

A cosmic background featuring the Earth's horizon at the bottom, a bright sun or star on the left, and the Milky Way galaxy stretching across the dark sky.

Testbed Esrange

Philip Pålsson

SPACE INNOVATION FORUM

4 - 5 September 2019

ESRANGE SPACE CENTER

WHAT IS DRIVING THE CHANGE?



**Earth
Observations**



**Positioning
& Navigation**



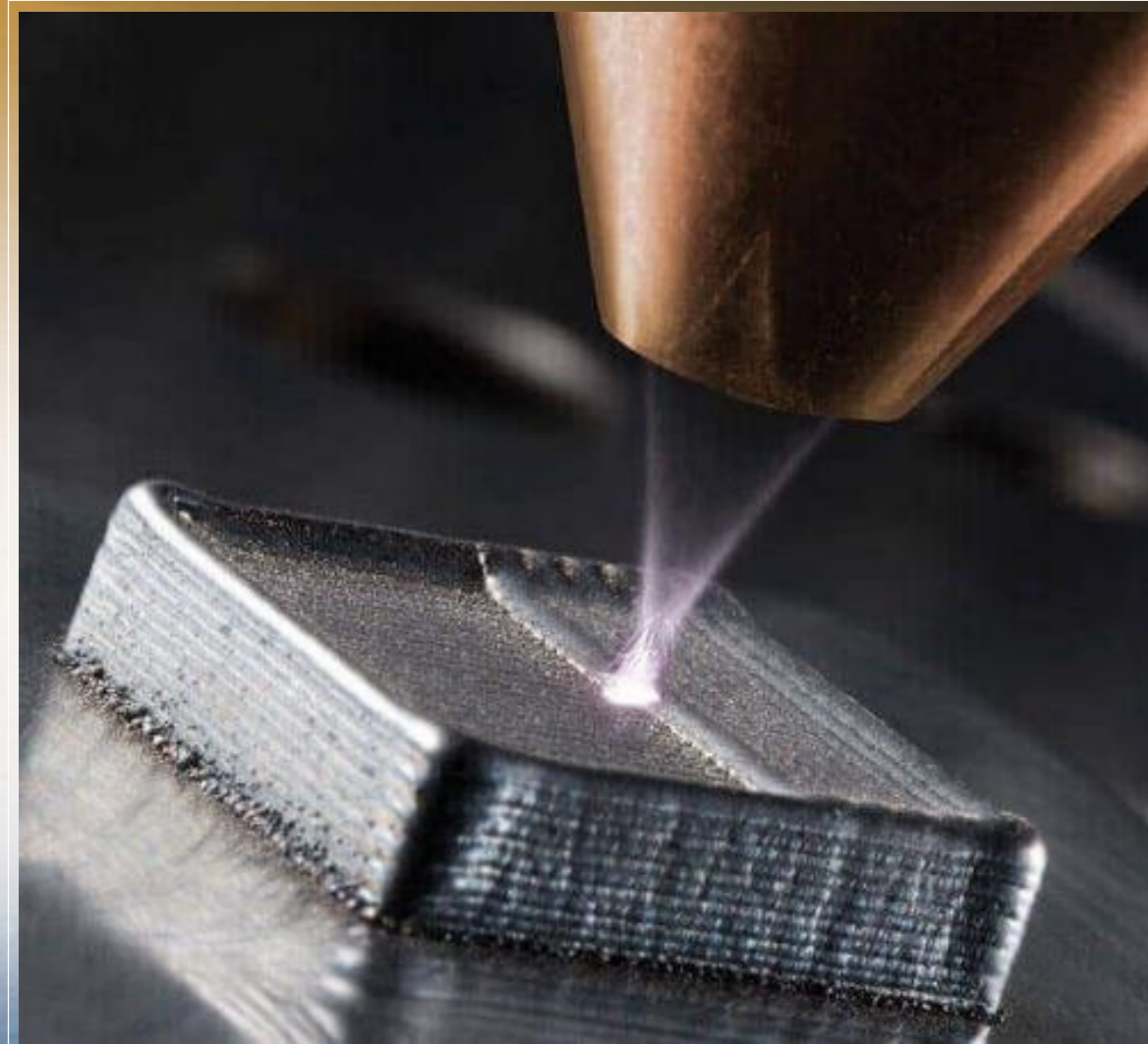
Communication



**Risk
Management**

- Transfer of critical infrastructure into the space segment
- Low cost access to space
- Real-time access to global EO/telecom data

