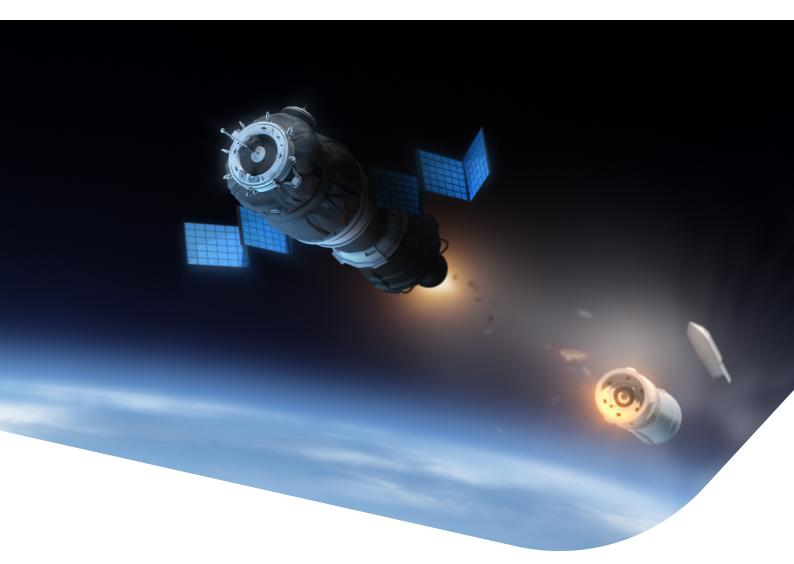
LEOP service





About SSC

Swedish Space Corporation (SSC) provides advanced space services to public and private organizations worldwide. Built on decades of experience, we offer proven expertise in space engineering, satellite ground station services and launch services.

We help Earth benefit from space.

SSC LEOP service

On a yearly basis SSC performs ground segment services to 1-5 Launcher Tracking supports and 15-25 LEOP missions for customers around the world.

SSC provides critical LEOP communications support to fit every mission thanks to the reliable and robust SSC Global and Multi-mission Ground Network. The launch support services are performed by SSC Technical Operations and Engineering teams which operates from Network Management Centers (NMC) in both Sweden, the United States and in Chile.

LEOP SERVICE WWW.SSCSPACE.COM



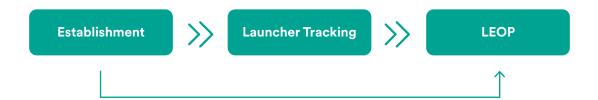
SSC's Telemetry, Tracking and Control (TT&C) service allows the satellite owners to manage their satellites fully with outstanding coverage and availability.

The LEOP service is highly reliable and cost-effective, utilizing an unparalleled network of worldwide locations.

SSC's Global Ground Station Network is designed to provide comprehensive communications and ground system support to a variety of satellite missions. The network has been constructed for high availability in a multi-mission concept.

SSC has vast competence in providing satellite support and has developed software, hardware and processes optimized for this service. SSC has a long experience of working in close collaboration with the satellite operators' team during LEOP phases to ensure mission success.

Optimization provides a cost efficient, secure and reliable service support.



Included in the service

- Establishment
 - o System test, validation and Launch network rehearsal
- Scheduling support
- Uplink telecommand
- Downlink telemetry
- Telemetry playback
- Localization Service
- Angular
- Doppler
- Ranging
- On-line voice service
- Ground Network Communication
- Reporting
- Scheduling according to priority o LEOP critical
 - o LEOP non-critical
- Service Level Agreements

Service characteristics

- S-band*
- Full motion antenna
- Auto-tracking
- High availability
- Redundancy

S-band

TX 2025-2120 MHz EIRP ≥ 54.0 dBW RX 2200-2400 MHz G/T ≥ 17.5 dB/K

Options in the service

- Data storage
- Tailor-made solution
- Additional Engineering support: development, testing hours, analysis support etc.

*Additional capabilities are available up on request (E.g. X-Band)

Communication - SSC Network to PoP

Primary: MPLS

Backup:* Internet VPN

*Option; MPLS

MPLS Specification

Latency	≤ 45 ms
Jitter	≤ 15 ms
QoS	Available