

ARIANE 6 – ELA 4 FLUID GROUND SEGMENT DESIGN OPTIMISATION FOR CONVENTIONAL FLUIDS SYSTEMS

First Author/Speaker,¹ Franck CANTIE, Second Author Johnny FABIANI

Cegelec Projets Espace & caraibes, Paris & Kourou , France
Franck.cantie@cegelec.com, www.cegelec-projets-espace.com

Abstract:

Present since the very origin of the Guyanese Space Center, CEGELEC has become a major actor in the realisation, operation and maintenance of ARIANE Fluid Ground Segment Equipment.

In a context of tough competition between launch system operators, European space actor have set very ambitious targets for ARIANE 6 launch costs.

On ELA4 Conventional Fluid Ground Systems, there were several optimizations that have been implemented to reach the target cost reduction. The document will mainly presents:

- Simplification of the ELA4 system architecture to optimize fluid operations
- Reduction of fluids components number
- Evolution and location of main critical functions
- Improvements that could be suggested

The design criteria evolution, that have been implemented, guarantee reliability and maintainability while allowing a significant reduction in operating and maintenance costs compared to ARIANE 5 ground Segment.