

Image: Combined tests start for Ariane 6 at Europe's Spaceport

September 16 2021



Credit: ESA/CNES/Arianespace

Europe's Spaceport in French Guiana is performing the first combined test in preparation for the inaugural flight of Ariane 6, Europe's new

generation launch vehicle.

This test confirms the operations and electrical and mechanical equipment required for integration of the upper part of the launch vehicle. The procedures are carried out in conditions representative of a launch campaign. A major step of this test involves the closure of the Ariane 6 fairing around the payload.

Preparations started in May 2021 with a de-risking campaign of the mechanical operations.

The fairing, built by Ruag Space in Switzerland, stands 20 m high and 5.4 m in diameter. It protects payloads from the thermal, acoustic and aerodynamic stresses on the ascent to space.

This combined [test](#) was performed using a new integration dock, composed of a large white frame, with two [mobile platforms](#) adjustable to any level and accessible by fixed stairs and platforms, developed by the French space agency, CNES.

The assembly building has two halls: one for integration of the fairing and another where the payload is stowed in the fairing. This encapsulation area is a spacious clean room for Ariane 6.

These activities are part of extensive 'combined tests' at the Spaceport by ESA, CNES, ArianeGroup and other industry partners. They will prove the systems and procedures to prepare Europe's new Ariane 6 launch vehicle for flight.

ESA oversees the implementation and management of verification and qualification activities up to and including the first flight of Ariane 6 before handing over to the exploitation authority.

Ariane 6 is designed to extend guaranteed access to space for Europe and will be capable of carrying out all types of missions to all orbits. It features a [modular design](#) with two versions: Ariane 62, fitted with two strap-on boosters, and Ariane 64, with four.

Provided by European Space Agency

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