

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

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ARIANE 6 INDUSTRIALIZATION CONCEPT AND STATUS

Abstract

One of the main pillars of the Ariane 6 program to reach technical and economic performance is to change the industrial model of heavy launcher in Europe. The program has engaged in a new way to develop launchers adapting the “Lean” management, development and manufacturing approaches to the launcher business. An important step in this process is the Maturity Gate 6.1 held in April 2017 that will authorize the start of Qualification Models manufacturing.

This paper introduces the industrialization concept presented at this Maturity Gate. This review concentrates on the maturity of the joint convergence process for:

- Launcher specification, design qualification logic;
- Industrialisation logic and supply chain management ;
- End-to-End manufacturing, assembly, integration and tests processes and operations;
- Standard Operations Procedures and critical processes.

The paper also details the status of Ariane 6 industrialization in terms of facilities, manufacturing of qualification models and first flight models, as well as tests and verifications performed. It finally introduces the next milestones for the industrialization of Ariane 6 that will lead to a first flight in 2020 and a full-operational capability in 2023.