FOR IMMEDIATE RELEASE

Astroscale's ELSA-M spacecraft completes Critical Design Review

Harwell, Oxford, UK, June 4th, 2025 – Astroscale Ltd. ("Astroscale UK"), the UK subsidiary of Astroscale Holdings Inc. ("Astroscale"), the market leader in satellite servicing and long-term orbital sustainability across all orbits, has successfully completed the Critical Design Review (CDR) for the ELSA-M (End-of-Life by Astroscale-Multiple) In-Orbit Demonstration (IOD) spacecraft.

Set to launch in 2026, ELSA-M will be the world's first commercial end-of-life service for prepared satellites, meaning satellites designed with technologies such as an interface that will enable docking and removal. The ELSA-M IOD mission is supported by the UK Space Agency through the European Space Agency's (ESA) Connectivity and Secure Communications Directorate. The mission is majority funded by Astroscale private funding and the remainder via co-funding from the UK Space Agency (via ESA and Eutelsat).

This world-first Rendezvous Proximity Operations (RPO) mission is being designed, manufactured and operated by Astroscale UK at the Harwell Campus in Oxfordshire, where we support a workforce of over 220 high-skilled people. This CDR milestone has been validated via detailed review by a customer team of both ESA and Eutelsat representatives across all engineering programme management and product assurance disciplines. The milestone also confirms the UK's leadership in providing Active Debris Removal (ADR) services globally, a vital step towards In-Orbit Servicing, Assembly & Manufacturing (ISAM) – the fastest growing segment of the space industry.

"Completing the Critical Design Review for ELSA-M is both a major step for the mission itself and also a major achievement for the UK ISAM industry. The mission is a true partnership between Astroscale UK, the UK Space Agency, ESA and Eutelsat with many industrial partners in the Astroscale ISAM supply chain across all regions of the UK. With the ever-growing number of satellites in Earth's orbit, the robust RPO and spacecraft capture capability provided by ELSA-M will revolutionise the delivery of repeatable ADR and other ISAM services as part of a future circular space economy." said Nick Shave, Managing Director, Astroscale UK.

Joshua King, Telecommunications Investment Lead at the UK Space Agency, said: "We are excited to support Astroscale UK's pioneering ELSA-M mission, which represents a significant leap forward in satellite servicing and orbital sustainability. This milestone not only underscores the UK's leadership in ADR but also highlights our commitment to providing new technologies and capabilities to support satellite communications. The successful completion of the Critical Design Review is a testament to the exceptional collaboration between Astroscale, ESA, and Eutelsat within the Sunrise Partnership, and we look forward to the successful launch next year."

The IOD mission is supported by the UK Space Agency through the Sunrise Partnership Project which is a Public-Private Partnership between ESA and Eutelsat. The Sunrise Partnership Project is part of ESA's Advanced Research in Telecommunications Systems (ARTES)

programme, within ESA's Connectivity and Secure Communications Directorate, which aims to develop solutions for future generation telecommunication satellite missions.

"Space is a common good, like the oceans, and we need to treat it responsibly. ESA welcomed Astroscale's active engagement and signature of ESA's Zero Debris Charter in June 2024, which contains high-level guiding principles and specific jointly defined targets to achieve zero debris by 2030. We are pleased to be supporting Astroscale to demonstrate the commercial viability of space debris removal, building on state-of-the-art technologies to create new missions that attract talent and investment. ESA fosters European and Canadian innovation in the highly competitive global satellite market," said Laurent Jaffart, Director of Connectivity and Secure Communications at ESA.

Guillaume Scottez, Senior Director for Innovation at Eutelsat Group said, "Astroscale's successful CDR marks a positive progression for our joint efforts to support, test, and validate innovative in-orbit servicing technologies, crucial for the long-term preservation of space as a valuable natural resource. With this milestone, we look forward to our continued collaboration with ESA, the UK Space Agency, and Astroscale to advance our mission."

ELSA-M improves upon the capabilities developed and successfully demonstrated by Astroscale's ELSA-d mission. Launched in 2021, ELSA-d validated Astroscale's end-of-life technologies by completing unprecedented in-orbit demonstrations, including repeated magnetic captures and controlled close-approach rendezvous operations between the two spacecraft.

ELSA-M is already progressing at full speed for the next phase, which includes the assembly, integration, and testing of the spacecraft flight model at Astroscale's facility in Harwell, launch and commissioning, and in-orbit demonstration activities. This demonstration includes successfully docking, de-orbiting, and releasing a Eutelsat OneWeb client spacecraft managed through Astroscale's in-house satellite operations facility.

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About Astroscale

Founded in 2013, Astroscale is the global leader in on-orbit servicing, dedicated to the safe and sustainable development of space. The company delivers a variety of innovative and scalable on-orbit servicing solutions, including life extension, in-situ space situational awareness, end-of-life, and active debris removal. These solutions empower satellite operators to reduce risks, increase returns, and achieve mission success while fostering a sustainable space environment. Astroscale is also defining the economics of on-orbit servicing and collaborating with government and commercial stakeholders to develop norms, regulations, and incentives that promote the sustainable growth of space.

Since its first successful launch in March 2021, Astroscale has proven rendezvous and proximity operations technologies in orbit during the ELSA-d and ADRAS-J missions, establishing the company as a leader in on-orbit servicing.

Astroscale spacecraft have been selected for pioneering missions with JAXA, the U.S. Space Force, the European Space Agency, the UK Space Agency, and Eutelsat OneWeb. As more satellite operators adopt on-orbit servicing to routinely inspect, relocate, remove, and extend the life of spacecraft, the potential of a circular space economy — and a future of no waste in space — is being unlocked.

Headquartered in Japan, Astroscale has a global presence with subsidiaries in the United Kingdom, the United States, France, and Israel.

Discover more about Astroscale at https://astroscale.com/

About ESA's ARTES Partnership Projects programme
The European Space Agency (ESA) is Europe's gateway to space, coordinating the financial and intellectual resources of its Member States to conduct space programmes and activities. The Partnership Projects programme line of ESA's Advanced Research in Telecommunications Systems (ARTES) drives innovation by federating ambitious large-scale, long-term collaborations between ESA, private companies, and satellite operators. The programme establishes ESA as a key partner in developing major satellite communication systems, new value-adding solutions and services, and providing in-orbit validation. It focuses on substantial, industry-shaping initiatives that require significant investment spanning over several years.

By closely aligning technological ambition with commercial strategy, ARTES Partnership Projects enable European and Canadian organisations to push the boundaries of satellite communications and strengthen their competitiveness on the global market.

Learn more at https://connectivity.esa.int/partnership-projects