PREREQUISITS FOR CHANGE



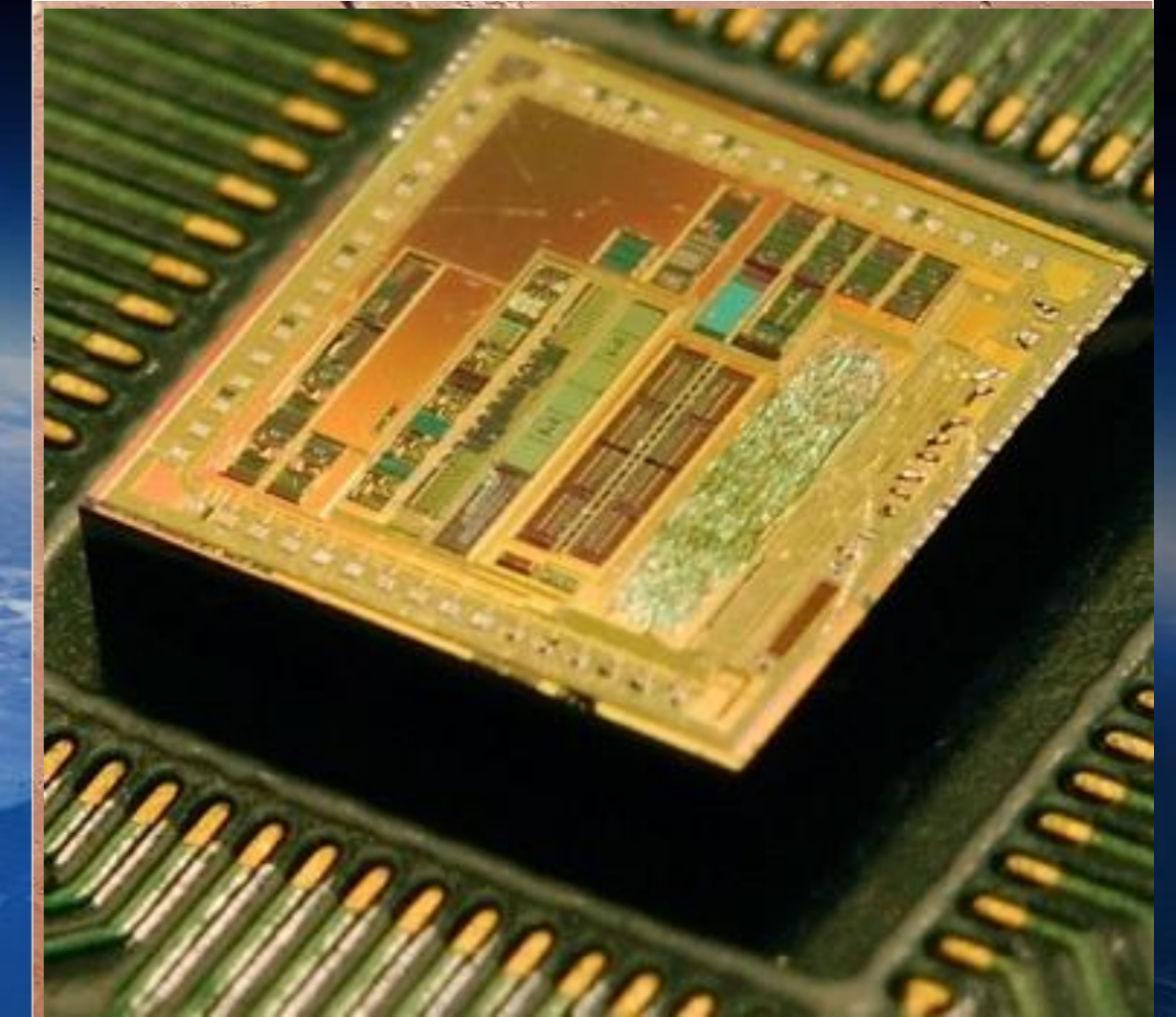
Manufacturing processes



Automation and AI



Big data



Nanotechnology

- Industrialization
- Spin-in from other industry

SMALLSAT EXPRESS

GOAL



SSC shall launch satellites into orbit from Esrange before the end of 2021, making Sweden the primary European location for launching small satellites.

