

The Luxembourg Perspective on ISRU and the Development of a Commercial Space Ecosystem

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Abstract

In 2016, Luxembourg launched the SpaceResources.lu initiative with the long-term vision to enable the exploration and utilization of space resources with the aim to contribute to the peaceful exploration and sustainable utilization of space resources for the benefit of humankind. One important objective is to diversify the Luxembourg economy by creating a sustainable commercial space ecosystem. To kick off the initiative the country identified an envelope of 200 M Euros to support all aspects of the strategy. In 2017, Luxembourg passed legislation that enabled the creation of a regulatory framework to allow businesses to harvest and use space resources. The framework also helps decrease risks in the emerging space resources industry for investors. In September of 2018, Luxembourg announced the creation of the Luxembourg Space Agency (LSA). These actions illustrate the strong determination of the country to reach their long-term vision of developing a sustainable commercial space sector.

The primary motivations of the Luxembourg SpaceResources.lu Initiative is to support the existing local space industry, attract leading space companies, while creating a nurturing environment for start-ups and new space endeavors. Five strategic pillars provide the foundation of the Space Resources initiative:

- Promote space resources by ensuring national political support and promoting international cooperation.
- Build a regulatory framework by establishing a clear legal framework and engaging internationally.
- Develop top-tier talent by promoting long-term public support and workforce engagement through education and R&D.
- Offer R&D assistance by providing dedicated support for industrial research and development activities.
- Enable long-term investment by developing financial instruments focused on commercial space.

This presentation provides an overview of the status of the activities undertaken by the Luxembourg Space Agency to support each of the 5 Pillars in the strategy and provides details on the progress it has made. In addition, a high-level summary of the recent ISRU Value Chain Study and the Mining Space Summit 2018 will be discussed.