGEO-1, during a presidential visit to France. Airbus Defence and Space will be manufacturing ANGEO-1 through a partnership which will also see the inclusion of capacity building and knowledge transfer. The €225.26 million-worth contract was secured through two loans provided by French bank Société Générale.



In other news

ESA and Mercator Ocean International sign Memorandum of Intent during the European Space Conference in Brussels, Belgium. This aims to enhance joint collaboration in the areas of EO and Digital Ocean activities.

François Kalfon elected as vice president of Ciel and Espace Intergroup of the European Parliament: His tenure will oversee the continuation of the current programme's such as the strategic and autonomous EU presence in the space sector.

EUSPA selects GMV for the development of the Galileo mission: This contract will see GMV develop a new High Accuracy Data Generator for phase 2 of the Galileo High Accuracy Service.

The Combined Space Operations initiative (CSpO) release joint statement after meeting in Italy: The CSpO partners met to discuss the importance of global cooperation and their mission to lead responsible state actors in space. The partnership is focused on a commitment to the Outer Space Treaty.

Austria, Panama, Thailand, Liechtenstein and Finland become signatories of the Artemis Accords: The Artemis Accords gather greater support with Austria, Panama, Thailand, Liechtenstein and Finland marking 53 signatories to the Accords.

Germany adopts the National Security and Defence Industry Strategy: This defines space technologies as a key industry of national interest and commits to increasing the development of space technologies and infrastructure with due regard to dual-use applications at national and EU levels.

Biden approves executive order to strengthen cybersecurity for commercial satellite systems: This hopes to enhance cybersecurity capabilities through introducing mandates surrounding the requirements for "agency-produced" space systems.

The U.S General Services Administration awards Viasat with a \$568 million contract: This deal focuses on innovation to address complex challenges faced by the Department of Defence and will support the military sector by advancing technologies.

ESA and Viasat have signed an agreement to develop a direct-to-device satellite system: enabling seamless mobile broadband connectivity without ground infrastructure.

Space Systems Command awards \$117 million contract to SES Space & Defence: This contract will see the provision of multi-orbit, multi-band satellite services to the United States European Command.

Pentagon grants Anduril Industries a \$14.3 million contract for the expansion of solid rocket motor production: This was granted under the Defence Production Act and formulates part of the Defence sectors support in growing domestic manufacturing capabilities.

Space Force's GPS IIIF programme has been delayed for approximately eight – eleven months: Space Force attributes the delays to manufacturing challenges from Lockheed Martin. The new schedule should see the delivery of the first satellite by November 2026.



In other news

Nigeria announces 2025 space budget of \$48.30 million: This raises the budget from the previous year by 82%.

Kenya Space Agency and Expertise France sign partnership: The collaboration focuses on capacity building, promoting EO data usage and fostering innovation ecosystems. This aims to facilitate growth across various sectors and supporting relevant industries such as universities.

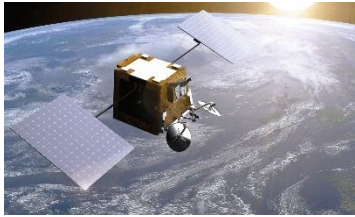
South Africa and Algeria sign MoU across various sectors including space: The move sees an increase in the strategic partnership of the two nations in various fields. Furthermore, joint ventures between the nations space sectors aim to increase both countries space capabilities.

Argentina's minister for Defence Dr. Luis Alfonso Petri was welcomed for an official visit in Israel aimed to deepened strategic partnerships between the Nations. The two countries emphasised the need for sustained cooperation, and their meetings included discussions of joint ventures in areas of satellite communications.

Isreal strengthens their strategic ties with India through focusing on space and quantum technologies. India's Minister of state for Science and Technology, Dr. Jitendra Singh, welcomed Mr Nir Barkat, Isreal's Minister of Economy and Industry on an official visit to India. The two countries discussed future joint ventures in sectors including space, quantum technologies and AI. This bilateral partnership is set to enhance both countries space capabilities.



INDUSTRY & BUSINESS



Credit: Airbus

Eutelsat chooses Airbus Defence and Space for OneWeb extension

Eutelsat has selected Airbus Defence and Space to manufacture the next 100 satellites of its low Earth orbit (LEO) OneWeb constellation. Allowing 5G connectivity, the spacecraft will be compatible with the technological requirements of the EU's IRIS² constellation, whose LEO segment will be operated by Eutelsat. First

deliveries are planned for late 2026.

Vast and SpaceX to cooperate on human spaceflight missions

Vast and SpaceX announced their collaboration in launching up to two Dragon missions to the International Space Station. The agreement comes as Vast, which plans on launching its space station Haven-1 this year, prepares for a bid for NASA's upcoming private astronaut missions (PAM) contracts. The missions will be launched on Falcon 9 and will permit to draw additional spaceflight experience as well as reinforce existing partnerships with institutional and private partners. Vast and its Haven-2 also remain in the race for NASA's Commercial Low Earth Orbit Destination (CLD) which will designate a successor to the ISS.

Thales Alenia Space and Hispasat to collaborate on quantum distribution system

Thales Alenia Space and Hispasat have started developing Spain's quantum key distribution system from geostationary orbit prototype. The technology leverages the quantum properties of photon to continuously verify whether communications have suffered an interception attempt, offering safeguards in military and governmental transmissions. The use of geostationary orbits, where signal attenuation is weaker, allows for a reduced number of satellites to establish contact with the ground. The project is to last for 24 months and includes the manufacturing of a geostationary payload as well as an associated terrestrial segment.

Tesat selected by Lockheed Martin for demonstration on future GPS

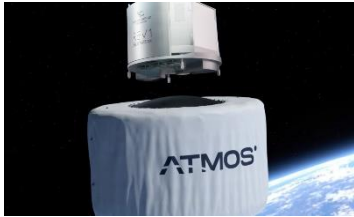
On December 3rd, Lockheed Martin announced it had selected Tesat optical communications terminals (OCT) for a future GPS III spacecraft demonstration. Tesat will now contribute to delivering an optical communication terminal for a MEO GPS satellite, part of Lockheed's contract to build 10 Next Generation GPS III satellites for the U.S. Space Force. Six of these have already been delivered, and Lockheed is also building up to 22 GPS III Follow On satellites with more advanced capabilities. The contract comes after Tesat was also contracted by Lockheed for its same OCT terminals to be used for its Tranche 1 Transport Layer satellites for the Space Development Agency (SDA).



