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Technology Roadmaps for Space Exploration (09) Technology Roadmaps for Exploration (1)

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TOWARD A GLOBAL SPACE EXPLORATION PROGRAM: A COMMITTEE ON SPACE RESEARCH (COSPAR) APPROACH

Abstract

The Committee on Space Research (COSPAR) represents national science institutions from 44 member countries, 13 international scientific unions and 5 associated companies. COSPAR strives to promote the use of space science for the benefit of mankind and for its adoption by developing countries and new space-faring nations. COSPAR's Panel on Exploration (PEX) was chartered to provide independent scientific advice to support the development of exploration programs and to safeguard the potential scientific assets of solar system objects. A recent PEX report provides a summary and synthesis of science

roadmaps and recommendations for planetary exploration produced by many national and international working groups, aiming to encourage and exploit synergies among similar programs. PEX has elaborated a stepwise approach to achieve a new level of space cooperation to develop world-wide capabilities in space science and exploration and support the transition phase toward a global space exploration program. The proposed stepping stones of the PEX roadmap are intended to transcend cross-cultural barriers, leading to the development of technical interfaces and shared legal frameworks and fostering coordination and cooperation on a broad front. The PEX roadmap provides a shared vision that enables new countries and stakeholders to join and engage in the overall space exploration effort. We report on the activities of the COSPAR Panel on Exploration in cooperation with national and international science foundations and space-related organizations to enhance future cooperative space exploration efforts and to assist in the analysis and implementation of possible architectures in the new era of planetary exploration.