IAF SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2) Mobile Satellite Communications and Navigation Technology (3)

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NEWSTARTS: STRATEGIC AND TECHNOLOGICAL APPROACHES FOR REINVIGORATING TELECOMMUNICATIONS FROM SPACE

Abstract

The satellite telecommunication industry is going through a period of great transition due to changing

user demands, technology advancements and evolving markets. The incumbents are having to diversify into new areas such as broadband connectivity, high performance satellites and constellations. This paper discusses the current state of the satellite telecommunication industry including the legal, economic, technological and social factors impacting the industry. This is then followed by identifying and analyzing a number of emerging trends in the industry, including the shift towards low latency, high secure communications, increase in bandwidth demand, laser communications, frequency allocation challenges, and the like. Following this analysis, market opportunities are identified for both new entrants and incumbents to leverage upon, namely, autonomous vehicles, mobile broadband, secure communications, deep space communications networks and enhanced event broadcasting technologies. Finally, recommendations are provided for approaching these opportunities using strategic tools and technologies, such that the satellite telecommunications industry can stay relevant in the era of 5G, Internet of Things and other upcoming developments.