



03 September 2020

# PRESS RELEASE

## Launch of the first high-performance microsatellite of its kind produced and assembled in Luxembourg

***The ESAIL microsatellite for tracking ships worldwide – developed under ESA's Partnership Projects programme – has been launched last night aboard an Arianespace Vega from Europe's Spaceport in Kourou, French Guiana. ESAIL is the first satellite of its kind produced and assembled in Luxembourg by the company LuxSpace, involving a large number of European small and medium-sized enterprises, with the support of the Luxembourg Space Agency and other ESA member states.***

ESAIL was one of 53 satellites on Arianespace's rideshare adapter for Small Satellite Mission Service and was deployed into a Sun-synchronous orbit at an altitude of more than 500 km.

ESAIL will track ships worldwide by detecting messages that ships radio-broadcast with their automatic identification systems (AIS).

As part of Canadian operator exactEarth's satellite-based automatic identification systems (SAT-AIS) constellation, ESAIL will provide ship data to the European Maritime Safety Agency for the next generation of global maritime traffic services. This enables fisheries monitoring, fleet management, environmental protection and security monitoring for maritime and government authorities and industry – making the seas safer.

ESAIL was developed in an ESA Partnership Project with LuxSpace and ExactEarth as part of ESA's SAT-AIS programme.

ESAIL is the third AIS satellite for LuxSpace – but also the largest so far. The company is currently developing a multi-purpose, modular platform called Triton-X. This platform will build on the manufacturing and testing heritage gained by LuxSpace through ESAIL, using off-the-shelf components to deliver a fully-fledged satellite within months.

Jochen Harms, Managing Director at LuxSpace, said: "ESAIL is a major milestone for us. It enabled us to build and integrate a sophisticated microsatellite using commercial off-the-shelf components, which reduced the time for testing and launch qualification. The emerged synergies paved our way towards commercial space. We have gained valuable experience and knowledge through ESAIL, which serve as inputs for the Triton-X platform."

Marc Serres, chief executive of the Luxembourg Space Agency, said: "As a European leader in commercial space, Luxembourg is following a unique space strategy focused on creating an attractive ecosystem for NewSpace companies and innovative space entrepreneurs. This maritime microsatellite built in Luxembourg by our major system integrator LuxSpace, in partnership with ESA, demonstrates how a private company and ESA can work closely together to develop a new commercial product."

Magali Vaissiere, Director of Telecommunications and Integrated Applications at ESA, said: "The successful launch of ESAIL illustrates ESA's capacity to manage microsatellites, adapting some innovative approaches of NewSpace. ESA's Partnership Projects federate industry around sustainable end-to-end systems up to in-orbit validation, achieving competitive leaps forward and economic impacts."

They help to de-risk partners' investments to answer market needs, and maximise the benefits to industry, thanks to ESA's efficient co-management approach tailored to commercial best practices."

Peter Mabson, chief executive of exactEarth, said: "We are delighted to add ESAIL to our industry-leading global maritime satellite constellation. Its capabilities will allow us to continue to advance the state-of-the-art in maritime vessel tracking and data services, and will pave the way for future capabilities. I would like to thank ESA and LuxSpace and their satellite manufacturing team for their accomplishments in producing this cutting-edge microsatellite." **About the Luxembourg Space Agency**

Established in 2018 with the goal of developing the national space sector, the Luxembourg Space Agency fosters new and existing companies, develops human resources, facilitates access to funding and provides support for academic research.

