

## PRESS RELEASE

# SENER Aeroespacial and Gilmour Space to develop Autonomous Flight Termination System for Eris launch vehicle

- The development of the AFTS for Gilmour Space Technologies' Eris launch vehicle will establish a new paradigm for launch vehicles.
- This builds on SENER's launch vehicle heritage with AVIO's hybrid navigation NAVIGA unit, which will be first used on the VEGA-C European launch vehicle.
- In both cases, these systems are expected to replace traditional systems, reducing launch costs and providing a more versatile and reliable service to users.

Madrid (Spain), February 8, 2022 - [SENER Aeroespacial](#), a company of the SENER engineering and technology group, and Australian launch services company [Gilmour Space Technologies](#), are working together on an Autonomous Flight Termination System (AFTS) for the Eris launch vehicle, which is being developed by Gilmour Space for the small satellite platform market.

The AFTS is a smart Hardware/Software unit with autonomous decision-making capacity responsible for aborting a flight if any anomalies are identified. This system is of the highest criticality and will be subjected to a strict certification process.

SENER Aeroespacial is currently working on the first phase, developing the software processing algorithms necessary to collect and analyze the flight/vehicle parameters, identify deviations from the nominal trajectory and/or the status of the vehicle, and send, if necessary, the command to terminate the mission. The goal is to have the first prototype ready, in collaboration with Gilmour Space, for testing and certification prior to Eris' maiden launch later this year.

The project aim is to successfully develop and demonstrate equivalence to current land-based systems in terms of performance and reliability, providing launch service providers and government launch organisations the ability to replace legacy systems which rely on costly land facilities and require manual operator intervention to terminate the mission. SENER Aeroespacial believes the AFTS will bring about a new paradigm in launch vehicle operations by improving both their versatility, by enabling more launches from places other than traditional launch centers; and their efficiency, by lowering the cost of operations.

This development builds on SENER Aeroespacial's launch vehicle heritage with AVIO's [hybrid navigation NAVIGA unit](#), which will be first used on the VEGA-C European launch vehicle. NAVIGA is a mission-critical system that combines equally two key elements for future space transport systems: cost reduction, by allowing for mass production, and versatility, thanks to the modular and flexible design, which allows a complete and certified unit to be adapted, with minor modifications and testing, to other environments.

In the words of Augusto Caramagno, Director of Institutional Programs at SENER Aeroespacial: "This new contract reinforces our position as a leader in a growing market in Europe, that of medium-cost space systems that offer good performance and high reliability. The AFTS is also joining our portfolio of

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highly critical onboard systems within the PNT (Positioning, Navigation and Timing) strategic line, where SENER Aeroespacial has considerable experience and has achieved a competitive advantage."

For Gilmour Space, this international collaboration is another example of its growing focus on European markets. Said Adam Gilmour, CEO of Gilmour Space: "It's great to be working with SENER Aeroespacial, an established space company with a strong track record for delivering high-performance systems. Given the progress, we're confident that we will have a robust AFTS ready for our first Eris rocket launch in the second half of 2022."

#### **About SENER Aeroespacial**

*SENER Aeroespacial has been a leading supplier of high-performance aerospace systems for Space, Defense and Science for more than 50 years, developing its own high added-value technology products.*

*In Space, it supplies electromechanical, guidance-navigation-control (CNG/AOCS), communications and optical systems, and it is involved in the main programs of the ESA and NASA space agencies (including Euclid, Meteosat Third Generation, Solar Orbiter, JUICE, Proba-3, Hubble, Galileo, Rosetta, Gaia, Herschel and Planck, IXV, BepiColombo and Mars 2020) and the European Southern Observatory (ESO). In the commercial space market, it is a world leader in supplying telemetry, tracking and command (TTC) antennas, and it regularly supplies all types of antennas and passive and active RF devices to leading international communications satellite manufacturers, as well as to the so-called New Space programs.*

*SENER Aeroespacial is a company of the SENER engineering and technology group, founded in 1956, which employs 2,350 professionals on five continents.*

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#### **About Gilmour Space**

*Gilmour Space Technologies is one of Australia's space companies providing affordable and reliable launch services into low earth orbits from the second half of 2022. Find out more at [gspacotech.com](http://gspacotech.com).*

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