

SPACE EXPLORATION SYMPOSIUM (A3)
Space Exploration Overview (1)

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ANALYSIS OF COOPERATION OPPORTUNITIES FOR EUROPE IN FUTURE SPACE
EXPLORATION PROGRAMMES

Abstract

For the last 40 years, space exploration in Europe has been driven by the efforts of the European Space Agency (ESA) combined to those of several European national space agencies. As opposed to other leading space nations that have made space exploration a national priority to suit political and strategic agendas, ESA's space exploration programme has traditionally been more science-based and technologically-focused. This pragmatic approach has protected public funds and space projects from the political volatility experienced in other countries.

While the European Union has identified satellite applications (Galileo, GMES) as policy priority areas, the enlargement of the EU's mandate has influenced the European Council to reconsider possible contribution to space exploration policy. In 2009, EU Ministers expressed their support for a major financial investment in space exploration that will have to materialize in the 2014-2020 EU Financial Framework currently in preparation.

Considering that space science and exploration is typically the first area of cooperation between countries, future initiatives and opportunities for Europe in space exploration will be determined not only by its own ambitions and capabilities but also by those of its international partners. As part of the European Commission 7th Framework Program, Euroconsult conducted an international benchmark of space exploration at two levels:

1. The programmes and initiatives in Europe and worldwide, in order to identify current and future directions, objectives, frameworks, and missions for space exploration;
2. The industrial capabilities relevant for space exploration in Europe and worldwide in order to map current and future expertise and the capabilities in critical technology areas required for future space exploration missions.

This benchmark assessment resulted in a gap analysis where objectives and capabilities have been compared, in order to develop scenarios for future European cooperation opportunities. Recommendations have been derived for the European Commission on how to optimize the European position supported by an action plan. The research leading to these results has received funding from the European Community's Seventh Framework Programme (FP7 2007-2013) under grant agreement n 284424.