

Paper Proposal - 2017 Annual Meeting of the Lunar Exploration Analysis Group

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Abstract

The lunar economy will supply and demand a diverse range of physical, virtual and financial products and services. A basic subset of these can be standardized as commodities and traded on an exchange to improve availability, quality, price discovery.

Background

Establishing a “space economy” on the lunar surface and in lunar orbit will require a consistency of supply of commodities such as water, oxygen, electricity, telecommunications bandwidth, launch and transport services, food and other natural or synthetic substances that can be consumed or serve as raw materials for ongoing operations and human exploration.

On Earth, commodities markets exist in order to smooth the levels of supply and demand, and to improve the quality and variety of standardized commodities that thriving economic activity requires. Commodities markets operating through regulated exchanges provide commodity sellers and buyers assurance that contracts for future delivery of the commodity will be performed, and allow for the holders of such contracts to sell the contractual rights or to diversity investment in a portfolio of related commodities.

Bold Idea

Given the risk of lunar exploration and its long timeframe for realizing revenues, a Lunar Commodities Futures Trading Exchange (the Exchange) is proposed and described.

The Exchange will permit the lunar economy to dynamically see futures contracts, adding market efficiency and transparency to moderate under-/over-investment and supply of a basket of lunar commodities. The Exchange will support creation of financial derivatives that serve to transfer technology and other risks, and thereby supplement self-insurance and third-party insurance strategies.

Ultimately, the Exchange will allow for a new cohort of investors to hold financial assets that support directly or derivatively a healthy lunar economy.