Credit: Tesat-Spacecom



Atmos and Space Cargo Unlimited to work on microgravity payload missions



Credit: Space Cargo Unlimited

On December 3rd, European companies Atmos Space Cargo and Space Cargo Unlimited announced they were partnering to develop a spacecraft carrying microgravity payloads into orbit and then return them to Earth. The companies will work together on a series of seven missions, the first of which is set for late 2025, with two more in 2026 and four in 2027. The companies have not disclosed many technical details of the missions but claim to have already sold 80% of the first commercial missions, and the next two

40% and 20%, respectively. They also say to fit into a broader ecosystem of space microgravity services that includes work on the ISS and future commercial space stations.

SSC and Ovzon cooperate on Sovereign Space Capabilities

On December 2nd, Swedish Space Corporation (SSC) and Ovzon announced they had strengthened their partnership to boost Swedish space capabilities. Both companies have signed an agreement with the aim of developing unique sovereign space and satellite capabilities. Such cooperation will support vital objectives to the country, which recently joined NATO, and will feature their space portfolios and Ovzon's Ovzon 3 satellite.

Sierra Space engages in partnerships for space-based semiconductors

On December 4th, Sierra Space announced it had reached agreements with US companies Astral Materials and Space Forge Inc. (subsidiary of UK-based Space Forge Ltd.) to examine the use of its technology for semiconductor development in space. Under the agreements, the companies will work on project designs to be flown on Sierra Space's Dream Chaser vehicle, as well as technologies and "proof-of-concept missions" for semiconductor production in space. The agreements could also include incorporation of semiconductor technologies onto space station systems.

Neuraspace installs second telescope for enhanced space traffic monitoring

On December 6th, Portuguese space traffic management startup Neuraspace announced it had installed a second optical telescope in Chile for LEO object tracking across both hemispheres. The move comes three months after it had set up a similar one in Portugal. Both telescopes were funded through Portugal's Recovery and Resilience Plan, and were supplied by Deimos, recently acquired by Spanish company Indra. The company uses artificial intelligence to provide real-time satellite position information to improve operations in space, including collision avoidance manoeuvre guidance. Currently, over 400 satellites currently use its platform for monitoring and collision avoidance services.



Credit: Neuraspace



Exolaunch integrates satellites for upcoming Transporter-12 mission with SpaceX

Following the Transporter-11 mission, Exolaunch integrated customers' satellites for the Transporter-12 rideshare mission with SpaceX. The Berlin based company oversaw the integration, launch and deployment of 28 satellites expected to be launched early 2025. Seven further satellites will be upgraded with Exolaunch hardware under this mission.

AstroForge and Stoke Space partner for asteroid mining



Credit: AstroForge

AstroForge and Stoke Space have signed a commercial agreement for launching mining payloads to asteroids. The contract, whose details remain undisclosed, should see its first launch after 2026 and will bring AstroForge's prospecting and mining spacecraft to asteroids of interest aboard Stoke's Nova rocket, currently under development. AstroForge's CEO Matt Gialich says that the vehicle offers the right size and costs for the missions. These will partly build upon the Mission 2 and the Odin spacecraft, which is to be launched next month aboard Intuitive Machine's IM-2 lunar lander mission and target asteroid 2022 OB5.

Globalstar and Parsons team up for defence satellite service

On December 3rd, satellite communications provider Globalstar and defence contractor Parsons announced they had teamed up to bring to market a secure messaging and data transmission service for military users. Under the agreement, Parsons had developed a secure communication waveform through its LEO satellite infrastructure that can leverage Globalstar's bent-pipe satellite architecture, simplifying integration and updates. The companies, which are planning to expand testing of the service beyond North America, seek to address a demand for communications in areas of high radio frequency (RF) congestion by civilian and military systems.

Vodafone and AST SpaceMobile sign commercial agreement

AST SpaceMobile and Vodafone have signed a commercial agreement lasting through 2034, establishing the framework for Vodafone to offer space-based cellular broadband connectivity in home and partners' markets. The deal, announced on December 9th, also includes an order by Vodafone for its first Block 1 BlueBird gateway. Vodafone has been an investor in AST SpaceMobile since 2018, and made an investment earlier this year alongside Google and AT&T.

Satellogic and Maxar partner for enhanced defence monitoring

On December 11th, satellite imagery provider Maxar Intelligence and Earth observation firm Satellogic announced a partnership to bolster geospatial intelligence capabilities for national security agencies. Under the deal, Maxar will be allowed to task, collect and distribute imagery from Satellogic's satellite constellation, allowing it to offer more comprehensive and flexible imaging solutions than traditional single-constellation products. The deal, which will see Satellogic join radar satellite imaging company Umbra in Maxar's partner portfolio, marks a growing trend of collaboration among satellite imaging companies to meet increasingly sophisticated government intelligence needs.



Esper and Loft Orbital sign contract for bus satellites

Australia-based hyperspectral imagery startup Esper Satellites and U.S. company Loft Orbital have signed a contract to provide buses for Esper's Four Leaf Clover missions. The hyperspectral imager payloads, providing data for mineral discovery and exploitation to Esper's customers, will fly on Loft's Yet Another Mission satellites from 2026 onwards. The change of provider, following the use of Space Machines' and Druva's buses, comes as Esper's payloads grew in size, technicality, and power requirements.

Starlink partners with Kyivstar and Telstra for Direct-to-Cell in Ukraine and Australia



Credit: Starlink

Starlink and Ukrainian telecommunications company Kyivstar signed an agreement opening the way for Starlink direct-to-cell connectivity in the country. While Kyivstar and its parent company VEON Group, with whom the deal was finalised, have focused on enhancing the national grid's infrastructure and coverage during the conflict, Starlink's service provides a backup option if ground-based networks become unavailable. The agreement will make Ukraine one of the first countries to benefit from the service. Text messages

functionality is expected to be available for Kyivstar customers in Q4 2025, with audio and data transfer coming later.

