

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Launch services, Missions, Operations and Facilities (2)

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VEGA LAUNCH SERVICES FOR SMALL SATELLITE PROGRAMS

Abstract

From 2010, the Arianespace launcher family will grow with the addition of Vega, the new light vehicle that will enter operational service at the Europe's Spaceport in French Guiana. Joining the European fleet of launchers with Ariane 5 and Soyuz, Vega is designed to provide adequate launch opportunities for smaller payloads, including mini and micro satellites.

This paper first provides a summary of the main characteristics and capabilities of the launch vehicle, together with the status of the launch system development.

The crucial role to be played by Vega in ensuring an affordable access to space for a wide range of small missions is then addressed while keeping in mind that the smaller spacecraft can nowadays achieve complete ambitious missions and should therefore be offered dedicated services instead of being bound to fly as secondary payloads.

As an illustration of this concept, the process for selection of the payload configuration and of the mission for the flight following the maiden launch is detailed, giving a full insight into the raised questions and the way to answer them.

The flexibility of the vehicle, fitted to cover a wide range of missions, is demonstrated through the presentation of the analyses performed by Arianespace for this specific mission as well as for potential subsequent missions.

Finally, the Arianespace management of the Vega operations in synergy with Ariane 5 and Soyuz is presented. It is shown that a consistent and standard approach for the three launch systems will be implemented, thus improving quality and efficiency thanks to other launchers experience.