

Commercial liftoff for Europe's smallest launcher

April 30 2014



Vega liftoff on flight VV03. Credit: Arianespace

The third launch by Europe's new small launcher, Vega, has delivered Kazakhstan's first satellite for high-resolution Earth observation into its planned orbit.

Liftoff of flight VV03 from Europe's Spaceport in Kourou, French Guiana came at 01:35 GMT on 30 April (03:35 CEST; 22:35 local time on 29 April).

The DZZ-HR satellite was released into the target Sun-synchronous circular orbit at 750 km altitude and an inclination of 98.54° precisely 55 minutes and 29 seconds after launch.

This satellite feeds a complete range of civilian applications for the Republic of Kazakhstan. The high-resolution images will be used for mapping, monitoring natural and agricultural resources, and search and rescue during natural disasters.

KazEOSat-2, as it will be named once in its [operational orbit](#), was built by Airbus Defence and Space and is expected to operate for more than 7 years.

Vega's payload mass for this launch was 918 kg, of which 830 kg was the satellite.

Vega is a 30 m-high, four-stage vehicle designed to accommodate between 300 kg and 2.5 tonnes of payload depending on the orbit and altitude.

A flawless maiden flight in February 2012 was followed in May 2013 by the first of the 'Verta' flights to prove the system's flexibility.

On its second mission, Vega delivered three satellites into two different orbits and then, to help keep space clean, safely disposed of the upper stage to burn up high in the atmosphere over the ocean – a complex mission sequence made possible by the flexibility of the [upper stage](#) and the Vespa multisatellite adapter.

Through this launch, Vega has entered into commercial exploitation and is being operated in conjunction with the heavy-lift Ariane 5 and medium-lift Soyuz rockets at Europe's Spaceport to provide a full range of services meeting the varied demands of the launchers market.

Provided by European Space Agency

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