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Ecosmic Partners with ESA to Validate SAFE on Agency Satellites

Turin, Italy, and Darmstadt, Germany – [04/11/2025] – Ecosmic, a European startup operating at the intersection of space and security, is having its flagship Space Domain Awareness (SDA) solution, SAFE, tested by the European Space Agency (ESA) on a selection of ESA-operated satellites. The 12-month collaboration began earlier this year and sees ESA's Space Debris Office at the European Space Operations Centre (ESOC) evaluating how SAFE integrates into live operational scenarios, and the related daily workflows to assess collision risks and support secure satellite operations.

Through this collaboration, ESA is partnering with Ecosmic to further validate SAFE's performance in a variety of operational contexts and mission scenarios. The joint work involves sharing expertise, analysing live data, and gathering feedback to enhance SAFE's capabilities and ensure it meets the evolving needs of both institutional and commercial operators. The activity is part of ESA's Space Safety Programme (S2P) "Competitiveness Segment" under the COSMIC initiative, which aims to strengthen Europe's position in the global space safety market by working with innovative companies such as Ecosmic to bring advanced capabilities into operational use. The collaboration has also been made possible thanks to the support of the Italian Space Agency (ASI), which plays a key role in strengthening the national value chain of Space Domain Awareness technologies.

SAFE is an end-to-end solution for Space Domain Awareness, designed to tackle every aspect of collision risk management. Its unmatched performance reduces both false positives and false negatives in collision alerts, enabling satellite operators to make faster, more reliable decisions and safeguard their assets in orbit. SAFE combines collision risk estimation with complementary capabilities, including orbit determination, anomaly detection, collision avoidance manoeuvre optimisation for electric, chemical propulsion and differential drag, and enhanced satellite shape modelling.

SAFE is already used by operators managing more than 60 satellites across Europe, the United States and the Middle East, and is undergoing an extended beta testing campaign with additional satellite operators to further refine its features and user experience. This operational feedback loop ensures SAFE continues to evolve as the trusted solution for collision risk management in congested orbits.

Benedetta Margrethe Cattani, CEO of Ecosmic, said: "Working with ESA in such a critical operational context is a milestone for Ecosmic. SAFE was designed to empower operators with more reliable, actionable data. ESA's use of SAFE marks an important institutional validation of our technology and will fuel the expansion of our capabilities for both institutional and commercial customers."

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Tim Flohrer, Head of ESA's Space Debris Office, said: "ESA supports the advancement of commercial services in space traffic coordination through its Competitiveness Segment in the Space Safety Programme, recognizing their vital role in achieving the Zero Debris objectives and ensuring safe, sustainable operations in orbit."

Marco Castronuovo, Head of ASI's Observation and Surveillance Office, said: "The collaboration between ESA and Ecosmic demonstrates the value of Italy's growing space ecosystem. By enabling SAFE's validation within ESA operations, ASI supports both national industry and Europe's strategic autonomy in Space Domain Awareness. Strengthening the Italian value chain in this domain is a priority, and collaborations like this ensure our country remains at the forefront of space safety technologies."

This partnership reflects both organisations' shared commitment to secure space operations and to developing cutting-edge European solutions that can meet the growing demands of a congested orbital environment.

About Ecosmic

Ecosmic is a space technology company developing the operating system for space security, a software suite that enables safe and scalable satellite operations in increasingly congested and contested orbits.

Founded in 2024 and headquartered in Turin, Ecosmic raised a €1.1 million pre-seed round from Primo Capital, through Primo Space Fund, in April 2024. Ecosmic was rapidly recognised among Europe's most promising space startups, first joining the CAS-SINI Business Accelerator, the flagship space entrepreneurship programme of the European Commission, and this year being selected for the Seraphim Space Accelerator, run by Seraphim, the London-based global leader in SpaceTech investments.

In early 2025, the company deployed its first product, SAFE, a suite for collision avoidance. Six months after launch, SAFE is already used by more than 60 satellites worldwide.

Ecosmic is built on a clear belief: in the new space economy data alone is not enough, it is quickly becoming a commodity. Intelligence is what creates value. That is why the company focuses on protecting satellites through advanced algorithms that convert raw orbital data into real-time, actionable intelligence.

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