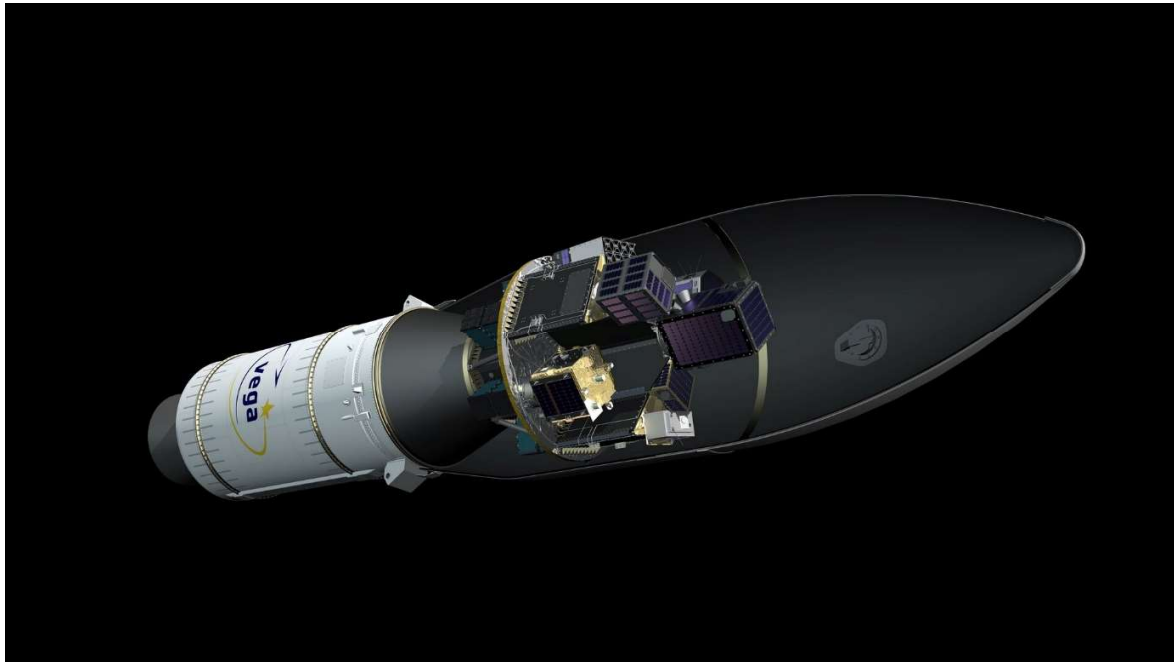
The agency implements the national space economic development strategy, manages national space research and development programs, and leads the SpaceResources.lu initiative. The LSA also represents Luxembourg within the European Space Agency, as well as the space related programs of the European Union and the United Nations.

### **Press Contact**

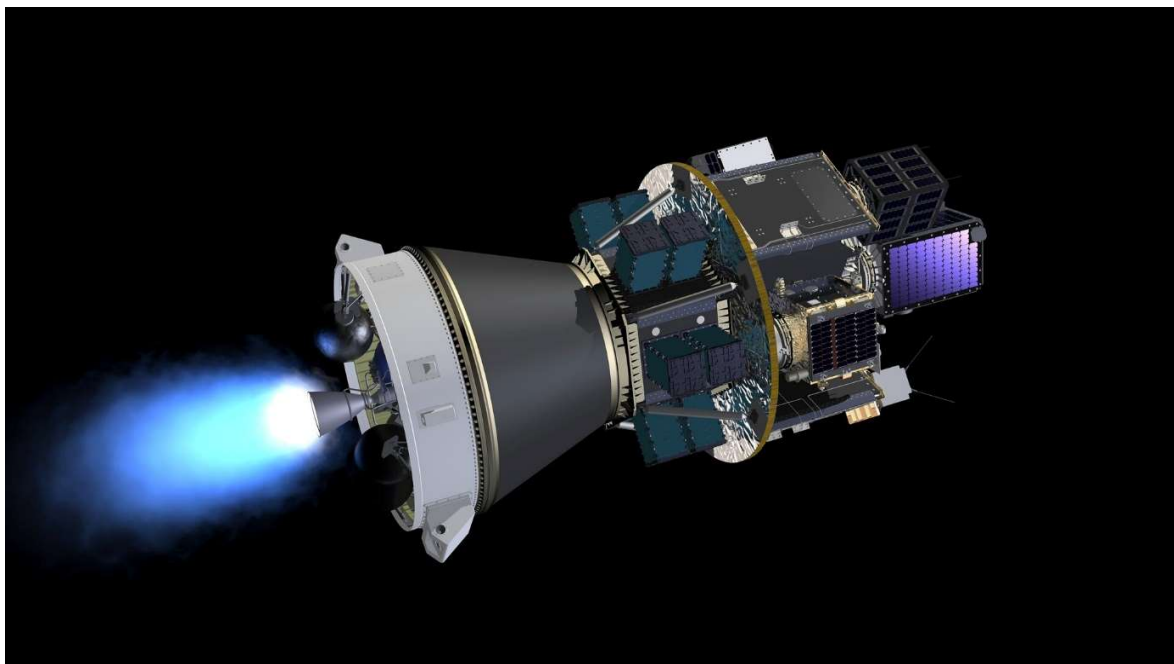
Sue Hewitt  
Marketing and Communication  
Phone: +352 621 312 480  
E-mail : [susan.hewitt@space-agency.lu](mailto:susan.hewitt@space-agency.lu)



