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# LEO TO LUNAR AND BEYOND: EXTENDING THE REACH OF SSC'S GROUND SEGMENT AS-A-SERVICE

**Abstract**

A new space race is underway with talks of returning astronauts to the moon and working towards the long-term goal of putting boots on Mars. National space agencies, international organizations, and an exciting crop of space start-up companies have a variety of missions planned for the cislunar orbit, the lunar surface, and beyond. The Swedish Space Corporation (SSC) is providing Ground Segment as-a-Service, based on owned, as well as partner, ground stations. The heritage of SSC's network dates to the Apollo era and has included many recent launch campaigns, missions to low Earth orbit, and scientific missions to lunar orbit and Lagrange points. As the industry evolves to meet changing goals, SSC's services are evolving to meet changing requirements. This paper will provide an overview of SSC's services for supporting the new space race, highlighting some of the complex missions which have been supported including Smart-1, Lunar Reconnaissance Orbiter, and the SpaceIL Beresheet mission. A roadmap will be presented outlining planned network improvements which will continue to offer technological leading-edge services during the next phase of space discovery.