

SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Future Space Transportation Systems (4)

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ARIANE NEXT : WEIGHTING OPTIONS FOR THE NEXT GENERATION OF ARIANE
LAUNCHERS.

Abstract

Ariane 6 and Vega-C development are well underway, with both systems set to begin their operational life in the 2019-2020 timeframe. Bringing enhanced capabilities together with improved flexibility and reduced launch cost, the upgraded fleet shall serve as the backbone of the European space access strategy for the next decade.

But a backbone is only a starting point, especially in changing times. For a long time commercial space has been mainly ruled by geostationary based telecommunications. In the last couple of years, new (or renewed) trends have been progressing: commercial megaconstellations, smallsat based applications, increased competition...etc. Remembering that European space launch policy relies on a balanced mix of institutional missions (e.g. Rosetta, Sentinel) and commercial activity (e.g. many satcoms, Skysat), the strategy - so far largely shaped by the geostationary market - has to remain agile to adapt to the possible evolutions of the space economy.

In this context, CNES Launcher Directorate reshuffled his "preparation for the future" activities to evaluate those challenges and weight future options for next generation of European space launchers, beyond the Ariane 6 and Vega-C now on tracks. The paper will provide an overview of these actions, followed by a deeper insight into the Ariane NEXT initiative which features the Prometheus low cost rocket engine and the Callisto reusability testbed.