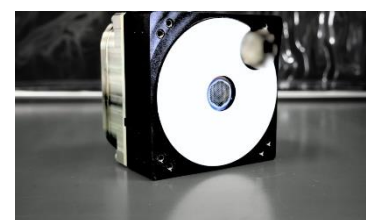
Starlink is also partnering with main Australian telecommunications company Telstra for the same purpose. Telstra's objective is to permit connectivity in Australia's remote locations, where terrestrial networks do not offer coverage. An initial phase of testing the direct-to-cell capabilities will occur before the service becomes available to customers. The agreement builds upon a 2023 contract which saw Telstra becomes Starlink's distributor in Australia.

Intuitive Machine completes integration of Nokia's cellular network system

Intuitive Machine has completed the integration of Nokia's Lunar Surface Communication System (LSCS) into its IM-2 Athena lander. The system is designed to allow connectivity between Athena and two lunar mobility vehicles, Intuitive Machine's Micro-Nova Hopper and Lunar Outpost's Mobile Autonomous Prospecting Platform rover. The transmission of command-and-control communications, telemetry data, and high-definition video streaming by the LSCS will occur through a technology similar to the one used in terrestrial 4G cellular networks. IM-2 and LSCS will be launched to the lunar south pole region no earlier than late February.

D-Orbit and Pale Blue partner for demonstration of water-based propulsion

Under this agreement, D-Orbit's orbital transfer vehicle, the ION Satellite Carrier, will conduct two validation demonstration of Pale Blue's water ion thrusters. The Japanese start-up develops propulsion systems using water as propellant, a technology which, the company says, is safer, cheaper, more sustainable, and suitable from CubeSats up to 700kgs satellites. The missions are to launch in June and October 2025.



Credit: Pale Blue



Ligado Networks sues Inmarsat and signs deal with AST SpaceMobile



Credit: Ligado Networks

The American satellite operator Ligado Networks is suing Inmarsat over unresolved terrestrial interferences. leading, Ligado claims, to a missed contract by the Federal Communications Commission.

Both companies entered in 2007 a \$1.7-billion-worth collaboration on L-band spectrum, under which Inmarsat was to provide extra bandwidth for North America's coverage, and upgrade ground terminals to avoid GPS interference. Ligado claims that Inmarsat's inaction to do so caused them to miss a Federal Communications Commission contract for installation of their systems near airports, eventually leading them to file for bankruptcy.

Within this context, Ligado and AST SpaceMobile entered into an agreement for 40 MHz of L-band Mobile Satellite Services (MSS) spectrum. AST would pay around \$550 million to close the transaction, which would also grant Ligado with \$120 million worth of convertible warrants, and \$80 million in yearly lease payments over at least eight decades. The deal, if approved by regulatory authorities, would allow AST to enhance its offer of satellite-based cellular connectivity, enabled by five in-house manufactured and currently deployed BlueBird satellites.



In other news

ArianeGroup selects Daher for €60M logistics contract: the agreement comes as ArianeGroup has scaled up production following the successes of both Ariane 6's inaugural flight and testing of French armed forces' M51.3 ballistic missile. The contract covers ArianeGroup's logistics and routing needs across its eight premises.

Planet secures \$230 million contract from unnamed customer: The U.S. company has secured a \$230 million multiyear contract with an unnamed Asia-Pacific customer. The deal includes the manufacturing, launch and operations of several Earth observation satellites and imagery supply for the customer.

LeoLabs expands radar space-monitoring network: The company, founded in 2016, has announced it is now operating its seventh radar site in Arizona. The new site has already started tracking over 9,500 objects in LEO and streaming data to clients, including military applications.

Seaspan signs with KVH for OneWeb LEO connectivity: The containership company has already equipped its fleet with Starlink connectivity, and the new deal for OneWeb will augment its existing LEO services.

Three rideshare companies to partner on GTO launch: SEOPS, Maverick Space Systems and Innovative Solutions in Space announced their collaboration in GTO launch opportunities, a market that is still underserved, according to them. A milestone of the effort will materialise through a shared dedicated Falcon 9 launch purchased by SEOPS.

Astranis launches four GEO satellites at once: SpaceX successfully placed in orbit four Astranis spacecraft at once, a first for a manufacturer, and also making it the operator having launched the most satellites in GEO over the last two years. Designed for regional coverage, one of the satellites will notably be the Philippine's first dedicated communications satellite.

Rocket Lab extends NASA's VADR contract to Neutron launches: Neutron will now be eligible to deliver science and technology payloads for NASA. The agreement follows up on an existing contract which saw Electron conduct four launches, in two back-to-back launches in a two-week turnaround for the Agency's PREFIRE and TROPICS missions.

BlackSky Technology wins Space Force contract for mission support: Space-based intelligence and analytics company BlackSky won several procurement contracts to support U.S. Space Force's Tactical Surveillance, Reconnaissance and Tracking (TacSRT) mission. The services will notably revolve around the provision of monitoring capabilities and insights on regions of interest.

Gilat secures \$18 million for IFC and \$9 million for communication satellites: Israeli satellite manufacturer Gilat has received \$18 million in orders from unnamed companies to provide in-flight connectivity and related services through its SkyEdge platforms. Likewise, the company secured an additional \$9 million for its SkyEdge IV and SkyEdge II-c satellite communication platforms. Both set of deliveries are scheduled within the year.

Infinite Orbits partners with Expleo for space inspection: The two French companies will collaborate in the Orbit Guard #3 mission, financed by French investment plan France 2030, which will inspect unused satellite METEOSAT-8 to assess its level of functioning. Expleo will provide a radio-frequency payload to this end.



In other news

Dragonfly Aerospace and LatConnect 60 collaborate for infrared sensors: South African company Dragonfly will provide three Chameleon SWIR (shortwave Infrared) imagers to Australia's LatConnect 60, which is building SWIRSAT satellites. The technology, used in Earth Observation, allows to see through atmospheric distortion like clouds or smoke.

Intelsat and OneWeb partner to strengthen connectivity in Alaska: The collaboration, also including Alaska's telecom provider GCI, will add OneWeb's LEO service to already-existing Intelsat's GEO coverage.

Raytheon, Umbra and Array Labs form partnership for 3D Earth observation: The three companies will collaborate on a new product, Site3D, combining synthetic aperture radar and modelling techniques. The technology is destined to public and private customers and will allow high-resolution 3D monitoring, the companies say.

