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**Information furnished in conformity with the Convention  
on Registration of Objects Launched into Outer Space****Letter dated 1 August 2022 from the Legal Services Department of  
the European Space Agency addressed to the Secretary-General**

In accordance with the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution [3235 \(XXIX\)](#), annex), the rights and obligations of which the European Space Agency (ESA) has declared its acceptance of, the Agency has the honour to transmit the attached notification regarding its Attitude Vernier Upper Module (AVUM) space object, launched into Earth orbit and duly registered in the Agency's space object registry upon launch (see annex).<sup>1</sup>

Following the first VEGA-C qualification flight, which occurred on 13 July 2022, the AVUM upper stage has been successfully passivated and injected into a graveyard orbit.

*(Signed)*Gisela **Süss**

ESA Legal Counsel and

Head of the Legal Services Department

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<sup>1</sup> The data on the space object referenced in the annex were entered into the Register of Objects Launched into Outer Space on 3 August 2022.



## Annex

### Registration data on a space object launched by the European Space Agency\*

#### Attitude Vernier Upper Module (AVUM)

##### Information provided in conformity with the Convention on Registration of Objects Launched into Outer Space

Name of space object	Attitude Vernier Upper Module (AVUM)
State of registry	European Space Agency (ESA)
Other launching States	France
Date and territory or location of launch	13 July 2022 at 1313 hours, 17 seconds UTC; Europe's Spaceport, Kourou, French Guiana
Basic orbital parameters	
Nodal period	224 minutes
Inclination	70.131 degrees
Apogee	5,844.535 kilometres
Perigee	5,836.466 kilometres
General function of space object	The AVUM stage is the last stage of the VEGA-C launcher and is the orbital stage carrying and deploying the satellite. This upper stage was launched as part of the inaugural flight of VEGA-C. The final position of AVUM is its disposal orbit; no re-entry is foreseen.

##### Additional voluntary information for use in the Register of Objects Launched into Outer Space

Change of status in operations	
Date when space object was no longer functional	13 July 2022 at 1528 hours, 43 seconds UTC
Date when space object was no longer operational	13 July 2022 at 1528 hours, 43 seconds UTC
Physical conditions when space object is moved to a disposal orbit	The AVUM stage was passivated during the last phase of the flight, as unsymmetrical dimethylhydrazine (UDMH), dinitrogen tetroxide (nitrogen tetroxide (NTO)) and hydrazine had been released. The on-board batteries have been discharged
Space object owner or operator	ESA
Launch vehicle	VEGA-C (first flight) (VC01)
Other information	The mass of the two on-board tanks is 20.59 kg each. The theoretical residual lifetime in its graveyard orbit exceeds 100 years

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\* The information was submitted using the form prepared pursuant to General Assembly resolution [62/101](#) and has been reformatted by the Secretariat.