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SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)

Launch Services, Missions, Operations and Facilities (2)

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ARIANE GROUND FACILITIES: BACKGROUND, OPERATIONAL PHASE AND FUTURE DEVELOPMENT

Abstract

Ground segment is often considered as a secondary issue with respect to the flight segment, nevertheless a launch complex is a key element of a space system and gives a significant contribution to the success of a launch system and to its long term sustainability. The launch complex reliability, availability and affordability are key elements to ensure access to space. While in the past the ground segment design tended to be only an outcome of the flight segment requirements, the new global and competitive context require that the launch system shall be considered as a whole. In particular, not only ground segment development costs but also its operational and long term global ownership costs have to be taken into account since the very first project trade-offs. Furthermore, the increasing demand for a more environmental conscious and sustainable development approach and the associated regulatory requirements shall be duly taken on board. This paper intends to give an overview of Ariane launch complex at Kourou, French Guiana, from its design concept to its operational success story return of experience, in view its future developments. Also specific aspects related to Ariane manufacturing facilities and interfaces with the launch range will be dealt.