

Customized solutions

Experience has shown that almost all test scenarios have individual prerequisites and requirements. We create the appropriate project- and requirement-related framework, whether it is support in the approval process (including special permits if necessary) or the provision of the required infrastructure.

We rely on close personal contact throughout the entire project, before and after, to find the optimal overall solution. In coordination with our project partners and users, we are constantly working on the expansion of the test framework in the test center, as well as the specification and further development of our infrastructure, which can be used in a variety of ways.

Test scenario insights



HyBird – small electric aircraft concept



CORUS-XUAM – Urban Air Taxi Management




HorizonUAM – Urban Air Mobility



ALAADy – Cargo drone

Contact

We are happy to answer your questions about testing options. Feel free to contact us at [cochstedt@dlr.de](mailto:cochstedt@dlr.de).



You can find detailed information about the test center on our website.

DLR at a glance

DLR is the Federal Republic of Germany’s research centre for aeronautics and space. We conduct research and development activities in the fields of aeronautics, space, energy, transport, security and digitalisation. The German Space Agency at DLR plans and implements the national space programme on behalf of the federal government. Two DLR project management agencies oversee funding programmes and support knowledge transfer.

Climate, mobility and technology are changing globally. DLR uses the expertise of its 54 research institutes and facilities to develop solutions to these challenges. Our 11,000 employees share a mission – to explore Earth and space and develop technologies for a sustainable future. In doing so, DLR contributes to strengthening Germany’s position as a prime location for research and industry.

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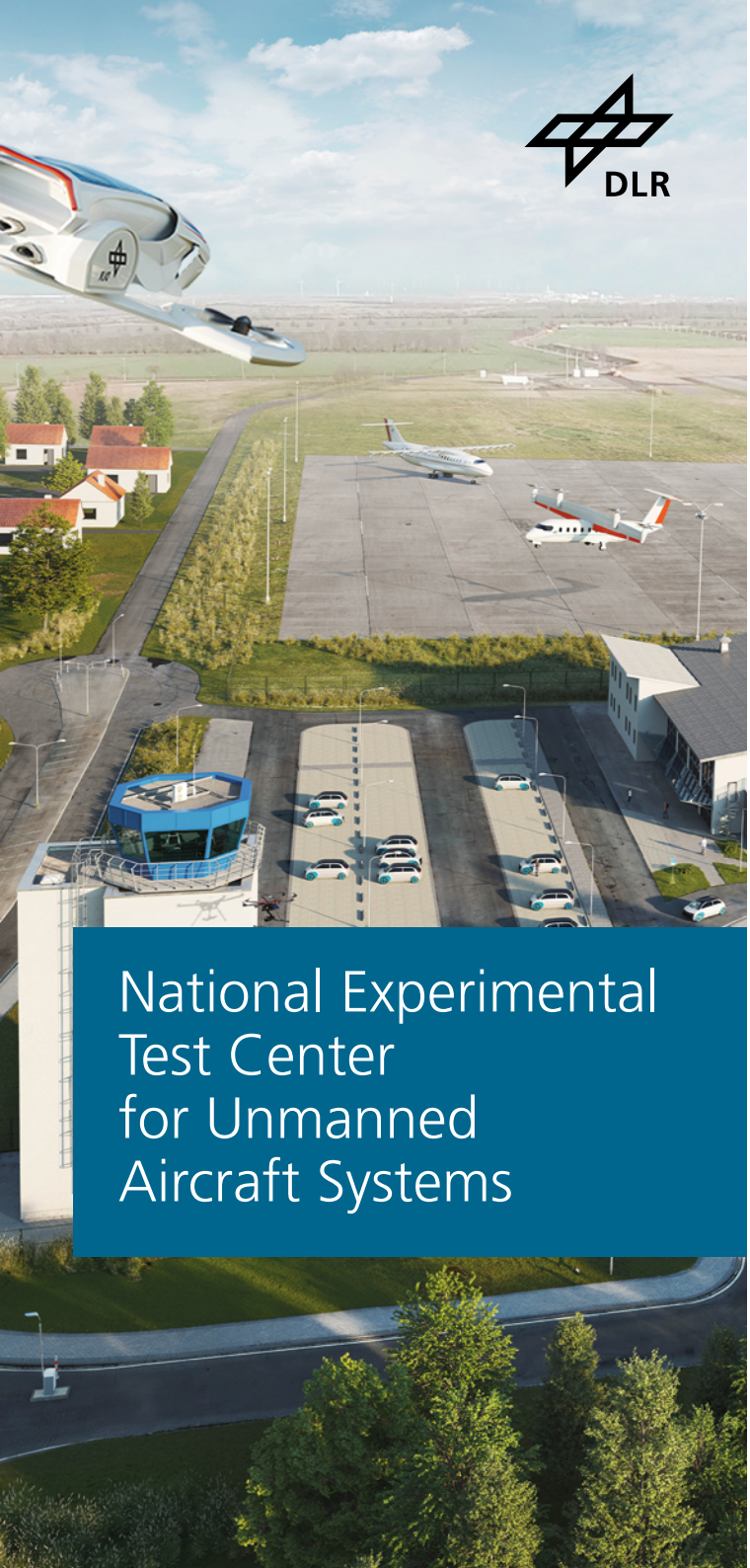
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Flight tests as part of the City-ATM project