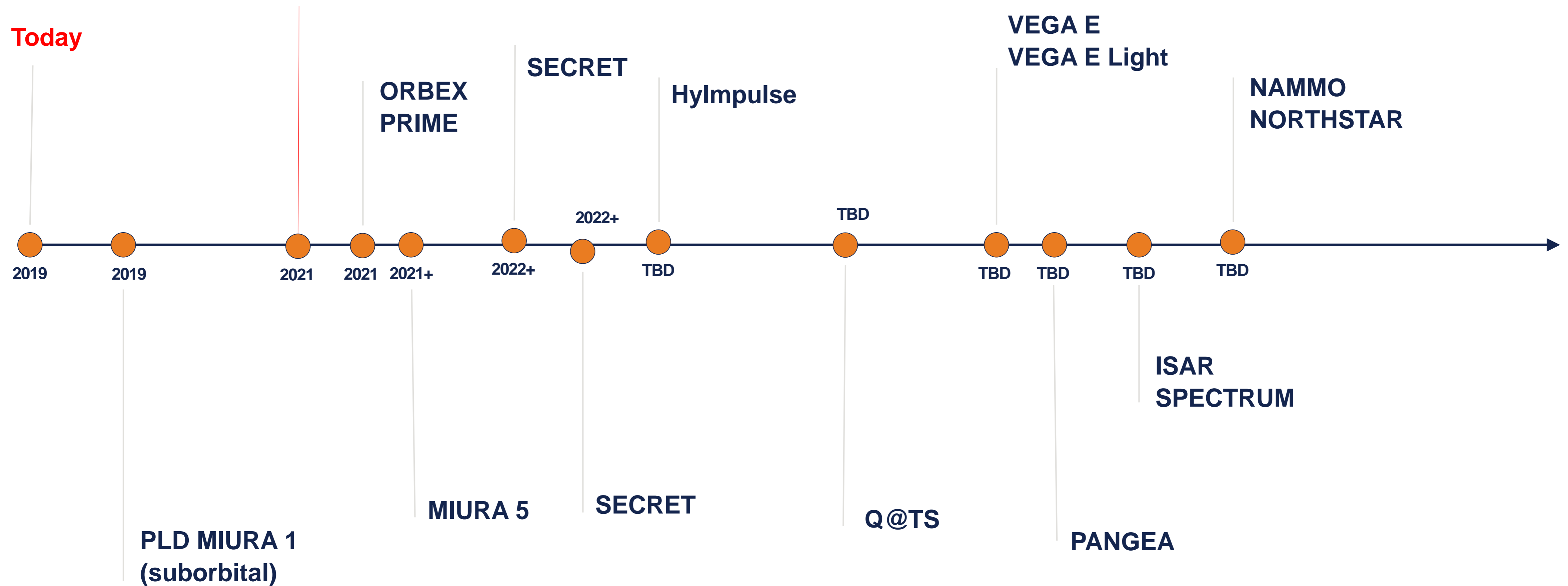


EUROPEAN MICROLAUNCHERS

GENERIC LAUNCH DATES

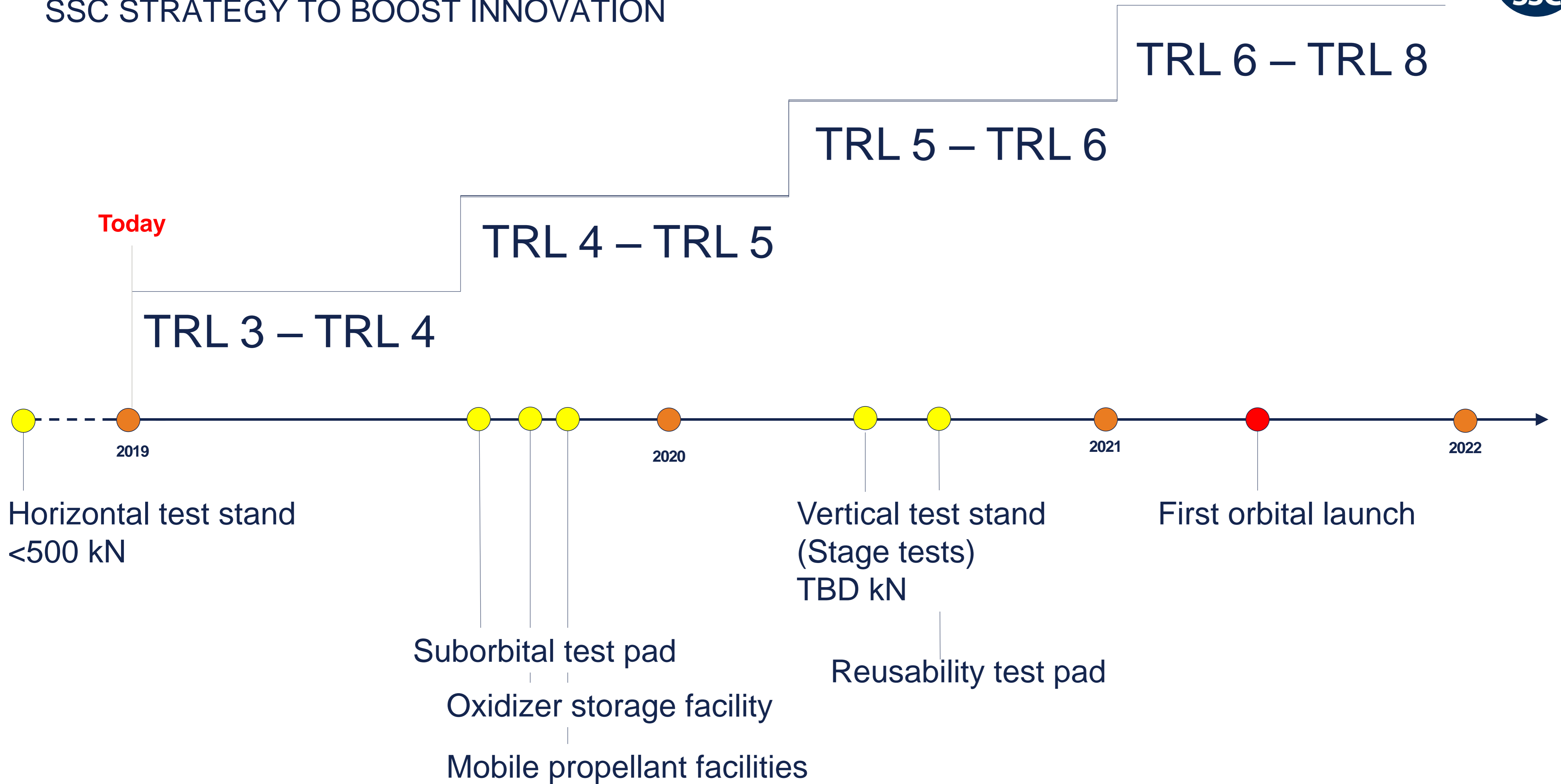