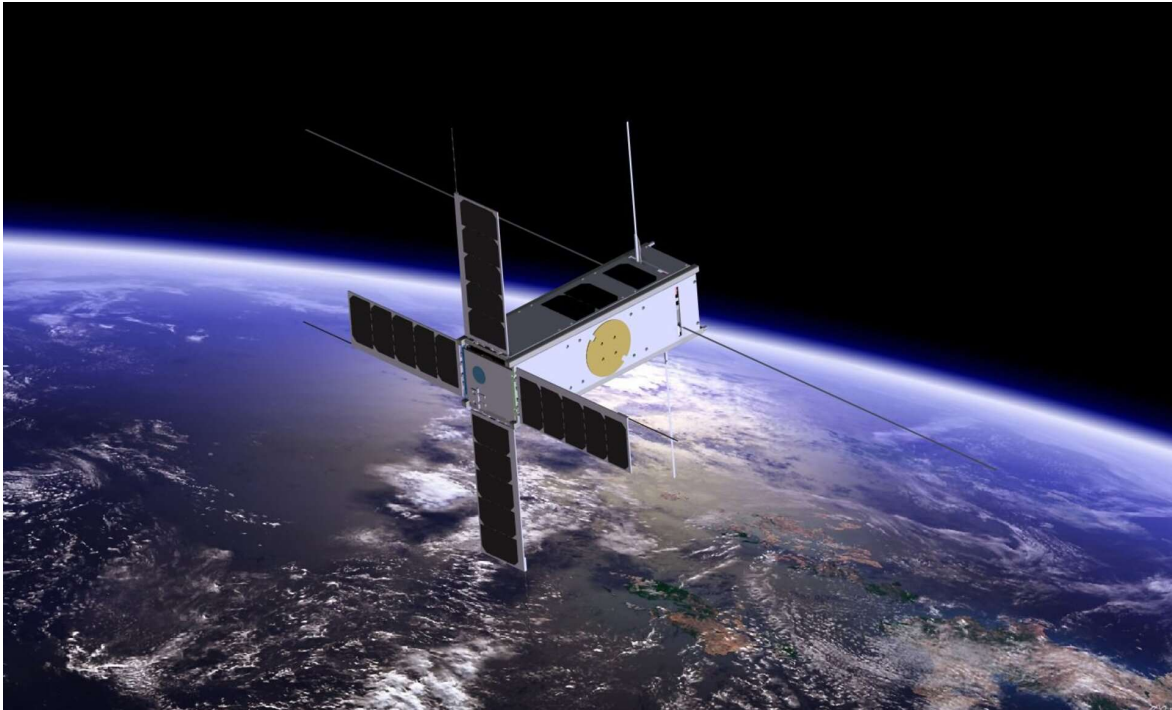
*Transfer of the Small Spacecraft Mission Service (SSMS) dispenser with all satellites mounted at Europe's Spaceport © ESA*



*Artist's view of Vega flight VV16 with the Small Spacecraft Mission Service (SSMS) dispenser and SAT-AIS © ESA*



