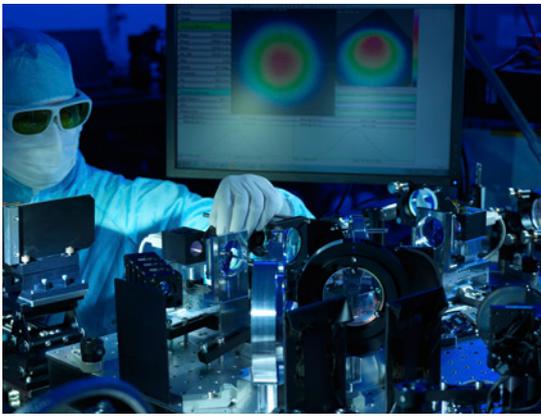


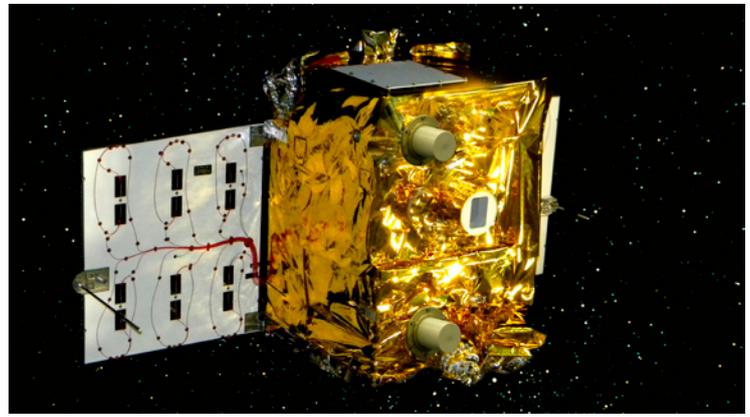


## New Space Berlin

The Space Industry in the German Capital Region



Test set-up and assembly area in a clean room environment at Berliner Glas



Model of TET-1 Satellite by Astro- und Feinwerktechnik Adlershof

#### Companies

Aerospace Innovation  
 AIRBUS Defense & Space  
 Alberding Deutschland  
 Arquimea Deutschland  
 ASTRATUM  
 Astro- und Feinwerktechnik Adlershof  
 Berliner Glas  
 Berlin Space Technologies  
 beSpace  
 Blue Sky Solutions  
 Canlas Laser Processing  
 DBS AEROSPACE  
 DELPHI IMM  
 Eagleyard Photonics  
 ECM Launch Services  
 Esri Deutschland  
 Ferchau Engineering  
 First Sensor  
 geoSYS  
 Germania Werk Schubert  
 German Orbital Systems  
 HERE  
 HSA Microtech  
 IQ Wireless  
 KAPI electronics  
 LiveEO  
 Magson  
 Newtec Communications  
 NICOMATIC  
 Optris  
 Orbit Recycling  
 Philotech Systementwicklung  
 und Software  
 pinasys  
 Planet  
 Point Cloud Technology  
 PTScientists  
 Project AlphaLink  
 Resonic  
 SAP  
 Sonaca Space  
 Space Structures  
 TomTom  
 Vectronic Aerospace

### Berlin: Germany's New Space hotspot

For the past few years, private spaceflight has been developing rapidly worldwide. It is playing a major role in addressing global challenges. New technical possibilities open up applications in many sectors – from agriculture, to disaster and environmental protection, energy supply, telecommunications, to automated transport. One of the hotspots of this development is Berlin.

Berlin facilities for small and nano-satellites are among the pioneers in the world which have rapidly gained commercial importance in recent years. More than 70 companies and research institutes from the German capital region strive for space and with their various expertise and specializations, form a holistic, interdisciplinary center of competence for space technologies and applications.

Operation in space places extremely high demands on technology. What's needed is the cooperation of highly specialized researchers and engineers from various fields. Berlin-Brandenburg has optimal conditions in this regard. The extensive research landscape and strong business clusters, particularly in the fields of



"Small satellites are the future of spaceflight; Berlin is both the cradle of this technology and their most important German location today. This innovation has been taking place at companies, research institutions, and universities for more than 20 years. Thus, the value chain from system technology to the marketing of data products is at home in the German Capital Region."

**Dr. Sebastian Scheiding**  
 CEO  
 Astro- und Feinwerktechnik Adlershof GmbH



"From Berlin-Adlershof we plan space missions to objects of our solar system and to search for planets around distant stars. We develop hardware and software components and algorithms for data analysis. The region's research institutions and space industry offer ideal conditions for this interdisciplinary work."

**Prof. Dr. Heike Rauer**  
 Head of the Institute of Planetary Research  
 German Aerospace Center

ICT, photonics, and aerospace, ensure that New Space businesses are able to thrive in an optimal environment. The city also attracts talent from all over the world.

### Excellent research

The Technische Universität Berlin is the university with the most satellites in orbit worldwide. During the mission in February 2018 that put four nanosatellites communicating with each other into orbit, the Berlin-based companies IQ wireless, Astro- und Feinwerktechnik Adlershof, and ECM Space Technologies were involved in addition to the TU Berlin.

