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

Author: Mr. Julio Aprea European Space Agency (ESA), France, japrea@gmail.com

Mr. Mathieu CHAIZE
ArianeGroup SAS, France, mathieu.chaize@ariane.group
Mr. Pier Domenico Resta
European Space Agency (ESA), France, pier.domenico.resta@esa.int
Mr. Stefano Bianchi
European Space Agency (ESA), Italy, stefano.bianchi@esa.int
Mr. Patrick BONGUET
ArianeGroup SAS, France, patrick.bonguet@ariane.group
Mr. Guillaume Collange
Airbus Safran Launchers, France, guillaume.collange@free.fr

THE ARIANE 6 LAUNCH SYSTEM, DEVELOPMENT UPDATE.

Abstract

The European Space Agency (ESA) and ArianeGroup are currently developing a new European launch vehicle, Ariane 6. ESA is the procurement entity and launch system architect to coordinate parallel development activities and ensure launcher system coherence. ArianeGroup is the launcher system prime contractor. Ariane 6 will see a notable decrease in cost against other comparable launch vehicles on the market, and will ensure the continuation of independent European access to space. In order to address all the customers' needs and provide future users with maximum versatility, several features have been added to the overall launch service design.

Ariane 6's maiden flight is planned for 2020, and it will achieve full operational capability by 2023. Recent major milestones have included the second static test firing of the P120C solid rocket motor (side booster) in January 2019, and the completed qualification campaign of the re-ignitable upper stage engine Vinci. Construction progress on the future Ariane 6 launch pad at Europe's Spaceport is nominal, with the mobile gantry frame completed ahead of schedule in November 2018.

The aim of this paper is to present the status of the development of the Ariane 6 launch system in 2019, as well as some aspects required for its operational use.