

Technology Roadmaps for Space Exploration (09)  
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## COORDINATED ESA INITIATIVES IN TECHNOLOGIES FOR SPACE EXPLORATION

**Abstract**

For space exploration to be efficient and provide maximum return, drastic technology advances and breakthroughs will have to be achieved in the coming years. Increased cooperation with terrestrial sectors will also be essential. Furthermore, technology nurturing goes beyond the horizon of the missions currently in development. In order to support this challenge which is multidisciplinary and cross-sectorial in nature, the European Space Agency (ESA) is dedicating a specific effort of coordination of technology activities linked to space exploration within its organisation. The aim being to provide Europe all necessary elements to pursue the next steps of space exploration whatever the destinations and allow it to remain an attractive and reliable partner of choice making critical contribution to critical requirements in exploration endeavours.

This paper will illustrate the results of an action coordinated between all the relevant ESA Directorates involved in space exploration technology planning and implementation. Intended technology procurements actions will be illustrated, highlighting how they intend to fit in the overall short and medium term ESA space exploration scenarios and how they will be proposed to the next ESA Council at Ministerial Level.