

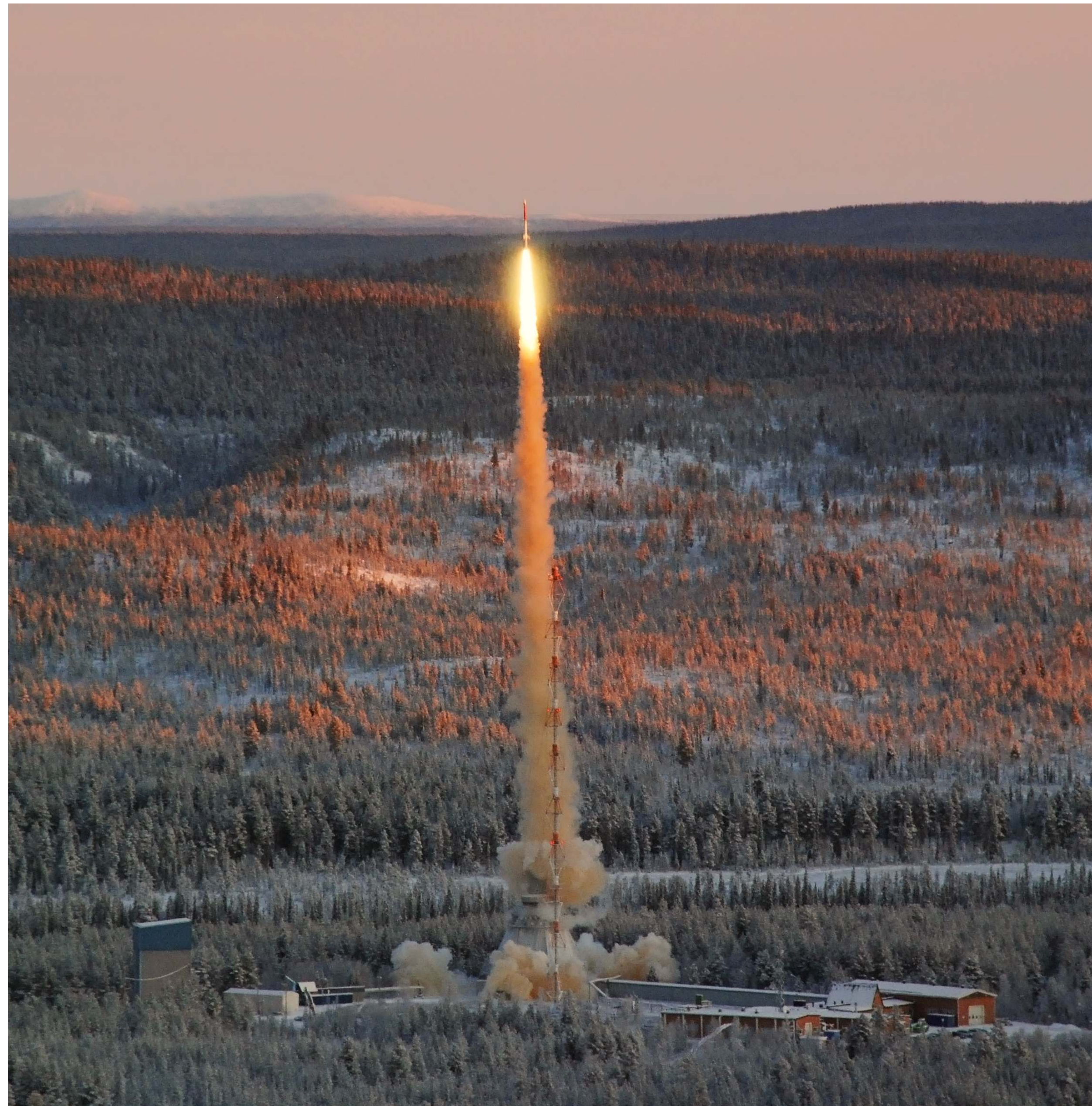


Esrange Space Center

Europe's most versatile Space Center

Testbed Esrange

- Horizontal Teststands
- Vertical Engine Teststands
- Reusability
- Vertical Stage Teststands
- Planetary Landers
- UAS**
- UAV Validation



Sounding Rockets

- Aurora and Atmospheric Science
- Microgravity and Atmospheric Reentry
- Rideshare Missions and Suborbital Express
- Student Missions

Ground Network Services

- On-site antenna park, key-node in one of the world's largest commercial ground station networks.