First Orbital Launch From Esrange



LAUNCHER DEVELOPMENT

SSC STRATEGY TO BOOST INNOVATION

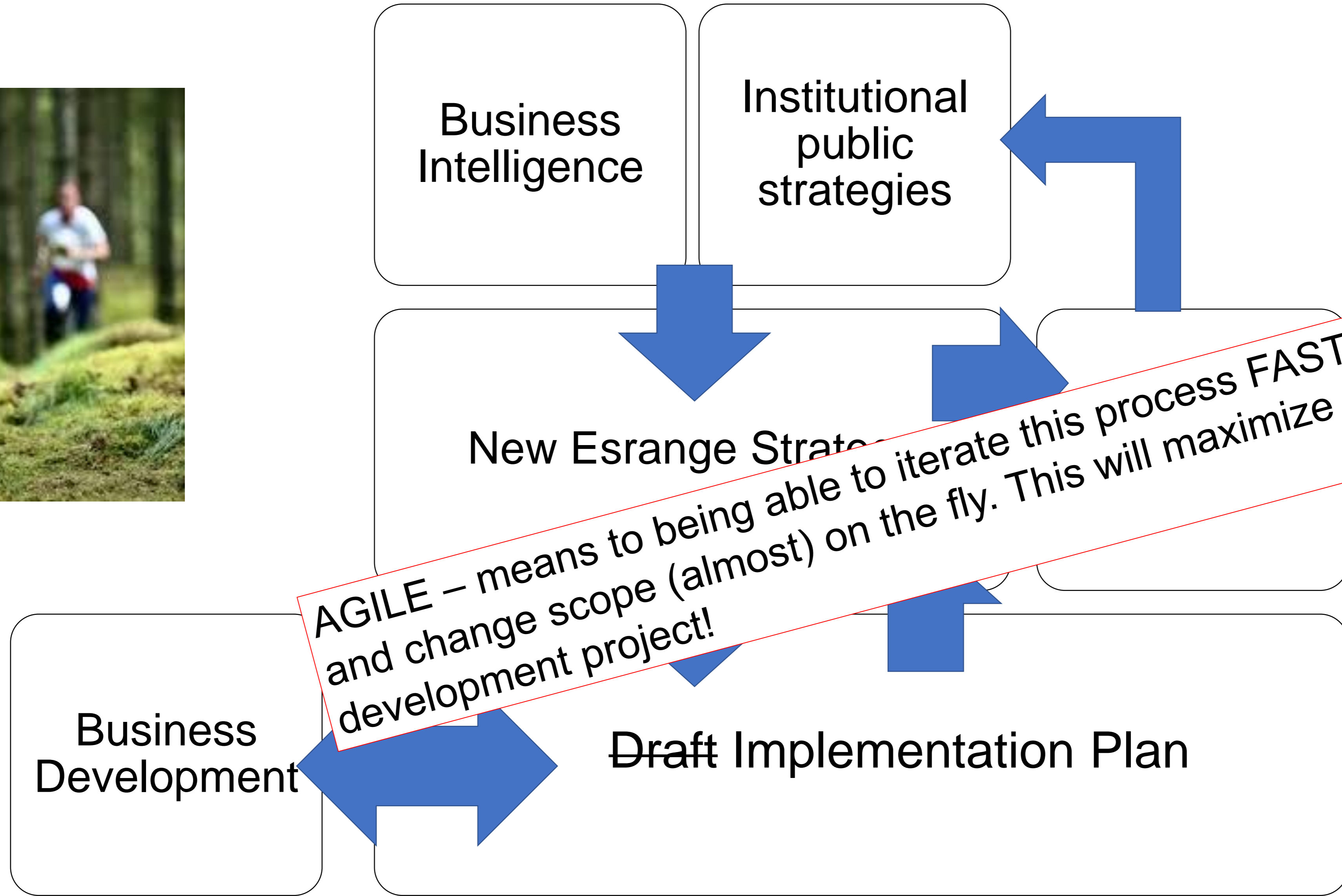