SAS partner with Starlink for in-flight connectivity: Aviation company SAS has contracted Starlink to provide in-flight connectivity aboard its flights. The rollout is to occur at the end of 2025.



INVESTMENT & FINANCE

Loft Orbital raises \$170 million for payload integration



Credit: Loft Orbital

Loft Orbital has secured **\$170 million in a Series C round co-led by Tikehau Capital and Axial Partner**. With an office in Toulouse, the U.S.-based company also saw the participation of BPIFrance in its funding round. The start-up develops standardised and modular payload adapters, allowing customers to integrate their systems into off-the-shelf satellite buses. Loft Orbital also offers deployment and operation services, and seeks to expand towards virtual missions, developing AI-ready platforms for customers looking to run software in space, and overall deployment of intelligence for in-space operations automation. The investment will go to that end as well as enable the expansion of manufacturing facilities.

ICEYE closes a \$65 million funding round extension

The Finnish company has secured **\$65 million in an extension of its Series E funding round** raised in April. ICEYE manufactures and operates the largest constellation of synthetic aperture radar (SAR) satellites used for Earth observation and monitoring. ICEYE currently has 40 satellites in orbit, nine of which were launched in 2024. The funds will be used to accelerate the deployment of its satellites with ten to fifteen annual launches from 2025 onwards. Moreover, ICEYE will further iterate its Intelligence, Surveillance, and Reconnaissance (ISR) platform for the Finnish Ministry of Defence.

Space Sector sees key IPO developments across U.S., Japan and China

United States: Karman Space & Defence and Voyager Technologies prepare for IPO

The defence and space operations company **Karman has filed for an IPO**, seeking to raise up to \$100 million. Karman notably manufactures propulsion, payload and interstage systems. **Voyager Technologies, formerly Voyager Space, has also filed for an IPO**, aiming for a \$2 to \$3 billion valuation. The number of shares and expected pricing has not been disclosed in both cases. If the IPOs come to fruition, they would be the first time a space company goes public in the U.S. since the SPAC wave in 2021.

Japan: Synspecive completes IPO

The Japanese company **has gone public on the Tokyo Stock Exchange**, closing more than \$60 million from the offering. Synspecive manufactures and operates SAR satellites named StriX. The technology allows monitoring and detection of changes to the Earth's surface, proving useful for military applications, with the Japanese Ministry of Defence being the company's main client. Synspecive currently operates four StriX and plans for 11 by 2026, with a final objective of a 28-satellite constellation in 2030.



Credit: Synspecive

China: Chang Guang Satellite Technology cancels its IPO

The Chinese satellite manufacturing and remote sensing company **has cancelled its IPO** at the Shanghai Stock Exchange. While official reasons have not been provided, the company was notably under sanctions following its sale of data to the Wagner Group.



Stoke Space secures \$260 million for reusable rockets



Credit: Stoke Space

The U.S.-based company has raised **\$260 million in a Series C round**. Stoke Space builds Nova, a fully reusable medium-heavy rocket able to launch three tons to LEO, or seven tons in its disposable version. While Nova has not flown yet nor has an estimate of its maiden flight, the first static fire of its Zenith engine was demonstrated in December 2024. Stoke also claims the possibility of returning payloads from orbit. The funding will allow further development of the rocket and refurbishment of its launch pad at Cape Canaveral Space Force Station.

Genesat secures CN¥1 billion for megaconstellation manufacturing

Shanghai Gesi Aerospace Technology (Genesat) has raised more than **CN¥1 billion (approx. €133 million) in a Series A+ round** with the participation of, among others, state-backed investment vehicles National Manufacturing Transformation and Upgrading Fund and Guokai Science and Technology Innovation Investment. Genesat, set up in 2022 as a product of the Chinese Academy of Sciences and Shanghai Spacecom Satellite Technology (Spacesail), is one of the main manufacturers of China's LEO communications and connectivity constellation, Qianfan, or "Thousand Sails". 56 satellites are currently in orbit, with 600 planned for the end of the year out of a total of 14,000.

Landscape raises CN¥900 million for reusable rockets

Chinese company Landscape has secured **CN¥900 million (approx. €119 million) in funding** from state-backed investment vehicle National Manufacturing Transformation and Upgrading Fund. Landscape develops the Zhuque launcher, with a second iteration successfully reaching orbit and delivering payloads last November, and a third having demonstrated liftoff and landing capabilities, as well as engine restart, in a 10-kilometer-high trial two months before that. Landscape also plans to conduct cargo missions to China's Tiangong space station from 2026 onwards. The investment will go towards further R&D and production scaling of the Zhuque vehicle.

Fleet Space secures \$100 million for space mineral exploration

The Australian company has raised **\$100 million in a Series D round** led by Teachers' Venture Growth, the venture fund of the Ontario Teachers' Pension Plan. Fleet Space develops satellite-enabled systems and seismic array technology to improve mineral discovery. A lighter version of the system its ExoSphere system is currently in development to be launched aboard Firefly's Blue Ghost in 2026 and analyse the far side of the Moon. The funding will assist the lunar efforts, with Fleet notably launching three additional satellites next year, over the two currently operated.



Credit: Fleet Space



Neo Space Group to acquire Airbus' UP42

Space services company **Neo Space Group (NSG)**, owned by **Saudi Arabia's Public Investment Fund**, is set to acquire **Airbus Defence and Space's UP42**, an Earth observation (EO) digital platform, for an undisclosed amount and pending regulatory approval. UP42 was launched by Airbus in 2019 and provides a cloud-based system for geospatial data analysis and embedding. The acquisition will strengthen NSG's capability to answer growing demands, namely with the selection by the Saudi authorities to establish the Kingdom's EO architecture.

ICEYE and Space42 create joint venture for UAE-based satellite manufacturing



Credit: ICEYE

Finnish SAR start-up **ICEYE** and UAE-based company **Space42** have announced the creation of a joint venture to manufacture satellites in the UAE. Both companies started cooperation earlier this year with Space42, operator of the national Earth Observation Program, launching ICEYE-manufactured and UAE's first SAR satellite Foresight-1. The initiative comes as the UAE seeks to answer the region's growing needs by building an independent industry and local supply chains. The JV facilities will host manufacturing and operation services and enable technology transfer.