Stratospheric Balloons

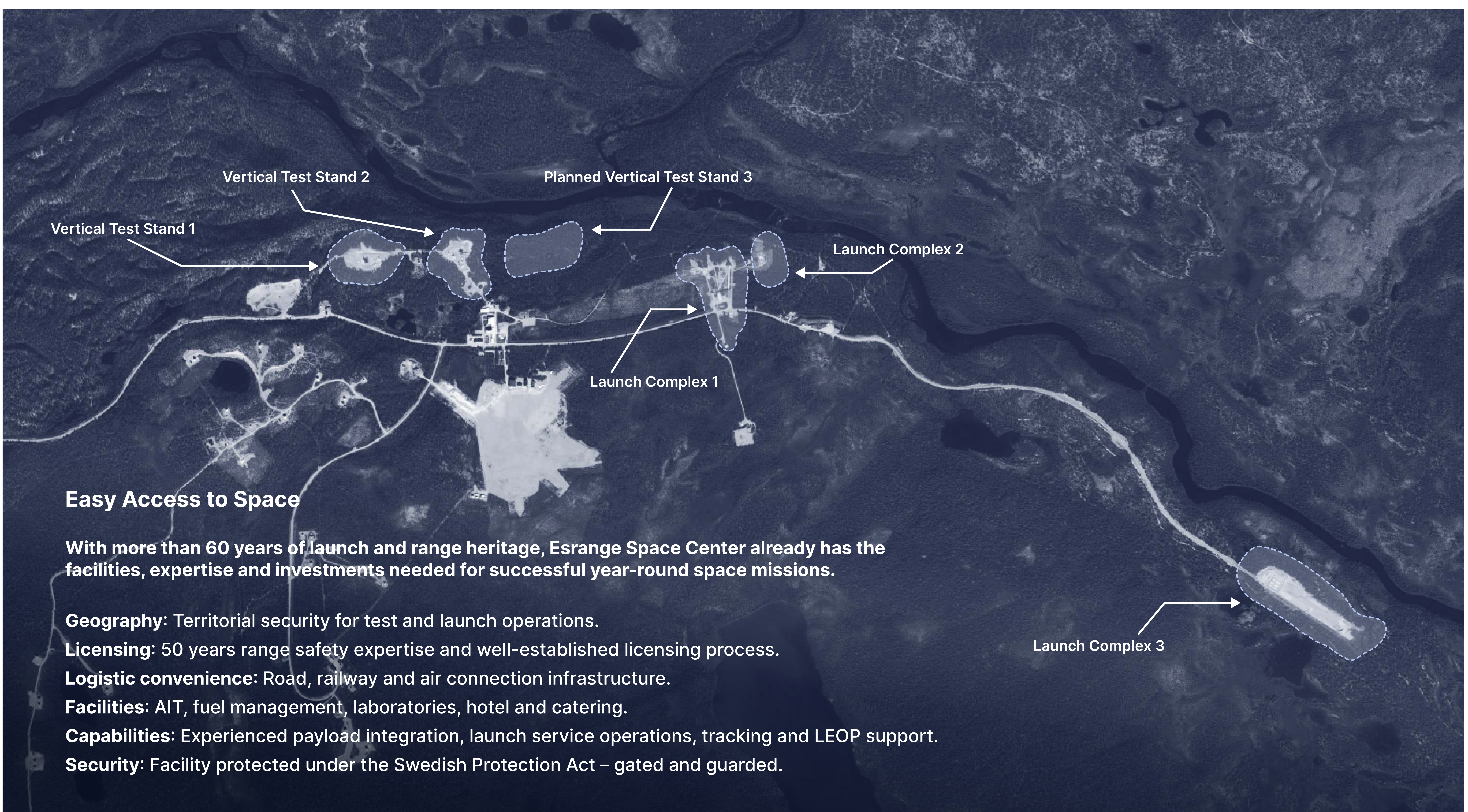
- Circumpolar Balloon Flights
- Drop Tests
- Student Missions
- Mobile Ballooning

Spaceport Esrange

- 3 orbital launch pads
- Vehicle Integration Building
- Spaceport Services
- Launch Service Provider



Established services Coming services



Easy Access to Space

With more than 60 years of launch and range heritage, Esrange Space Center already has the facilities, expertise and investments needed for successful year-round space missions.

