

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

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ARIANESPACE LAUNCHER FAMILY : ONE YEAR OF EXPLOITATION

Abstract

The year 2013 was the first year for exploitation by Arianespace of its whole launcher family Ariane 5 – Soyuz – Vega. It allowed the launches of 4 Ariane 5 including the A5ES for ATV4 Albert Einstein and 3 ECA putting into GTO orbit 6 out of the 16 commercial GTO satellites launched in the world, 2 Soyuz launches from CSG and the second Vega after its maiden flight in 2012, representing 7 launches in that year. 2013 was an ambitious year with a result rather modest due in particular to technical and programmatic difficulties. It resulted in making year 2014 even more ambitious, with the objective of a mean rate of one launch every month.

Ariane reliability and availability stay excellent, followed by a first success at the beginning of 2014. Soyuz were successfully launched on time from CSG, confirming the good operational European and Russian teams working together. And the second Vega launch, equipped with its new multiple launch structure, behaved very nominally.

The exploitation of 3 launch systems necessitates a strong coordination of launch base common means in order to maintain satisfactory flexibility. A common work is ongoing with CNES/CSG to analyze the existing constraints and to put in place the necessary actions to increase the global system flexibility. Practical decisions are expected in the coming months. They will be helpful to fulfil the Arianespace launch rate objective.

For the future, many projects are on the way to improve the Arianespace service to their customers: - Vega industrialization will increase its launch rate capability, with an objective of three launches per year. A new batch order of 10 launchers will guarantee Vega availability up to end of 2018, - A new batch of Soyuz launchers is under negotiation with Russian partners to assure this intermediate launch capability in the long term, - Ariane 5ECA is being adapted to the new coming satellites, in particular the hybrid and electric ones, by increasing the allowed volume under fairing without performance loss; a new batch of 18 launchers has been ordered to Industry, securing the launch rate up to the end of the decade, - The Ariane 5ME and Ariane 6 programme files are being prepared for European decisions at the ESA Ministerial Conference in December 2014; on the basis of the market evolution, Arianespace confirms the need of the performance and volume of A5ME as soon as 2018 as a gapfiller preparing the arrival of the Ariane 6 launcher, perfectly adapted to the forecast market and the new competition.