

### We help Earth benefit from Space

# **Esrange Space Center**

Access to space from the Nordics

Jan Schulte 02 December 2024

## **SSC - Swedish Space Corporation**

global provider of space services





# **Esrange Space Center**

SSC's launch & operations facility

- Established 1966 by ESRO (now ESA)
- SSC owned since 1972
- Located 40 km from Kiruna in northern Sweden, inside the Arctic Circle (68N, 21E)
- Vast, unpopulated land impact area of 5200 km<sup>2</sup>
- Restricted airspace GND/UNL of 6600 km<sup>2</sup>
- Large and modern facilities for balloon/rocket preparation, integration, testing, launching, tracking, and analysis







### LC-2 HTS, Horizontal Test Stand Esrange Space Center "The world's most versatile space center"

The world's most versatile space Center LC=3, Launch Comple Balloon launch pad Orbital launch area

LC-3, Launch Complex 3, LC ad Orbital launch area Main Building Motorial heteotesting facilities Suborbital rocket launch area

LC-3C, Orbital mini launchers LC-1 & LC-2

> LC-3B, Reusability testing VTS-2, Vertical Test Stand

Ground instrument area

LC-3A, Orbital micro launchers

LC-3 Orbital launch area

VTS-1, Vertical Test Stand LVIE

LVIB, Launch Vehicle Integration Building



Satellite antenna site area

Main Building Area Balloon pad

# **SSC SmallSat Express**

#### SmallSat Express launch services starting 2026

- SSC launch services provider
- Frequent access to space from Esrange Space Center in Sweden
- Easy access via air, road, rail, or sea
- Reference orbit: 550 km SSO (other high-inclination orbits acheivable)
- Industry standard separation systems and dispensers
- On-site operations support, launch control center, integration building with ISO 8 clean room (ISO 7 upon request), customer facilities, and hotel
- **SSC CONNECT** for LEOP & On-Orbit satellite ground station services



700kg to 550km SSO liquid oxygen/RP-1 2.0 m fairing

**Firefly Alpha** 

Perigee Blue Whale 180kg to 550km SSO liquid oxygen/methane 1.5m fairing



## SSC SmallSat Express

Esrange Space Center Launch Complex 3

**LVIB** (Launch vehicle integration building)

#### LC-3A -

- Microlaunchers
- ~200 kg to SSO
- First launch 2026

#### LC-3C

- Minilaunchers
- ~800+ kg to SSO
- First launch 2027

LC-3B

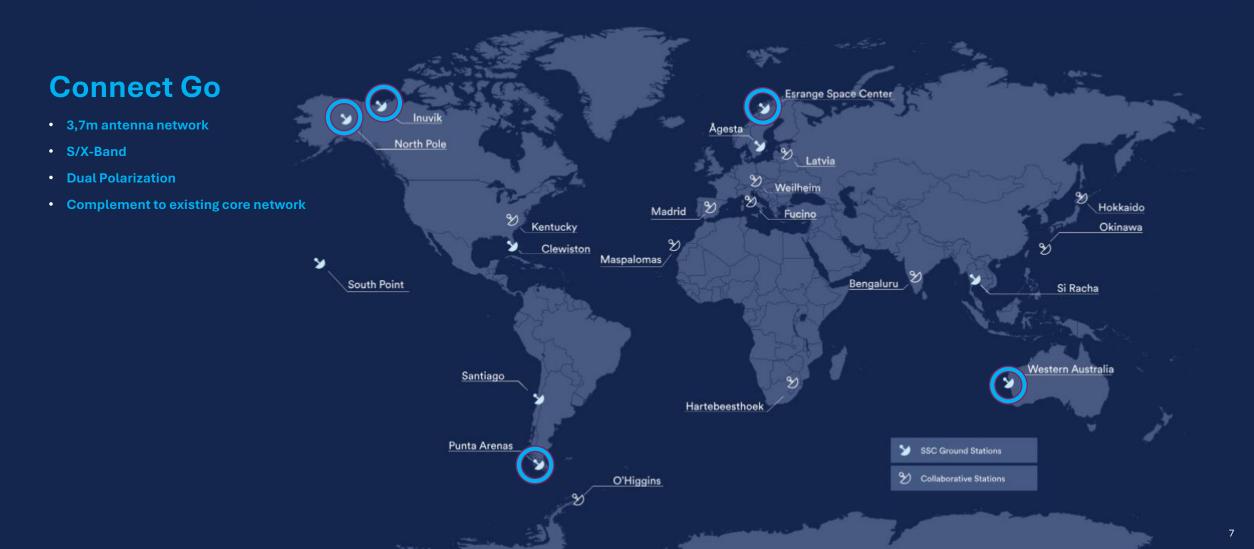
• Reusability testing

# **SSC CONNECT Ground Station Network**

Global connectivity for reliable spacecraft operations









### Swedish Space Corporation

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www.sscspace.com