

HUMAN EXPLORATION OF THE SOLAR SYSTEM SYMPOSIUM (A5)  
Long Term Scenarios for Human Moon/Mars Presence (2)

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WHAT IS THE VALUE OF SPACE EXPLORATION?

**Abstract**

The next step of the human being into space is currently discussed in many fora. While most people agree that Mars will be the next major goal in exploration the path to get there is still undetermined. The International Space Exploration Coordination Group (ISECG) has proposed a roadmap, which foresees two options, one which is referred to as “Moon first”, the second path favorites the exploration of a near Earth asteroid instead before venturing for Mars. Along with these discussions efforts are underway to determine the benefit of either of these options (and of human spaceflight in general). The attempt to understand the benefits of exploration and especially the human component in exploration is as old as human spaceflight in itself. No well-defined framework has been developed in the past leading to conclusive answers, which in turn could form the basis for future evaluations of the benefit of human exploration. What is a benefit, what the utility and what the value of (human) exploration? And how could these be measured, if this is at all possible? ESPI has developed a methodology starting with a clear definition of the above and other related terms in order to get a firmer grip on this complex matter. This methodology is then applied to the Global Exploration Roadmap (GER) of the ISECG, which yields estimates for the “benefit” and “value” of space exploration in general and human exploration in particular.