Making visions fly

The use of unmanned aircraft systems (UAS) in the commercial sector and in advanced or innovative air mobility (AAM/AM) continues to face both technical and regulatory challenges. Activities at the National Experimental Test Center for Unmanned Aircraft Systems enable cross-disciplinary research of problems and development of solutions to the point of demonstration or application.

The test center serves as a critical enabler for research and industry in the development of new applications, from humanitarian aid to large logistics drones and air taxis. An important framework for this is the combination of conventional airport operations with the ability to prioritize testing and demonstration of UAS technologies, which has been realized in the real-world laboratory at Cochstedt.

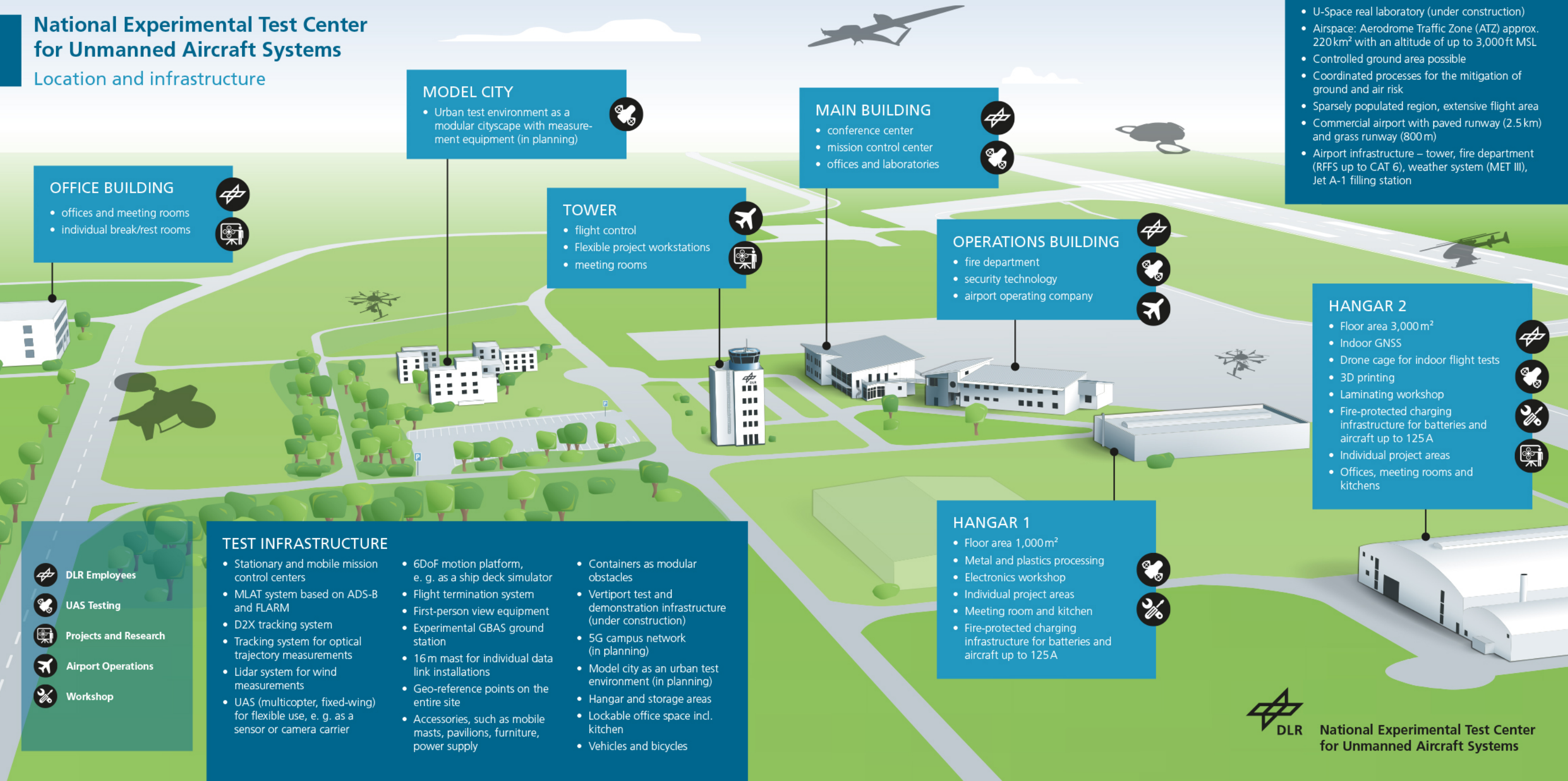
The National Experimental Test Center for Unmanned Aircraft Systems is open to all international customers and users from industry, research and government. Numerous projects and campaigns of start-ups and well-known industrial companies as well as various international research associations have already been carried out here.

