

Technology Roadmaps for Space Exploration (09)  
Advancing Propulsion Technologies (4)

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PROPULSION TECHNOLOGIES AND ROADMAP FOR MOON AND MARS MISSIONS

**Abstract**

The paper gives an overview of the European propulsion product and technologies as well as the current status of propulsion technologies planned to developed and qualified for the Lunar-Lander Missions. A more detailed focus is set on proposed propulsion technologies for final soft and precise landing with an outlook of these technologies to be used for future exploration missions (e.g Mars sample return mission) by adaptations. In the summary and close out alternative propulsion technologies are compared and discussed.