

IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Launch Services, Missions, Operations, and Facilities (2)

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THE NEW GENERATION OF THE EUROPEAN LAUNCH BASE, IN FRENCH GUIANA, IS ON THE
WAY!

Abstract

How to guaranty continuity in independent and reliable access to space to serve Europe's freedom of actions and space ambitions ?

European launchers, Ariane 6, Vega-C are one main part of this access to space. The other part is the launch base.

Built in 1965, the Centre Spatial Guyanais is located in French Guiana, and is a world-class spaceport formed to be maintained to meet Europe's present and future needs.

From CSG, Europe have a direct and autonomous access to space via its launchers. But this access is granted using 30 years old infrastructures in few cases.

The word is moving fast and so does the space environment. Fortunalely, this new space environment is driven by innovations. In the frame of this undefined evolution of the word, European council at ministerial level validated, in 2019, a new era for our European Launch Base located in French Guiana, growing on flexibility, new services, reliability, while complying with societal needs (new satellites generations, climate neutrality, technological breakthroughs, ...) and in the end, costless. This program is the Core Launch Range Renewal (CLRR).

The CLRR includes some key investments as renewal of ageing networks, and the first step of CSG modernisation as new Operations Center (CDO gathering operational teams and systems, and introducing new working methods), new energy management systems (eg 20 KVA electrical power loop ie the backbone of the energetical transformation of the whole Spaceport), in view of contributing to secure and enhance the operational efficiency.

Where are we 3 years after the validation of the ambitious European program ? What is the target in terms on realization and first operations ? And other the top, how is the adaptation done due to the evolution between 2019 and now ?

The paper introduces the planned renovation and modernization activities, their status, a focus on the innovative systems and the actions to meet the known and updated needs and create the new ones.