

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)  
Enabling the Future - Developing the Space Workforce (5)

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CREATING A SUSTAINABLE SPACE ECOSYSTEM IN LUXEMBOURG

**Abstract**

Luxembourg has made growing and cultivating its space business sector a priority for the country's future. Space is already a major industry within Luxembourg going back as far as 1985 with the success of SES, a global leader in communication satellites. The Luxembourg government is actively working to enable an innovative vision of space industrialization a reality with its resulting new markets and wealth. In 2016, Luxembourg initiated the Space Resources Initiative, creating a framework for space commercialization by carving out a fund of 200 M Euros to support their bold vision. In 2017, Luxembourg passed legislation that enabled the creation of the regulatory framework needed to decrease risk and enable businesses to harvest and use space resources. Since the vision was announced with supporting policies and laws established, new space companies have begun moving to Luxembourg and creating new jobs. These new companies represent not only those focused on space resources but pioneering businesses using space in new and innovative ways.

To create a sustainable ecosystem supporting the growing space cluster in Luxembourg multiple new programs are being established at the University of Luxembourg and at the Luxembourg Institute of Science and Technology (LIST). These new programs will create a pipeline of expertise and innovation within the country needed to staff the burgeoning space sector and be responsive to the industry's current and future needs. The initiative plans to fund new areas of research in public research laboratories in partnership with private industry. The flagship of the new program is a new specialized Space Master's program at the University of Luxembourg, which taps into cutting-edge expertise from around the world. Through partnerships with multiple organizations; researchers, industry experts, and leading policy makers will participate in this program whose students will lead the space revolution of the future.

This paper describes these new exciting programs in Luxembourg at the University of Luxembourg and LIST to create and sustain the vibrant ecosystem needed to fulfill the country's Space Resources vision.