## IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2) Launch Vehicles in Service or in Development (1)

Author: Ms. Aline Decadi European Space Agency (ESA), France

Mr. Michel Bonnet European Space Agency (ESA), Italy Mr. Jean-Michel Rizzi European Space Agency (ESA), France Mr. Galateau Guillaume ESA, France Mr. Franck Koebel ArianeGroup, France Mr. Arnaud Demay ArianeGroup, France Mr. Guillaume Collange ArianeGroup, France Mr. Serge Mahé Centre National d'Etudes Spatiales (CNES), France Mr. Frédéric Munos Centre National d'Etudes Spatiales (CNES), France Mr. Olivier Ryckebosch Centre National d'Etudes Spatiales (CNES), France

## ARIANE 6 INAUGURAL FLIGHT

## Abstract

Ariane 6's inaugural flight is planned for mid 2024 from the European Space Port in French Guiana. The development of this new European launch system is the fruit of a technological, industrial and, above all, human adventure over the past decade. Ariane 6 guarantees Europe independent access to space, and makes a major contribution to our security. Its flexibility and modularity are essential assets, and pave the way in Europe for the space of the future: suitable for cargo, manned flight and sustainable development. These objectives are part of the ESA Director General agenda for the ESA Space Summit at the end of 2024 and the ESA Ministerial Conference at the end of 2025, with the ultimate goal to enable European citizens to benefit from the positive spin-offs of space launches daily.

The purpose of this paper is to review the key elements in the adventure along the development of Ariane 6, leading up to the maiden flight of the first launch vehicle. In particular, we'll look back at the main tests that underpinned the launcher's qualification, as well as the crucial preparatory stages of the first launch campaign, right up to the final countdown to the inaugural Ariane 6 flight. The future evolutions of Ariane 6 will also be presented, making benefit of Ariane 6's modular design of both A62 and A64 versions.