- Geography:** Territorial security for test and launch operations.
- Licensing:** 50 years range safety expertise and well-established licensing process.
- Logistic convenience:** Road, railway and air connection infrastructure.
- Facilities:** AIT, fuel management, laboratories, hotel and catering.
- Capabilities:** Experienced payload integration, launch service operations, tracking and LEOP support.
- Security:** Facility protected under the Swedish Protection Act – gated and guarded.

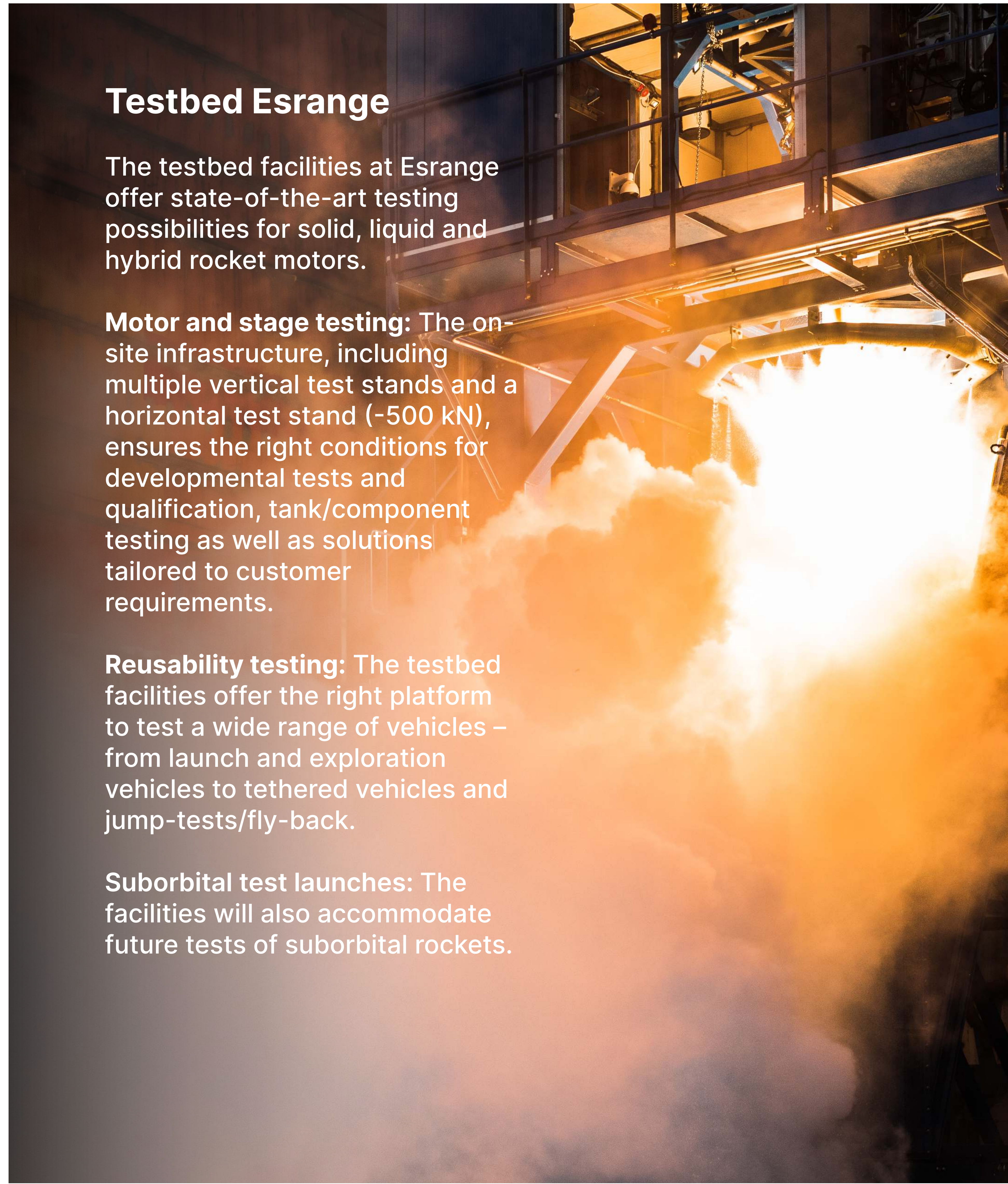
Testbed Esrange

The testbed facilities at Esrange offer state-of-the-art testing possibilities for solid, liquid and hybrid rocket motors.

Motor and stage testing: The on-site infrastructure, including multiple vertical test stands and a horizontal test stand (-500 kN), ensures the right conditions for developmental tests and qualification, tank/component testing as well as solutions tailored to customer requirements.