Sateliot secures €30 million loan from the EIB

The Spanish start-up has obtained a **€30 million loan from the European Investment Bank**. Sateliot develops a LEO constellation of nanosatellites to provide IoT remote connectivity, targeting markets like agriculture and mining. The company also has plans to enable cellular off-the-grid coverage, having signed agreements with more than 50 countries. The first four satellites, from a planned total of 250, were put into orbit last August. The investment will go towards launching 16 more before the end of 2025.

Gilat acquires Stellar Blu Solutions for in-flight connectivity

Israel-based SATCOM company **Gilat Satellite Networks** has acquired **U.S. communications terminals manufacturer Stellar Blu Solutions for \$98 million** with a contingent payout of \$147 million upon the completion of future performance terms. Stellar Blu Solutions develops electronically steered array antenna and has experience in multi-orbit solutions which, according to Gilat, could grant them competitiveness in an in-flight connectivity market characterised by growing demand. Gilat financed the acquisition through a combination of their own resources and a credit line.



Firehawk Aerospace raises \$60 million for 3D-printed propellant

The U.S. start-up has secured **\$60 million in a Series C round** led by 1789 Capital. Firehawk Aerospace manufactures 3D-printed solid rocket fuel and hybrid engines, which, the company states, is cheaper and quicker to make than traditional methods. The company partners with different branches of the U.S. military for missile production, and with NASA in a “service-based” partnership scheme which saw Firehawk benefit from the facilities of the Stennis Space Center to test its Armstrong 1K rocket engine. Firehawk has not specified how it planned on using the investment.



Credit: Firehawk Aerospace

Interstellar Technologies secures \$44 million from Toyota



Credit: Interstellar Technologies

Interstellar Technologies has received a **\$44 million investment from Woven by Toyota**, the carmaker’s mobility technology subsidiary. The investment establishes a strategic partnership that will see Interstellar, a launch and satellite manufacturing company, benefit from Toyota’s manufacturing know-how and capabilities to answer rising demand and attempt vertical integration. The move will also allow the automobile company to explore non-traditional alternatives to mobility challenges.

Hexagon to acquire Septentrio for autonomy-enabling GNSS

Sweden-based and spatial data company Hexagon is to acquire Belgian GNSS receivers manufacturer Septentrio, pending regulatory approval. The acquisition will broaden market opportunities and allow Hexagon’s positioning products to benefit from Septentrio’s GNSS technology, notably in accuracy performance and lower size, weight, and power consumption requirements. Such improvements, the companies say, will allow the emergence of autonomous systems in markets like robotics or UAVs. Septentrio will be hosted within Hexagon’s Autonomous Solutions division.

Pixxel raises \$24 million for hyperspectral constellation

The India-based start-up has secured **\$24 million in a Series B extension**. Pixxel builds a constellation of hyperspectral satellites, dubbed Fireflies, to provide imagery to sectors like agriculture, mining, or the environment. Three demonstration satellites have been launched in 2022 and six more are planned on a rideshare mission in early 2025. The company also develops Aurora, its platform for data visualisation. The funding will be directed towards manufacturing the constellation’s first 18 satellites, delivering on contracts for outside customers and iterating on data algorithms for Aurora.

FibreCoat secures €20 million for expanding into space

The German company has raised close to **€20 million in a Series B round** co-led by NewSpace Capital and Goose Capital. FibreCoat fabricates reinforced, aluminium-coated fibres used in the automotive, construction, and defence industries. The company will use the funds to expand into



the space market, where its product would permit to shield spacecraft from heat, radiation, and electromagnetic interference.

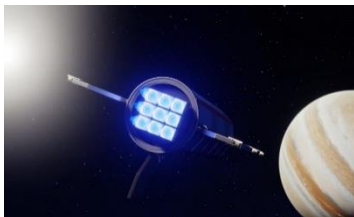
Turion Space raises \$20 million for micro-satellites

The U.S.-based start-up has secured **\$20 million in a Series A round** led by Veteran Ventures Capital. Turion Space develops the Droid family of micro-satellites as well as the Starfire software, as platforms to perform space domain awareness and non-Earth imaging. Through earlier funding obtained from SpaceWERX, US Space Force's innovation arm, the company is also expanding towards active debris removal, with a first grappling demonstration expected in 2026. Turion will allocate the money to expand the fleet with the second version of their satellite, Droid.002, and to further iterate on autonomous docking and manoeuvring systems for deorbiting and removal.



Credit: Turion Space

ION-X raises €13 million for ion thrusters



Credit: Ion X

The French start-up has secured **€13 million in a Series A round**, with leading investors not disclosed. ION-X designs and manufactures ionic liquid electro-spray thrusters to power small satellites. The company is to conduct a first orbital demonstration of its system's capabilities at the beginning of next year, and will then deliver three prototypes to its first customer, the French aerospace agency CNES, for further testing. The investment will allow to scale production to target a manufacturing output of 10 units per month by 2026.

PLD Space borrows €11 million loan for launch facilities

The Spanish start-up has secured an **€11 million loan from the Spanish state-owned financing enterprise COFIDES**. PLD is building the suborbital Miura 1 rocket, a technological demonstrator for Miura 5, a partially reusable launcher designed to carry one ton to LEO. PLD also unveiled its ambition last October to develop Miura Next, a family of medium-heavy launchers, and Lince, a spacecraft for cargo and crew. The lending will be used to refurbish a in French Guiana, owned and shared by the CNES, for Miura 5's debut expected in late 2025.

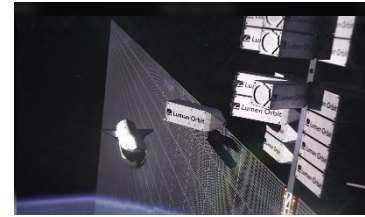
SpinLaunch secures \$11.5 million for centrifugal launch

The start-up raised **\$11.5 million**, according to an SEC filing. SpinLaunch seeks to launch satellites through a kinetic system accelerating payloads by spinning them in a vacuum chamber. The first centrifuge was built in 2021 and conducted ten suborbital tests. The company eventually aims to launch and operate a 1,190-satellite Internet constellation. SpinLaunch will use the investment to pursue the design of a more powerful accelerator and develop ruggedised satellites able to handle the thousands of Gs occurring during the launch process.



