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

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## MULTILATERAL CNES ACTIVITIES ON FUTURE LAUNCHERS

## Abstract

CNES initiate, organize and support various activities on Future Launchers moreover on multilateral budget than ESA budget. All of them are managed in order to cover a large spectra of technologies but without any redundancy. This paper shows the programmatic overview of CNES Future Launchers activities either on technical or financial point of view. It describes all types of activities: advanced concept studies and prospective, research and technology, technological demonstrators development and system preliminary studies. The overall logic and reason of these activities are presented, and for each type of activities, details are given as well as the organization implemented by CNES and its partners to conduct them. Then coherence and combination with other European programs is shown. It also includes technical description of the major parts of this effort and associated results obtained since 2004: propulsion and system demonstrators, major system studies covering a large payload range.