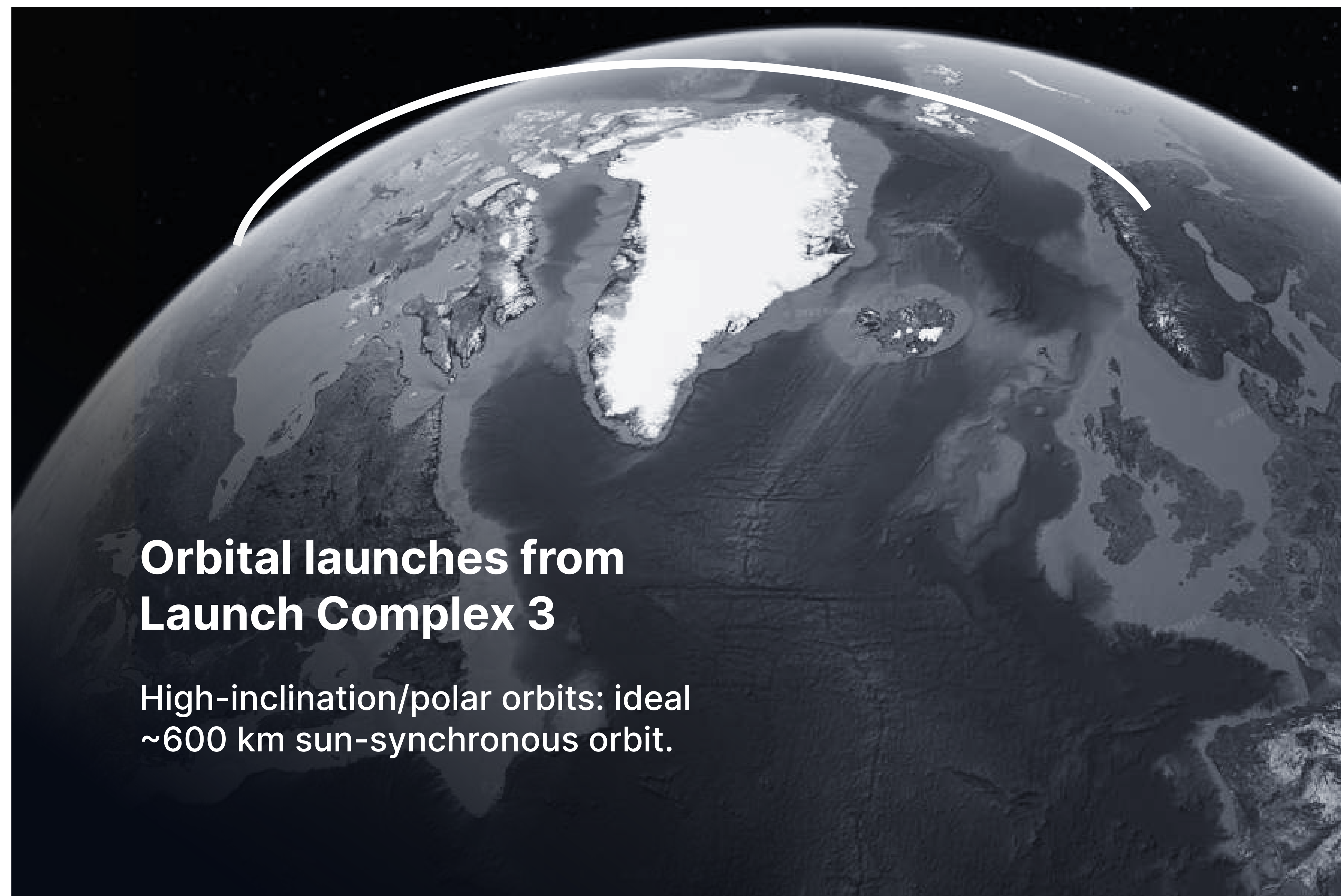
Reusability testing: The testbed facilities offer the right platform to test a wide range of vehicles – from launch and exploration vehicles to tethered vehicles and jump-tests/fly-back.

Suborbital test launches: The facilities will also accommodate future tests of suborbital rockets.



