Launch Vehicle Interfaces of a Low Earth Orbit Satellite

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The KOMPSAT-2 system has been designed to provide 1m panchromatic high resolution images for GIS (Geographic Information Systems) and the composition of printed maps and digitized maps. The KOMPSAT-2 was launched into its mission orbit by Rockot launch vehicle on 28th of July 2006 from the Plesetsk Launch Site in Russia. The interface between a spacecraft and a launch vehicle mainly consists of mechanical, electrical and environmental interface. This paper describes the analyses and tests which were performed to verify the interface between the KOMPSAT-2 and the Rockot launch vehicle. The analyses include mission analysis, separation analysis and coupled load analysis. The tests include the separation, shock test and electrical interface test.