Lumen Orbit raises \$11 million for orbital data centres

The U.S. start-up has secured **\$11 million in a seed round** led by NFX. Lumen Orbit seeks to construct data clusters in space powered by solar panels, and which would beam the information back to Earth through laser transmission. A first demonstrator carrying Nvidia GPUs is planned for next May. Lumen targets AI companies which could effectuate compute-heavy training operations without the high electricity costs. The start-up has not specified how it intended to use the funds.



Credit: Lumen Orbit

Moody's to acquire CAPE Analytics for enhanced risk model



Credit: CAPE Analytics

Financial company **Moody's is to acquire geospatial intelligence start-up CAPE Analytics for an undisclosed amount**, pending regulatory approval. CAPE Analytics leverages geospatial data and AI to develop property intelligence, providing insight for underwriting strategies. The acquisition will allow Moody's to enhance their insurance offer, with the possibility of acquiring "address-specific" insights. CAPE also sees the opportunity to expand through Moody's global reach and target other financial

industries.

Attentive.ai raises \$12 million for geospatial landscaping

Indian start-up Attentive.ai has secured **\$12 million in a two-tranches Series A round led by Tenacity Ventures**. Attentive leverages AI to analyse satellite and aerial imagery and provide insights into the quantity of materials needed for outdoor operations. The company's Beam AI software is used in sectors like landscaping, roofing, and paving. The investment will allow to expand the range of products offered and cover additional trades.

Astrome secures \$10 million for wireless broadband

Indian company **Astrome has raised \$10 million in a funding round led by Apollo fund**. Astrome develops wireless terrestrial and satellite communication solutions, supporting 5G and working towards future 6G networks. The start-up's satellite connectivity offering also comprises millimeter-wave E-band technology permitting coverage in remote areas. Astrome will use the investment in R&D, scaling up production, and considers expanding to international markets.



Spaceium and OrbitAID raise millions for orbital refuelling

Canadian-American start-up Spaceium has secured **\$6.3 million in a seed round**. Spaceium seeks to offer in-orbit refuelling stations to enable deep space missions. The technology revolves around space tanks able to store fuel for years and equipped with robotic arms for operations processing. Spaceium plans to allocate the new capital towards expanding its team and in-orbit technology testing. The funding round was led by Initialized Capital.



Credit: Spaceium

Indian start-up OrbitAID has raised \$1.5 million in a pre-seed round

OrbitAID also develops a refuelling system called the Standard Interface Docking and Refuelling Port (SIDRP). The company's objective is to lengthen the lifespan of satellites and prevent orbital debris. The round was led by Unicorn India Ventures and complemented by Tamil Nadu regional fund TANSIM and the capital will go towards orbital capacity demonstration, scaling up of operations, hires, and accelerated market viability.

Orbital Lasers secures ¥900 million for LiDAR constellation

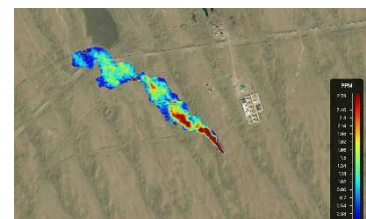


Credit: Orbital Lasers

The Japanese start-up has raised **¥900 million (approx. €5.5 million) in a seed round**. Orbital Lasers builds pulsed-laser devices that can be used to precisely measure altitude, an objective that the company seeks to attain by deploying a Light Detection and Ranging (LiDAR) constellation. Another considered utilisation of the technology is debris removal through the detumbling of spacecrafts. The investment will be used to continue R&D, grow the engineering team, and advance Orbital Lasers' market entry.

Momentick secures \$5 million for methane emissions detection

The Israeli start-up has raised **\$5 million in a funding round led by FinTLV Ventures**. Momentick leverages satellite imagery in its proprietary platform to track methane emissions. The technology allows real-time monitoring and provides insights that can be used for risk analysis and management. To this end, the company has partnered with an unnamed insurance company to release its Emissions Risk Management service. The funding will be used to further develop the product and penetrate the insurance market.



Credit: Momentick



In other news

Phase Four secures undisclosed amount for in-space electric propulsion: the Series C round was led by Artemis Group Capital. Phase Four develops electric propulsion solutions, notably partnering with prime contractor Redwire for a Hall Effect Thruster named Valkyrie.

Chinese start-up Nayuta Space has raises “tens of millions of yuan” in a pre-Series A round: The round was funded by Quanxin Investment. Nayuta Space is developing Xuanniao-1 (Black Bird-1), a stainless-steel rocket designed for full reusability and will allocate the funding to expand the team, to try to meet their target of a first orbital flight in 2026.

AscendArc has secures a total of \$4 million in funding: The U.S.-based company secured the funding in a combination of a pre-seed and a seed round. The start-up targets the small GEO satellites segment, manufacturing low-tonnage GEO spacecraft.

Interstellar raises CN¥30 million in an angel round, with Qifu Capital as lead and sole investor: The Chinese start-up is manufacturing a crewed spacecraft, CYZ1, anticipating commercial flights by 2028 and aligning with China's timelines for its manned lunar mission. The funding will assist in further designing the safety and escape architecture of the craft.

The Japanese start-up Letara raises ¥480 million in a seed round: Letara is a spin-off of Hokkaido University's Laboratory of Space Systems and develops plastic-based hybrid propulsion systems for spacecraft. The funding will go towards hires, R&D, and preparations for a first in-space demonstration.

Raven Space Systems secures \$2 million in a pre-seed round: The round was led by Backswing Ventures. Raven manufactures thermoset composites used in the aerospace industry through scaled 3D printing. The investment will go towards the expansion of manufacturing facilities.

Kurs Orbital secures €1.1 million in soft loan from Invitalia: The former Ukrainian company, today based in Turin, is working on its rendezvous and proximity operations ARCap module, which provides options for mission extension, debris removal, or servicing. The start-up will invest in hires and equipment as it seeks to finalise its first module by late 2025.

ExoAnalytic Solutions has acquired 3S Northumbria: U.S.-based ExoAnalytic Solutions operates a telescope network and a proprietary software to monitor and analyse orbital objects. The acquisition of British space data integration start-up 3S Northumbria will bring expertise in space sustainability and circular management.

