

# WE HELP EARTH BENEFIT FROM SPACE

## SSC INTRODUCTION

Axel Vidmark 2019-09-17







#### SSC WORLDWIDE





#### SOME OF OUR CUSTOMERS AND PARTNERS























































#### **DECADES OF EXPERIENCE**

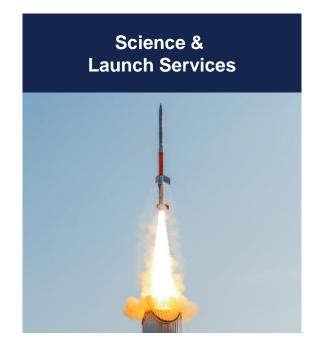
SSC

- Space operations services since 1958
- Collaborative partner to the world's space agencies and organizations
- Enabler of new government and commercial space endeavors
- Owner/operator of one the world's largest multi-mission ground station network
- Actively engaged in customers' mission-critical spacecraft operations every day



### **BUSINESS AREAS**







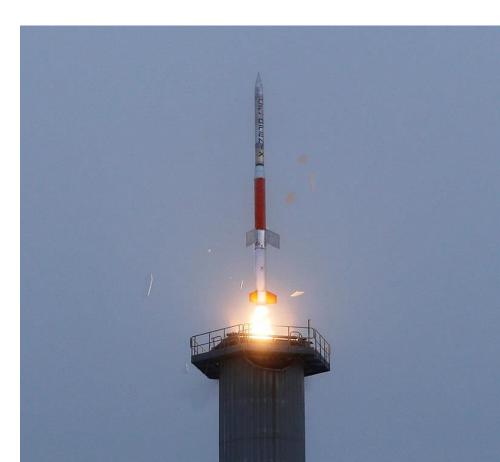




#### SCIENCE & LAUNCH SERVICES



- Sounding Rockets
- Stratospheric Balloons
- Autonomous Systems
- Ground Instruments
- Payloads & Systems
- Scientific support
- Test & Validation
- Software Development
- Small Satellite Launches



#### **ESRANGE**

#### THE MOST VERSATILE SPACE CENTER IN THE WORLD



#### **SCIENCE & LAUNCH SERVICES**



**Sounding Rockets** 



**Technology Demonstrations** 



**Stratospheric Balloons** 



**Reusability Test-Bed** 







#### SATELLITE GROUND NETWORK SERVICES



- Launch Support Services
- On Orbit Services
- Hosting Services
- Satellite & Network Operations
- Gateway Services
- Teleport & Media Services
- Data Handling & Processing
- Consulting & Mission Engineering



#### SSC GLOBAL NETWORK OF GROUND STATIONS



GLOBAL CONNECTIVITY FOR SPACE OPERATIONS



One of the world's largest multi-mission tracking networks

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GLOBAL CONNECTIVITY FOR SPACE OPERATIONS

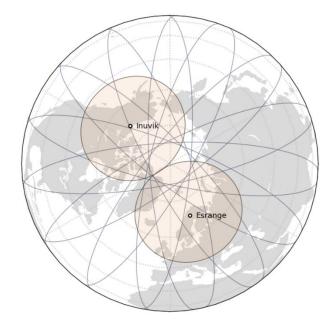


One of the world's largest multi-mission tracking networks

#### ARCTIC COVERAGE IMPLEMENTATION



The SSC Inuvik station in Canada was established in 2010 to complement the Kiruna station, at same latitude and with 180° separation.



The two sites are operated together by SSC, <u>as</u> <u>one site</u>, with the load shared seamlessly.

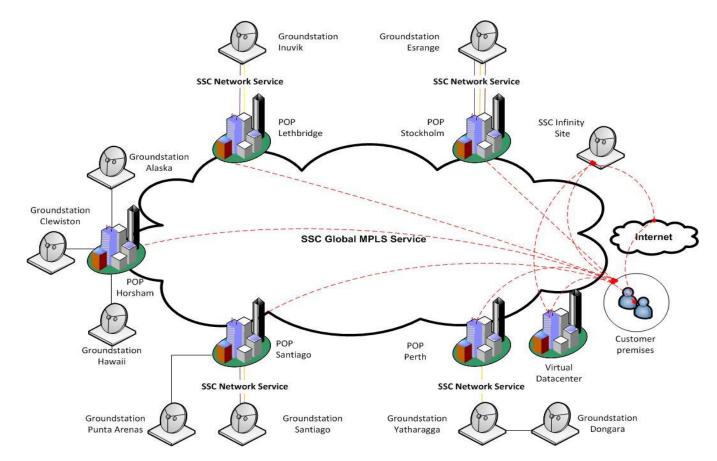
- The geometry and separation gives a favorable solution to download more data by avoiding overlapping coverage.
- Allows for data downloads that are nonintrusive with respect to many imaging areas.
- Mitigates RF-interference issues from simultaneous X-band downlinks closer to the North Pole.
- A reliable solution for high availability and flexible scheduling of redundant resources, a requirement for Ka-band and future optical communication.

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#### SSC CONNECTIVITY

# SSC

#### ONE CONNECTION INTO SSC GLOBAL NETWORK - ACCESS TO ALL SERVICES

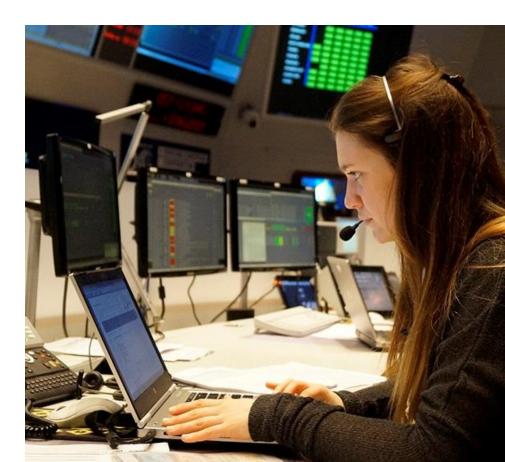




#### **ENGINEERING SERVICES**



- Complete Space Consultancy services at Europe's largest space organizations
  - ESA
  - DLR
  - CNES
- Support during every phase
  - from designing and testing
  - through to launch and operations



#### SPACECRAFT OPERATIONS & ENGINEERING SERVICES



## Support throughout



Satellite & Spacecraft Operations



Ground Segment Infrastructure



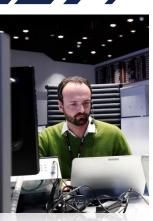
Systems Engineering



Training & simulations



Mission
Assessment &
Engineering



Independent Consultancy

#### **CURRENT IOAG-SSC CONTEXT**



- TODAY:
  - Agency cross-usage of infrastructure
  - Agency mission support
  - CCSDS Observer
    - Usage and implementation in operations
  - SFCG member
- Other Topics of interest within IOAG discussions:
  - OSLG follow-ups
  - DTN
  - LEO26SG follow-ups

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www.sscspace.com