THE NEW SPACE RACE

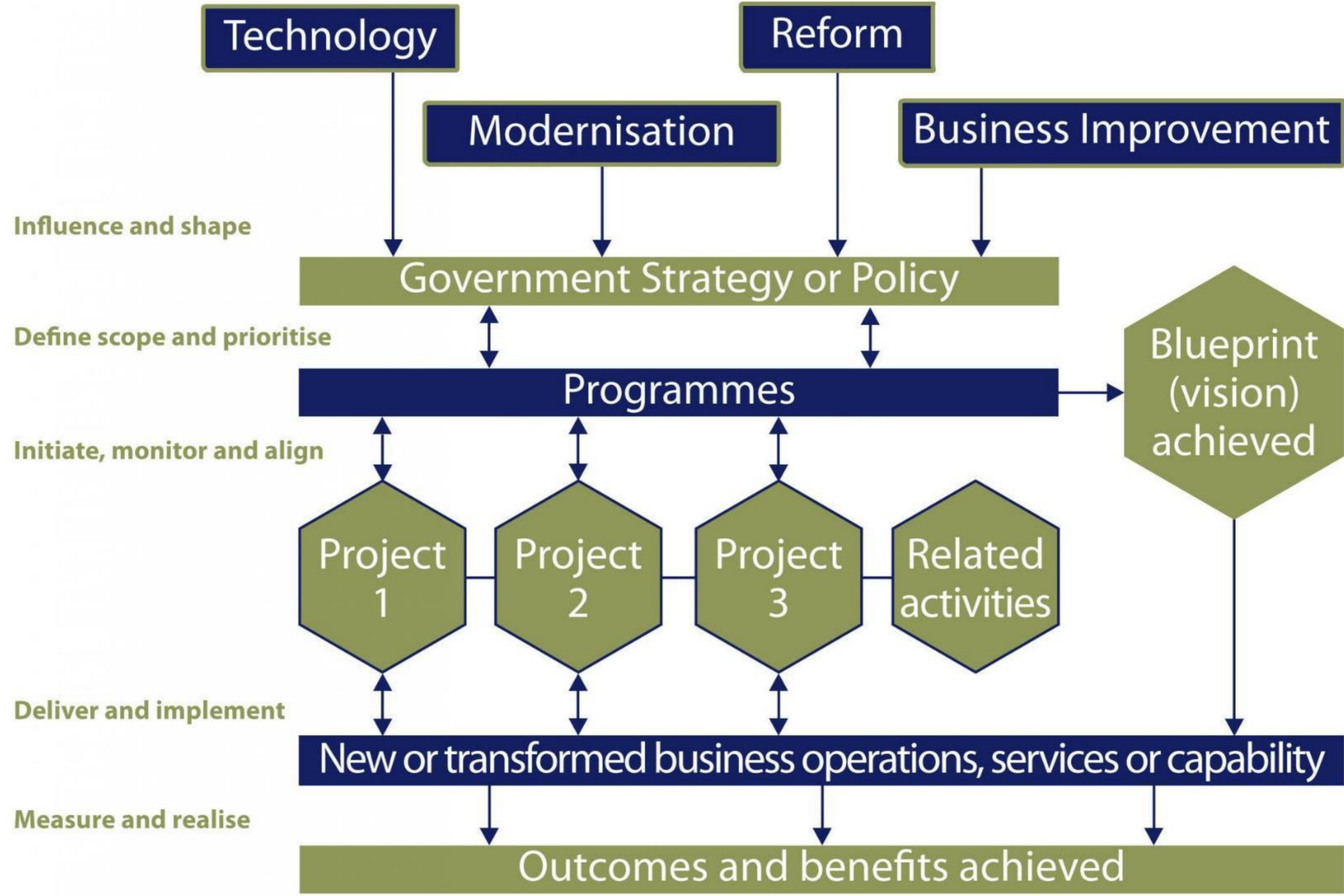


- ✓ Global competition
- ✓ Accelerate time to market
- ✓ Challenge assumptions
- ✓ Find synergies between new and existing capabilities
- ✓ Early access to testing
- ✓ Simplify

