

IAF SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)
Launch Vehicles in Service or in Development (1)

Author: Mrs. Mila Savelyeva
GK Launch Services, JSC, Russian Federation

ADVANCED CAPABILITIES FOR DEDICATED AND RIDESHARE LAUNCHES BY SOYUZ FAMILY
ROCKETS**Abstract**

GK would like to participate at the IAC 2021 and give an oral presentation - Advanced capabilities for dedicated and rideshare launches by Soyuz family rockets. Soyuz rockets are realizing missions from low-earth and geostationary orbits to escape trajectories to deep space missions to other planets and asteroids. LV's feature high injection accuracy, as uplift capability is achieved by the advanced control system and enhanced engines of three stages. The new generation of Soyuz launchers features multi-functionality and eco-friendliness – a rocket of great world renown. GK Launch Services is a commercial operator authorized to conclude and implement contracts for rendering launch services with the use of Soyuz family launch vehicles from Russian spaceports. GK Launch Services was founded on 25th April 2017 as a joint venture of GLAVKOSMOS, a subsidiary of ROSCOSMOS State Space Corporation, and INTERNATIONAL SPACE COMPANY KOSMOTRAS. The increasing pace of commercialization is scaling up the number of mega-constellations and, as a launch operator, we provide our customers with affordable and responsive ridesharing and dedicated launch opportunities. We deliver numerous SmallSats into different orbits within one mission by the use of Fregat Upper Stage, as it is an autonomous and versatile stage produced by NPO Lavochkin and designed to operate as an orbital vehicle that provides highly accurate insertion of spacecraft into target orbits owing to the multiple restart capability of its main engine that allows up to 7 burns. We look forward to joining scientists, engineers and managers to exchange information and ideas under the theme - “Inspire, Innovate Discover for the Benefit of Humankind” by focusing on efficient, sustainable affordable delivery and injection of various types of spacecraft into orbits. With the best regards, GK Launch Services.