Paper ID: 29501
oral

66th International Astronautical Congress 2015

28th SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)
International Space Exploration Policies and Programmes (2)

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2035 THE POLITICS OF SPACE MINING – AN ACCOUNT OF A SIMULATION GAME

Abstract

Celestial bodies like the Moon and asteroids contain materials and precious metals such as Platinum, Gold, Iron, and Helium-3, which are valuable for human activity on Earth and beyond. Space mining has so far been mainly relegated to science fiction books and movies, and was not treated seriously by the international community. Although this dream has not yet been realized, many experts in space exploration agree that it is only a matter of time until a breakthrough is achieved. As evidence, in 2013 two companies were created in order to pursue this goal, and were able to raise significant funds to realize their ambitions. Once space mining has become technologically and economically feasible, it will have a dramatic and disruptive effect on the global economy and world politics. This development will have significant consequences for security and global stability, affecting a large number of countries regardless of their space capabilities. Nevertheless, the social and political aspects of space mining were not yet addressed by international relations and political economy experts and scholars. It is vital to develop novel political, economic and legal frameworks of thought on such issues in advance. To that purpose, and as a preliminary exercise, a simulation game was conducted at the Political Science Department of Tel Aviv University to challenge students to deal with the future political, economic, and legal aspects of space mining. In the simulation, students played a variety of space-faring nations, emerging ones, and non-space countries; each of which has a different perspectives on issues such as: innovation, investments in RD, legal aspects and so forth. The paper presents this futuristic simulation and its outcomes, proposing mechanisms to mitigate challenges ahead.