Orbital launches from Launch Complex 3

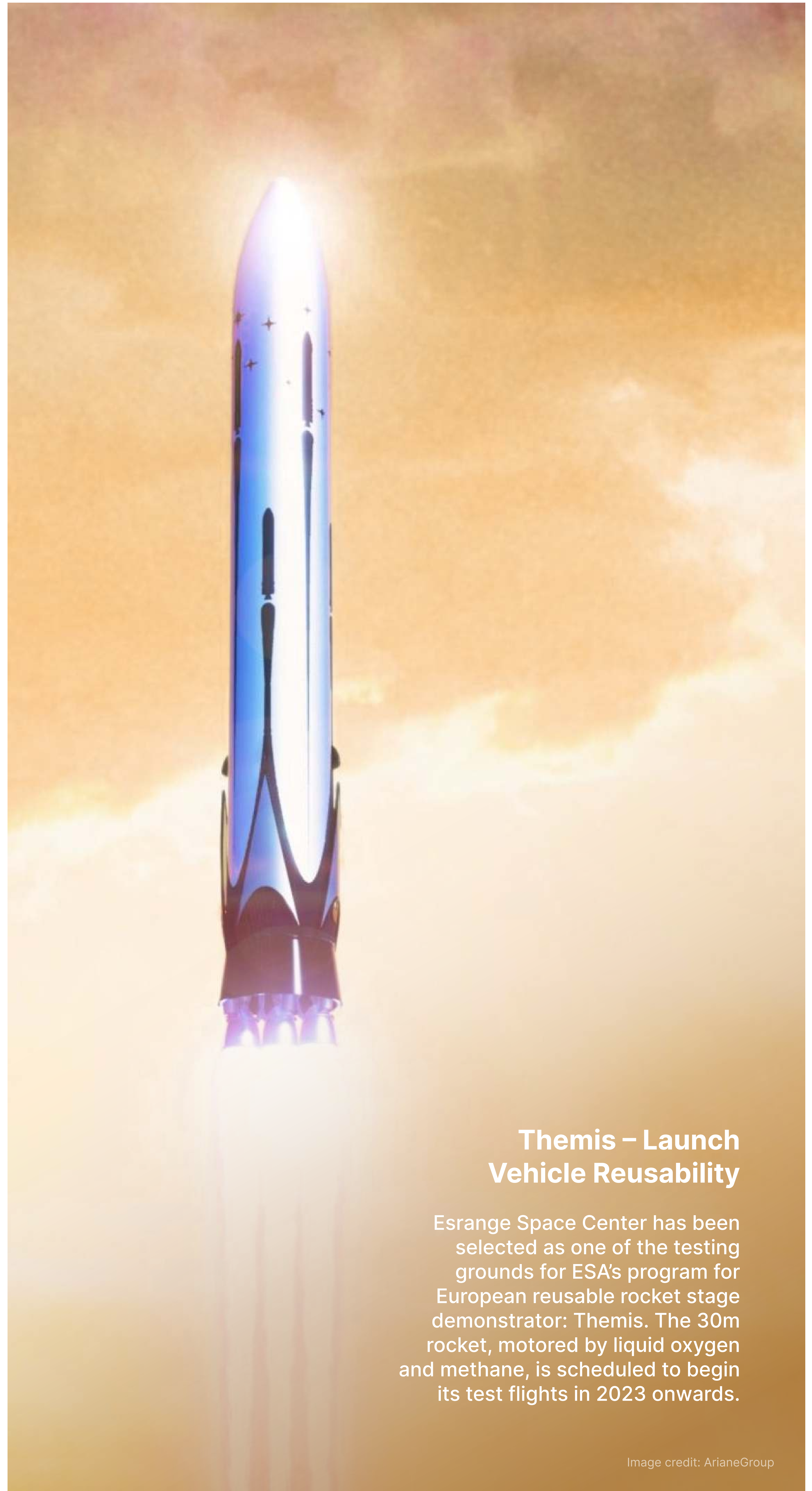
High-inclination/polar orbits: ideal
~600 km sun-synchronous orbit.



Themis – Launch Vehicle Reusability

Esrange Space Center has been selected as one of the testing grounds for ESA's program for European reusable rocket stage demonstrator: Themis. The 30m rocket, motored by liquid oxygen and methane, is scheduled to begin its test flights in 2023 onwards.

Image credit: ArianeGroup



LC-3C

- Minilaunchers
- ~1200+ kg to SSO
- First launch 2023

LC-3B

- Reusability testing
- First launch 2023

LC-3A

- Microlaunchers
- Suborbital rockets
- ~300 kg to SSO

LVIB (Launch vehicle integration building)

Liquids and gases infrastructure

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