Vyoma wins contract to fly miniaturised Flamingo SSA sensors under the ESA's "HydRON Element 3" programme

Friday 17 April, 2026

- Vyoma, as part of a consortium led by Kepler, was selected to demonstrate near-zero latency Space Safety and SDA (Space Domain Awareness) services under the HydRON Element 3 programme
- The compact SSA- (Space Situational Awareness) hosted payloads complement the existing sensing capabilities of Vyoma's Flamingo satellites
- Observational data is downloaded and processed with near-zero latency and used for tip and cueing

Munich, April 17th, 2026 – Vyoma, a Munich-based company providing SDA capabilities was selected, as part of a consortium led by Kepler Communications, by the European Space Agency (ESA) to demonstrate its near-zero latency space surveillance services under the "High-thRoughput Optical Network (HydRON) Element #3" project. The co-funding for Vyoma's share of the ESA contract is drawn from the German DLR's (German Aerospace Centre) contribution to both the ESA's Advanced Research in Telecommunications Systems (ARTES) Optical and Quantum Communications – ScyLight programme and to its Space Safety Programme.

The HydRON demonstration system aims to build the first optical satellite network across low Earth and geostationary orbits with a capacity of one terabit per second, ensuring seamless interoperability with high-capacity terrestrial networks. The "HydRON Element #3: User Segment and Evolution" project step focused on identifying innovative service concepts that make use of the low-latency satellite communication enabled by the network.

Vyoma is already operating large SSA sensors on its purpose-built and self-operated Flamingo satellites, enabling it to quickly respond to user requests, perform dedicated observation campaigns, and reliably observe even faint objects. Within the HydRON Element #3 scope, Vyoma is adding complementary observational capabilities with a miniaturised SSA sensor suite aimed at being hosted on third-party satellites.

The very large field of view of the hosted SSA sensors captures a large swath of space at once, simultaneously monitoring a wide range of orbiting satellites. The increase in number of observations achieved with these additional sensing capabilities allows for reduced observation latency for objects of increased interest such as manoeuvring satellites.

Due to the near-zero latency of the observations provided through the network, Vyoma will also demonstrate its real-time processing of the recorded information, providing timely, actionable information on space security and safety as well. Anomalies, such as unexpected satellite manoeuvres can be detected swiftly, and, if required, tracked with the agile Flamingo satellites via an automated tip and cueing approach to further increase accuracy of the provided SDA information. Ground-based customer sensors such as Space Surveillance and Tracking radars may be cued in as well.

Vyoma will launch further Flamingo satellites and hosted SSA payloads through 2026 to 2029 with the aim of providing low-latency observations of all satellites in low Earth orbit, enhancing sovereign SDA capabilities, and contributing to safe and secure satellite operations.

About the European Space Agency

The European Space Agency (ESA) provides Europe's gateway to space.

ESA is an intergovernmental organisation, created in 1975, with the mission to shape the development of Europe's space capability and ensure that investment in space delivers benefits to the citizens of Europe and the world.

ESA has 23 Member States: Austria, Belgium, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. Latvia, Lithuania,Slovakia and the Republic of Cyprus are Associate Members.

Media:



Related Sectors:

Business & Finance ::

Related Keywords:

Space Travel :: Business :: Technology ::

Scan Me:

ESA has established formal cooperation with four Member States of the EU. Canada takes part in some ESA programmes under a Cooperation Agreement.

By coordinating the financial and intellectual resources of its members, ESA can undertake programmes and activities far beyond the scope of any single European country. It is working in particular with the EU on implementing the Galileo and Copernicus programmes as well as with Eumetsat for the development of meteorological missions.

Learn more about ESA at www.esa.int

About Vyoma:

Vyoma is a Munich-based company that leverages space-based and ground-based data to empower automated satellite operations and deliver space intelligence to the industry. Officially founded in August 2020, Vyoma offers services that enable efficient and scalable satellite operations in congested orbits around Earth, drastically reducing mission costs for its customers. Vyoma tenders to operators, space commands and space agencies. As a participant in the European Commission and ESA programs for SDA technology development, Vyoma relies on a specialized workforce of 40+ engineers and scientists.

Press Contact

Schwartz Public Relations

Emma Ethell / Klaus Burgmair

Sendlinger Straße 42A

D-80331 Munich

Tel.: +49 (0) 89 211 871 -39 / -49

E-Mail: vyoma@schwartzpr.de

Web: www.schwartzpr.de

Company Contact:

_

news aktuell

E. desk@newsaktuell.de
W. https://www.newsaktuell.de/

View Online

Additional Assets:

Newsroom: Visit our Newsroom for all the latest stories:
https://www.newsaktuell.pressat.co.uk