*Small Spacecraft Mission Service on Vega flight VV16 © ESA*

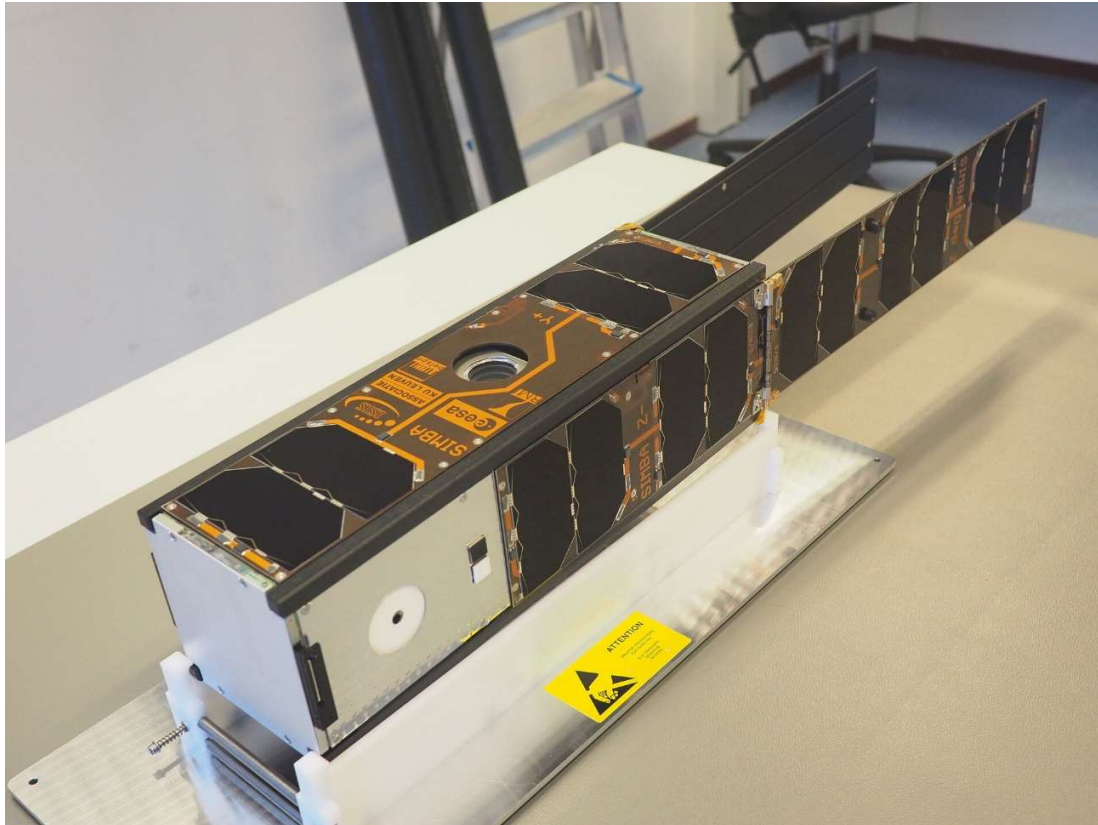


*PICosatellite for Atmospheric and Space Science Observations (PICASSO) CubeSat* © ESA

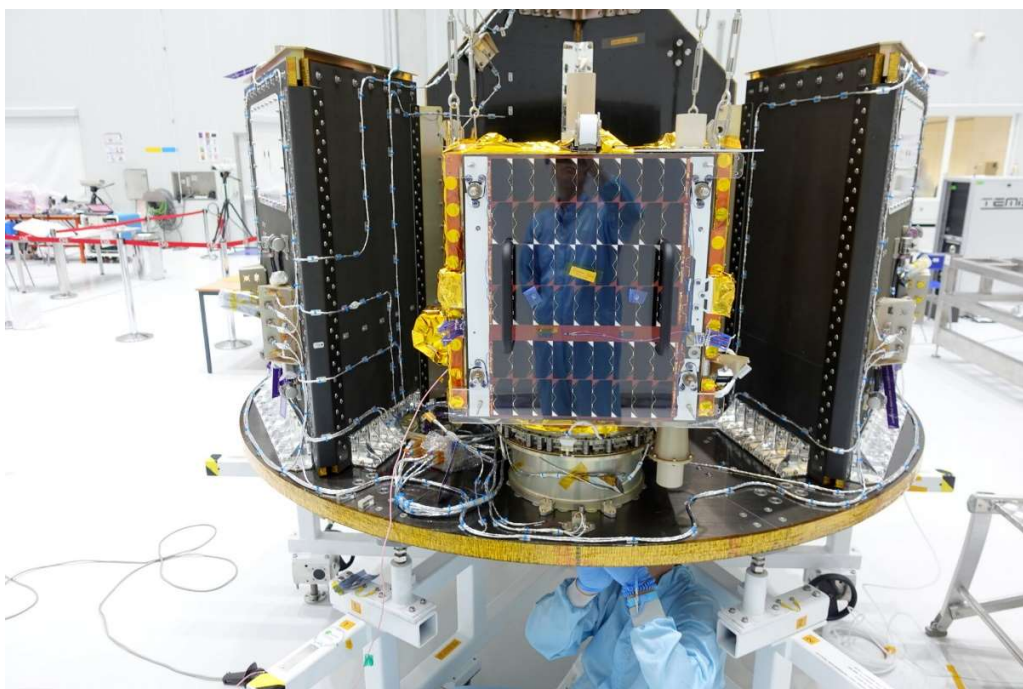


*$\Phi$ -sat-AI* © ESA





*Simba CubeSat* © ESA



*ESAIL microsatellite mounted* © ESA