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Space Economy - New models and economic approaches for private space ventures, with an emphasis on
the needs of emerging space nations (3)

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IS EUROPE READY TO ENGAGE IN THE TRANSFORMING LAUNCHER MARKET?

Abstract

The market of space transportation is undergoing a profound transformation. In recent decades, the diversity of launchers has grown due to the increasing variety of missions and a continuously increasing commercial demand, achieving a total delivery of over 3400 active satellites today, 2700 being in LEO. Traditional launchers are challenged by reusable launchers, large satellite dispensers, launching start-ups / SMEs dedicated to small launchers that are promising a launching repetition rate of a few days only. Moreover, flexible air-launch capabilities are beginning to prove their reliability and with economic advantages. These new features combined with the traditional mid-heavy lift capabilities still very much in use and irreplaceable for a range of missions, show the dynamism and adaptability of the launching market. In the United States during this period private investment using new sources and means of funding has been significant for small launchers start-ups, as well as for heavy lifters under development. After reviewing launching forecasts, this paper will address the future market for small launchers with a particular focus on Europe which has not yet embraced this new mode of transportation. More specifically, it will seek to answer the following questions: Given investment risk is based on market expectations, does Europe have the right tools to anticipate what the market will be in 10 or 20 years? Why do the European investors / stakeholders remain reluctant to join this new band wagon? Can Arianespace develop new initiatives to compete with, or engage in, the small launchers market, or does it consider of no interest, or even already lost? Has Europe, or particular European nations, the appropriate financial tools and technological capabilities to develop a reliable and competitive industry of small launchers? How or will this rapidly changing landscape be considered by the European launcher alliance announced by the European Commission in January 2021? If the small launching business, dedicated basically for low Earth orbit small satellites, will represent a significant portion of the market, can Europe afford not to be part of it?