With the Experimental Test Center in Cochstedt, DLR operates a highly innovative research infrastructure that is unique in Europe in this constellation.



# National Experimental Test Center for Unmanned Aircraft Systems

## Location and infrastructure



### OFFICE BUILDING

- offices and meeting rooms
- individual break/rest rooms

### MODEL CITY

- Urban test environment as a modular cityscape with measurement equipment (in planning)

### TOWER

- flight control
- Flexible project workstations
- meeting rooms

### MAIN BUILDING

- conference center
- mission control center
- offices and laboratories

### OPERATIONS BUILDING

- fire department
- security technology
- airport operating company

### TESTING AREA

- U-Space real laboratory (under construction)
- Airspace: Aerodrome Traffic Zone (ATZ) approx. 220 km<sup>2</sup> with an altitude of up to 3,000 ft MSL
- Controlled ground area possible
- Coordinated processes for the mitigation of ground and air risk
- Sparsely populated region, extensive flight area
- Commercial airport with paved runway (2.5 km) and grass runway (800 m)
- Airport infrastructure – tower, fire department (RFFS up to CAT 6), weather system (MET III), Jet A-1 filling station

### HANGAR 2

- Floor area 3,000 m<sup>2</sup>
- Indoor GNSS
- Drone cage for indoor flight tests
- 3D printing
- Laminating workshop
- Fire-protected charging infrastructure for batteries and aircraft up to 125 A
- Individual project areas
- Offices, meeting rooms and kitchens

### HANGAR 1

- Floor area 1,000 m<sup>2</sup>
- Metal and plastics processing
- Electronics workshop
- Individual project areas
- Meeting room and kitchen
- Fire-protected charging infrastructure for batteries and aircraft up to 125 A

### TEST INFRASTRUCTURE

- Stationary and mobile mission control centers
- MLAT system based on ADS-B and FLARM
- D2X tracking system
- Tracking system for optical trajectory measurements
- Lidar system for wind measurements
- UAS (multicopter, fixed-wing) for flexible use, e. g. as a sensor or camera carrier
- 6DoF motion platform, e. g. as a ship deck simulator
- Flight termination system
- First-person view equipment
- Experimental GBAS ground station
- 16 m mast for individual data link installations
- Geo-reference points on the entire site
- Accessories, such as mobile masts, pavilions, furniture, power supply
- Containers as modular obstacles
- Vertiport test and demonstration infrastructure (under construction)
- 5G campus network (in planning)
- Model city as an urban test environment (in planning)
- Hangar and storage areas
- Lockable office space incl. kitchen
- Vehicles and bicycles

- DLR Employees
- UAS Testing
- Projects and Research
- Airport Operations
- Workshop



National Experimental Test Center for Unmanned Aircraft Systems