Saudi and Yemeni companies to collaborate on satellite operations: following a Saudi-Yemeni Business Council meant to deepen economic opportunities between both countries, a communications company was launched to develop satellite-based operations. With a budget of SAR10 million (approx. €2.5 million), the venture will work to improve regional connectivity.

Huanxin Yilian closes Pre-A+ round of funding: the round, of unspecified amount, was co-led by Gimpo Intelligence and Yida Capital. Huanxin Yilian develops laser communication products and test systems for aerospace applications.

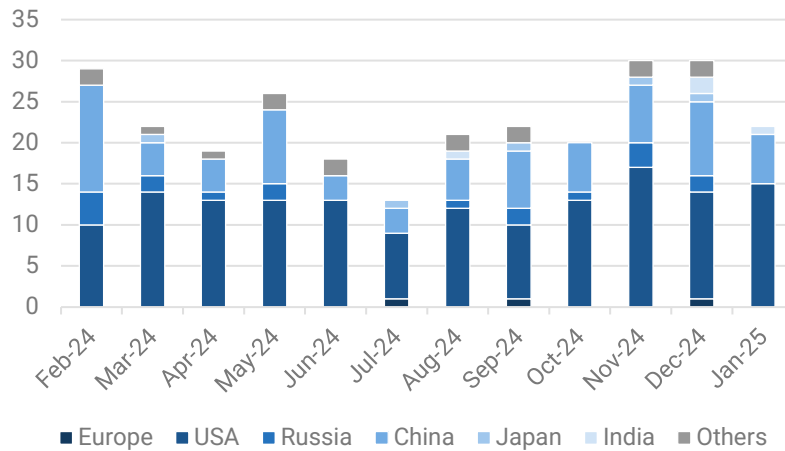


LAUNCHES & SATELLITES

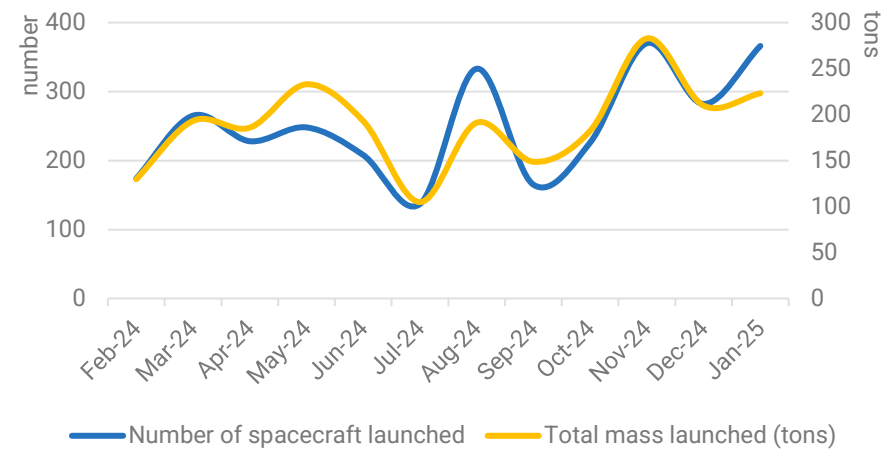
Global space activity statistics

December 2024 – January 2025	Europe	USA	China	Russia	Japan	India	Other	Total
Number of launches	1	28	15	2	1	3	2	51
Number of spacecraft launched	1	537	94	2	5	6	4	648
Mass launched (in kg)	2200	372 647	45 374	11 730	65	3630	400	433 046

Launch activity over the year



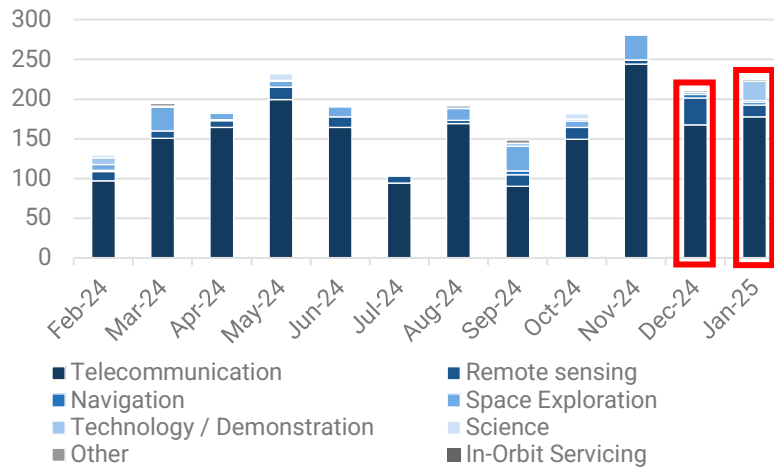
Evolution of the number of launches per launch country



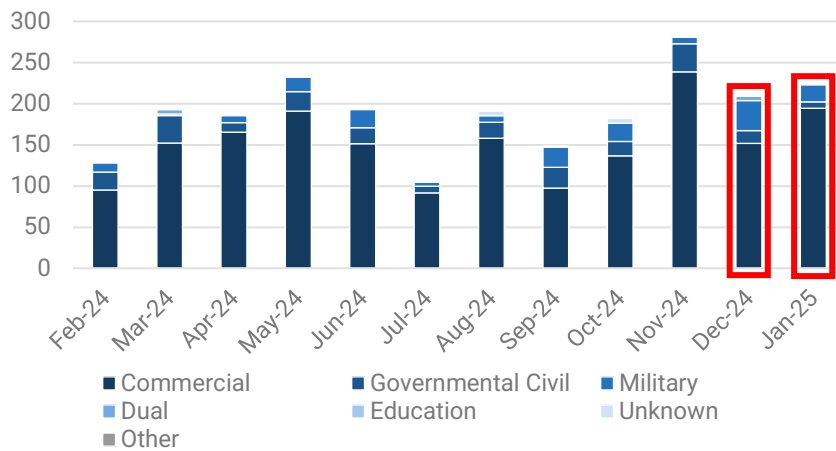
Evolution of launch activity over the year 2024-2025



