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The Global Exploration Roadmap: Opportunities for Lunar Science

The Global Exploration Roadmap (GER) has been developed by the International Space Exploration Coordination Group (ISECG – comprised of 14 space agencies) to define various pathways to getting humans beyond low Earth orbit and eventually to Mars. Such pathways include visiting asteroids or the Moon before going on to Mars. This document has been written at a very high level and many details are still to be determined. However, a number of important papers regarding international space exploration can form a basis for this document.

This poster will focus on developing the "Lunar Vicinity" scenario by adding detail via mapping a number of recent reports/documents into the GER. The documents highlighted here are in no way meant to be all encompassing and other documents can and should be added, (e.g., the JAXA Space Exploration Roadmap). This exercise is intended to demonstrate that existing documents can be mapped into the GER despite the major differences in granularity, and that this mapping is a way to promote broader national and international buy-in to the Lunar Vicinity scenario.

The documents used here are: the Committee on Space Research (COSPAR) Panel on Exploration report on developing a global space exploration program, the Strategic Knowledge Gaps (SKGs) report from the Lunar Exploration Analysis Group (LEAG), the Lunar Exploration Roadmap developed by LEAG, the National Research Council report Scientific Context for the Exploration of the Moon (SCEM), and two journal articles, the scientific rationale for resuming lunar surface exploration, and the astrobiological benefits of human space exploration.

In addition, the ISECG is in the process of developing a Science White Paper (SWP) to accompany the next edition of the GER, due in late 2016. The SWP will be an important tool to communicate science which will be able to be accomplished at human exploration destinations to policymakers. This abstract will discuss the process of developing this SWP and ways in which the global science community can become engaged in its development.