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POSSIBLE AREAS OF RUSSIAN-EUROPEAN COOPERATION ON THE MARKET OF LIGHT LV LAUNCH SERVICES

Abstract

Until recently, Russian presence on light LV launch market was limited to commercial launches of military surplus LVs "Rokot" and "Dnepr". Launch operators for those LVs - "Eurokot" Russian-German JV and "Cosmotras" international space company (with Russian, Ukrainian and Kazachstanian partiipation) were able to fulfill 12 and 21 respective commercial SC launches for different countries. However, "Dnepr" LVs are not being manufactured since 2015 and "Rokot" LV employment finishes in 2018. A possibility to maintain "Eurokot" as a launch services operator and employ an advanced Space Transportation System (STS) instead of "Rokot" is being looked into. Estimation is given to the perspective of including advances STS into European LV system as well as conditions of efficient utilization of such STS on Russian, European and international LV market, taking into account a trend of dynamic development of light LV commercial launches. Technical and economic indexes and technical ability to build STS with LV (including reusable first stage built on design and technological know-how of Russian and European space-faring organizations) are being looked into.