

IAF BUSINESSES AND INNOVATION SYMPOSIUM (E6)  
Public-Private Partnerships: Traditional and New Space Applications (2)

Author: Prof. Michele Cristina Silva Melo  
Brazilian Space Agency (AEB), Brazil, michelecsmelo@gmail.com

Ms. Nancy C. Wolfson  
American Institute of Aeronautics and Astronautics (AIAA), United States,  
nancyspaceexplorationresearch@gmail.com

Mr. John Toop-Rose  
Hyperganic Group GmbH, Singapore, Republic of, tooprose@outlook.com

Prof.Dr. Andrea Cabello  
University of Brasilia, Brazil, andreafc@gmail.com

Mr. Swarnaajyoti Mukherjee  
Apogeo Space Srl, Italy, s.mukherjee@apogeo.space

AN ANALYSIS OF THE ITU APPLIED TO SPACE RESOURCES AND ASTEROID MINING

**Abstract**

The space sector is transforming, and the so-called "New Space" is driving commercial/private activities monopolizing the race for exploiting space resources, including asteroid mining; therefore, there is a need for more up-to-date international regulations to ensure that all of society has access to the benefits generated by space technology and new space commercial activities. The Outer Space Treaty is still in force; its first article states, "The exploration and use of outer space, including the Moon and other celestial bodies of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind." But which company/country will be the first to explore/mine an asteroid or to reach Mars? The first to arrive will have access to exorbitant gains, which will not be shared or socialized with other countries or companies. After all, if the investments are private, why should the gains be socialized? The International Astronautical Federation (IAF) Space Entrepreneurship and Investment Committee (SEIC) approved the creation of a dedicated team "IAF SEIC Working Group on Sustainability and Space Resources Utilization (WG-SSRU)" to answer some of these questions. The IAF SEIC-SSRU's ongoing work, surveys, and analysis of literature and previous institutions' models aim to support space laws and regulatory frameworks to fulfill international responsibility and liability per the space treaties, to the creation of new markets, and to study the creation of an institution that models the International Telecommunications Union (ITU) for the space area or similar. This paper serves as a literature review regarding the creation of a regulatory framework for space resource extraction, modeled after the International Telecommunications Union (ITU). This work's approach enables a multi-stakeholders dialogue and cooperation with the government, non-governmental enterprises, and civil society to contribute to the United Nations SDGs. This presentation discusses 1. Our strategic plan includes: a) Contemporary technology and the best practices. b) Evaluate the jurisdiction over space-made items for this purpose, contributing to developing a domestic and international legal framework for a new space industry where space arbitration could be carried out. c) To encourage the diversification of the budget and promote Public-Private Partnerships (PPP) by bringing together academics and practitioner perspectives to find innovative solutions for space sustainability. 2. To safeguard our commercial and non-commercial assets and infrastructure by turning issues into profitable solutions and new space markets. 3. The IAF SEIC WG-SSRU socioeconomic and environmental agenda for 2023 -2025."