KEYWORD: MINDSET

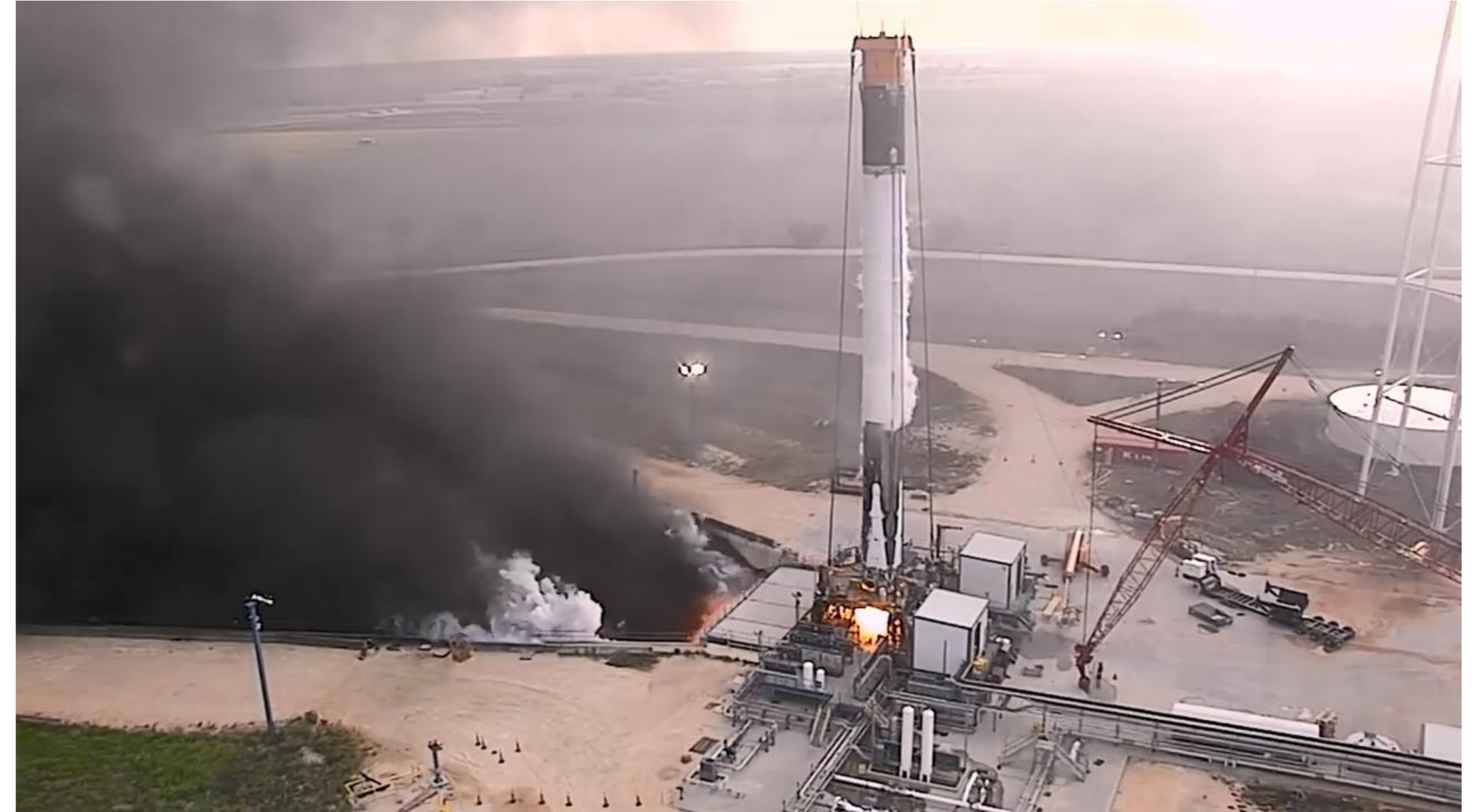


Build



TESTBED ESRANGE

OVERVIEW



Unique support services for:

- Engine development and test
- Stage development and test

TESTBED ESRANGE

OVERVIEW



Unique support services for:

- Exploration vehicle and system test
- Reusability testing for launchers
- Sub-orbital rocket test launch



RIT 2021

Operated by



Partners



Sponsors



KIRUNA KOMMUN



LULEÅ KOMMUN





THANK YOU

SPACE

INNOVATION

GROWTH

COOPERATION