Satellite missions and markets



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



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

Dec 24 / Jan 25	Tele	EO	Nav	IOS	Explo	Sci	Tech/ Dem	Other
Europe	9504	2971		200		2	737	1
USA	308985	18249	4352	550	1517		19937	21
China	21000	13300	970		1000	442	5980	
Russia	11730							
Japan		100					73	10
India	7	180	2250				840	
Others	5559	2239		240			101	40

Total mass (kg) launched by mission and customer country

Dec 24 / Jan 25	Commercial	Gov. Civil	Military	Dual	Edu	Other	Unk.
Europe	10526	2893			1	1	
USA	313959		39557		17		
China	16192	15530	11000				
Russia			6000	5730			
Japan	179				4		
India	187	3090					
Others	5573	1633	920		4	19	30

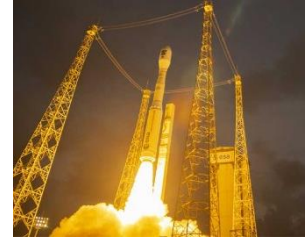
Total mass (kg) launched by market and customer country



LAUNCH HIGHLIGHTS

Vega C returns after two years

Almost 2 years after a failure in December 2022, **Europe's Vega C small-lift rocket has successfully returned to operational service on December 5th, 2024**. The rocket's latest mission involved deploying the Sentinel-1C Earth observation satellite into orbit on behalf of ESA. The Sentinel-1 constellation is part of the European Union's Earth Observation program Copernicus. Designed for all-weather, day-and-night monitoring, these satellites provide crucial data for environmental monitoring, disaster response, and maritime surveillance. The Vega C rocket first launched on 13 July 2022, marking what was expected to be its full transition into regular operational use. However, on 21 December 2022, its first official commercial mission for Airbus Defence and Space ended in failure. The next Vega C mission is scheduled for Q1 2025, when it will carry ESA's Biomass Earth observation satellite into orbit.



Credit: ESA

First launch of second Chinese megaconstellation

On December 16th, 2024, China has officially begun deploying its Guowang satellite communications megaconstellation. A Long March 5B rocket, equipped with a Yuanzheng-2 upper



Credit: Ourspace

stage, lifted off from the Wenchang Satellite Launch Center carried the initial batch of satellites for the planned 13,000 sat megaconstellation. Publicly available information on the program remains scarce. The constellation is under the management of China Satellite Network Group Co., Ltd. (China Satnet), overseeing the design, deployment, and operation of the satellite network. Guowang is not the only large-scale satellite constellation China has initiated last year. The commercial Qianfan (Thousand Sails) constellation, a Shanghai-based initiative, also

began deployment in 2024.

Commercial solid rocket failures in China and Japan

In December two commercial solid fuelled rockets in China and Japan suffered failures.

The second test flight of a Japanese small launch vehicle ended in failure after the rocket lost control just minutes following liftoff on December 17th. This marks the second consecutive failure for the Kairos rocket, with its first launch attempt nine months earlier also unsuccessful. Space One, the company behind Kairos, aims to establish itself in the small satellite launch market. The firm counts Canon and IHI Aerospace among its investors.

Later that month, Chinese commercial Kinetica-1 solid rocket encountered a failure on December 27th, 2024. Commercial launch service provider CAS Space, a spun off from the Chinese Academy of Sciences, focuses on securing launch contracts for both domestic and international payloads. This marks the first recorded failure of the Kinetica-1 rocket, which had successfully completed five previous launches.



Inaugural launch of Blue Origin's New Glenn

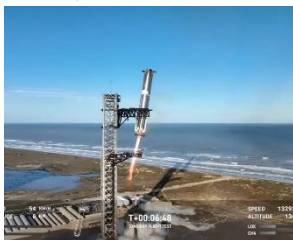
Blue Origin's New Glenn rocket successfully reached orbit on its much-anticipated first launch on January 16th, though the company was unable to recover the first stage booster. During descent, the first stage attempted a re-entry burn but was ultimately lost. Despite this setback, Blue Origin emphasised that achieving orbit was the primary objective of the mission, designated NG-1. New Glenn has been in development for over a decade as Blue Origin's heavy-lift orbital rocket. The company originally aimed for a first launch in 2020, but the schedule experienced multiple delays. The payload for NG-1 is the Blue Ring Pathfinder, which will remain attached to the upper stage following launch. The successful launch of New Glenn marks a significant milestone as the second, potentially reusable, active heavy-lift rocket in the U.S., paving the way for future missions such as NASA's ESCAPEDE Mars probes, Project Kuiper satellites, and national security payloads, strengthening competition in the commercial launch sector.



Credit: Blue Origin

Seventh Starship test flight saw second tower catch, but booster was lost

For the seventh time, SpaceX launched its Starship super-heavy launch vehicle on January 16th, aiming to push the vehicle's capabilities further. One of the major objectives was to catch the Super



Credit: SpaceX

Heavy booster using the "chopstick" arms of the launch tower at Starbase. This manoeuvre, first accomplished during Starship Flight 5 in October, was successfully repeated in this test. The upper stage was intended to complete a partial orbital trajectory before executing a controlled splashdown in the Indian Ocean, similar to the previous three Starship flights. However, SpaceX lost contact with Ship around 8.5 minutes into flight, apparently after the vehicle suffered some kind of anomaly. A key new objective for Flight 7 was to test satellite deployment. The upper

stage was set to release 10 mock satellites, designed to simulate the next-generation Starlink (V3) broadband spacecraft in terms of size and mass. SpaceX sees Starship as critical to expanding its Starlink broadband megaconstellation. Additionally, the system is central to NASA's Artemis programme and future Mars missions, making each test flight a crucial step toward full operational capability.

Falcon 9 launches lunar rideshare mission

A Falcon 9 rocket successfully launched on January 15, carrying two lunar landers: Blue Ghost 1 developed by American company Firefly Aerospace, and Resilience by ispace from Japan. By launching together, both companies were able to reduce mission costs, making lunar exploration more affordable for each of them. NASA is the primary customer for Blue Ghost 1, utilising the Commercial Lunar Payload Services (CLPS) programme to deliver 10 science and technology demonstration payloads. Resilience carries science and technology payloads from various Japanese companies, a Taiwanese university, and a tiny artistic installation called Moonhouse, created by a Swedish artist. This is ispace's second lunar landing attempt after a previous failure in April 2023.



Credit: Firefly Aerospace

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