The second important research institution is the German Aerospace Center with the Institutes for Planetary Research and for Optical Sensor Systems, which also operate their own technology development.

Numerous other research institutions contribute to space technology – including medical research at the Center for Space Medicine (ZWMB) of the Charité – Universitätsmedizin Berlin.



S-Net satellite check out



TU Berlin S-Net team in front of Soyuz fairing

## Extensive expertise

The Berlin-based companies and research institutes develop and build subcomponents as well as complete small and nanosatellites with a variety of application technologies. These include drive technology, lightweight components, electronics, optics, laser systems, power supply, measuring instruments, communication technology, sensors, simulation software, etc.

Large international players are also discovering Berlin as a location for space technology. Planet, one of the world's most important New Space players, operates the largest satellite fleet in space from Berlin. There are currently about 150 satellites in use, with which Planet scans our earth daily and which it then uses to create a picture of the whole world once a day. Airbus Defense and Space has a branch in Potsdam and the Belgian aerospace group SONACA is represented with the Sonaca Space GmbH in the Technology Center Adlershof.

## Innovation and startup culture

Berlin is very popular with tech startups. The primary reasons include the already established startup scene with a variety of incubators, accelerators, and co-working spaces, the



of Berlin as a region for innovation in space technology."

**Prof. Dr. Klaus Briß**  
Chair of Space Technology  
Department of Aeronautics and Astronautics  
Technische Universität Berlin

"The excellent cooperation with innovative companies and institutions were a key factor for our successful satellite and space projects. The increased number of international students in our space program confirms the attractiveness



is a perfect breeding ground for the next groundbreaking New Space startups."

**Sven Przywarra**  
Founder NewSpaceVision  
Co-founder LiveEO

"Space technology is changing rapidly and has the potential to significantly influence many industries on Earth. With its startup ecosystem, its large amount of tech talent from all over the world, and the pioneering role of TU Berlin in small satellite construction, Berlin

comparably more affordable cost of living, and the increased attractiveness of the city for young people from all over the world.

The players particularly benefit from intensive cooperation and networking. The Berlin Brandenburg Aerospace Alliance (BBAA) as the local industry network and the NewSpaceVision initiative, which offers a platform for continuous exchange with meetups and conferences, play an important role.

## To the moon and beyond

PTScientists aim to land the first private mission on the Moon. They will deliver a number of scientific and cultural payloads to the lunar surface, as well as two Audi lunar quattro rovers, which will capture the first hi-res images of Apollo 17's original lunar roving vehicle. PTScientists are working with Vodafone to create a 4G network on the Moon to send the data back to their lander, which will then transmit it to Earth. Additional mission partners are Infineon, Omega and On, who will support the mission with components, time-keeping and mission gear.

Players from Berlin are also participating in the SpaceX Mars mission.

## Business Incubation / VC

AtomLeap  
Interstellar Ventures

## Research

BAM Federal Institute for Materials Research and Testing  
Beuth University of Applied Sciences Berlin  
Brandenburg University of Technology Cottbus-Senftenberg  
Center for Space Medicine Berlin  
Deutsches Elektronen-Synchrotron DESY  
Ferdinand-Braun-Institut, Leibniz-Institut fuer Hoechstfrequenztechnik (FBH)  
Fraunhofer Heinrich Hertz Institute HHI  
Fraunhofer Institute for Open Communication Systems FOKUS  
Fraunhofer Institute for Production Systems and Design Technology IPK  
Fraunhofer Institute for Reliability and Microintegration IZM  
Freie Universität Berlin  
German Aerospace Center (DLR)  
GFZ German Research Centre for Geosciences  
Hasso Plattner Institute  
Helmholtz-Zentrum Berlin für Materialien und Energie  
Hochschule für Technik und Wirtschaft Berlin  
Humboldt Universität  
Paul Drude Institute for Solid State Electronics (PDI) Leibniz Institute  
Technical University of Applied Sciences Wildau  
Technische Hochschule Brandenburg  
Technische Universität Berlin  
Zentrum zur Förderung eingebetteter Systeme (ZeSys)

## Associations / networks

Association for Geoinformatics, GeolT and Navigation  
Berlin-Brandenburg Aerospace Alliance (BBAA)  
DIN Deutsches Institut für Normung  
Disrupt Space  
GEOkomm Verband der GEOInformationswirtschaft Berlin/Brandenburg  
New Space Vision  
TelematicsPRO Utilities

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Berlin offers excellent starting conditions for growth, production, research and development. Economic policy focuses on innovation and technological performance.

Our goal is to help companies and scientific institutes start up, develop and network here.

We support you with:

- Finding a location
- Funding and financing
- Technology transfer and R&D cooperation
- Collaborative networks
- Recruiting strategy
- International market development

Contact us!

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Photo of Berlin from the Sentinel-1A satellite, transmitted via laser using technology from Ferdinand Braun Institute and Berliner Glas Group



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