The German Aerospace Center

DLR

"DLR is the ideal place for me to apply my professional skills in a team, and develop them even further."

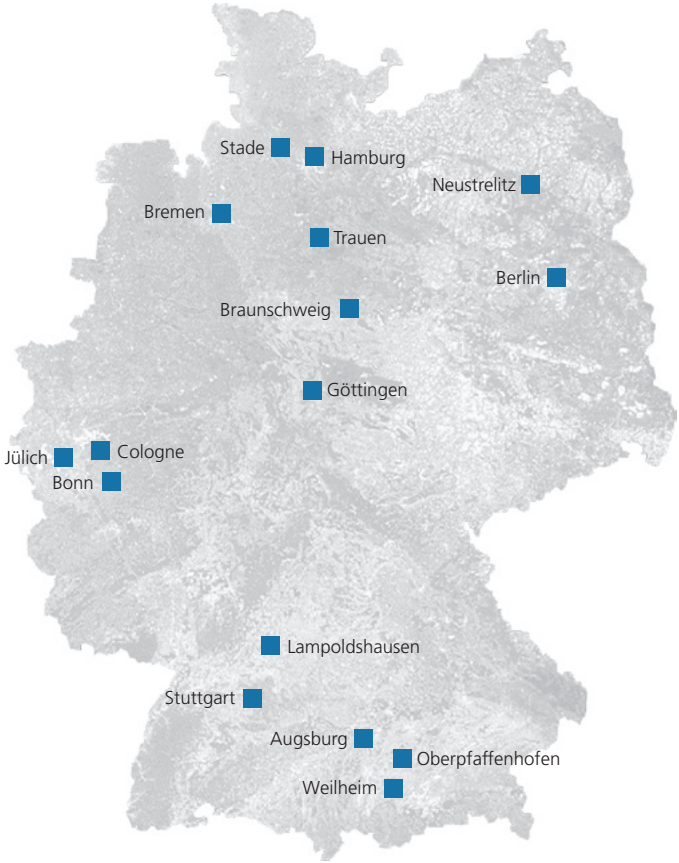
Caroline Forster

About DLR

DLR, the German Aerospace Center, is Germany's national research centre for aeronautics and space. Its extensive research and development work in aeronautics, space, energy, transport and security is integrated into national and international cooperative ventures. In addition, DLR, on behalf of the German Federal Government, is responsible for planning and implementing Germany's space programme. DLR is also the umbrella organisation for the nation's largest project management agency.

DLR is involved in research regarding Earth and the Solar System. It provides expertise in the quest to protect the environment and develops environment-friendly technologies for energy supply, mobility, communication and security. Its portfolio ranges from basic research to the development of products for tomorrow.

DLR operates large research facilities for its own projects, and also acts as a service provider for customers and partners from business and industry. In addition, it promotes and encourages new scientific talent, provides advice to the German government and is a driving force in the regions where its facilities are located.


Stade
Hamburg
Neustrelitz
Bremen
Trauen
Berlin
Braunschweig
Göttingen
Jülich
Cologne
Bonn
Lampoldshausen
Stuttgart
Augsburg
Oberpfaffenhofen
Weilheim

Working at DLR

DLR employs 8000 people; it has 33 institutes, test centres and operational facilities at 16 locations in Germany. The Executive Board is based in Cologne; DLR also has international offices in Brussels, Paris, Tokyo and Washington D.C.

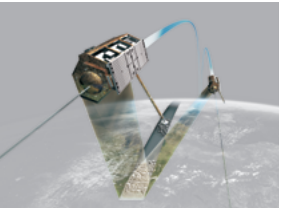
In the financial year 2015, DLR had a budget of 888 million Euros, of which 51 percent were third party funds obtained competitively in the market. The German space budget administered by DLR amounted to 1357 million Euros, of which 66 percent represented Germany's financial contribution to the European Space Agency (ESA), 20 percent went towards the German space programme and 14 percent towards space-related research conducted within DLR itself.

DLR's great productivity is made possible by the exceptionally well trained and highly motivated women and men it employs, all of whom are able to engage in further training at DLR. Equal opportunity is a big area of focus at DLR. Flexible working hours, part-time work and specific promotional measures ensure that the demands of vocation and family remain mutually compatible.

DLR gives the public an opportunity to gain an insight into its work on its Open Days, or here, on German Aerospace Day.

"For me, DLR is an important player in the aerospace sector."

Holger Burkhardt



The German satellite duo TerraSAR-X and TanDEM-X delivers radar data for a 3D elevation model of Earth's entire land surface

Space administration

DLR Space Administration is responsible for the planning and implementation of German space activities on behalf of the German Federal Government. This programme integrates all German space activities at the national and European levels, and includes the national space programme, DLR's space research and development programme as well as German contributions to the European Space Agency, ESA, and to the European Organisation for the Exploitation of Meteorological Satellites, EUMETSAT.

DLR's main client is the German Federal Ministry of Economics and Technology. However, DLR also works for other German government ministries in applied fields such as Earth observation, navigation and satellite communications.

The German space programme comprises satellite communications, navigation, Earth observation, space exploration, research under space conditions, the International Space Station and its utilisation, space transport, and technology for space systems.

DLR.de/Space-Administration

Project management

The DLR Project Management Agency is an important element in the German government's project funding mechanism, supporting research programmes and ensuring that the best projects are implemented in accordance with the legal framework. Areas such as health research, information technology, environment, education and workplace design, as well as projects involving European and international cooperation, have been supported by DLR Project Management. There is also project management for aeronautics research.

DLR.de/en/PT
DLR.de/en/PT-LF

Technology marketing

DLR conducts innovative projects in cooperation with business partners – DLR Technology Marketing views this as its role. As a point of contact for companies, this body constitutes the interface between research and business – between product concept and innovation. In this process, companies are able to benefit from DLR's skills and expertise. The work of DLR Technology Marketing includes evaluating concepts for new products and services, and projects to further develop these for the market. For the men and women who work at DLR, this is the place to go when considering company setups, patent applications and awarding of licensing rights.

DLR.de/en/TM

Developing young talent

DLR fosters and develops talented young scientists from their initial research experiences in school laboratories to doctorate level qualifications and beyond under the title DLR_Campus. School laboratories are now present at most DLR locations. Here, over 100,000 children and young people have experienced a fascination for research by conducting their own experiments.

Every year DLR invites groups of talented young people to attend the DLR_Talent_ School in their area on a full-time basis for one year. Students can complete internships and carry out work for their theses at various institutes. DLR holds competitions in which young people submit their ideas and are encouraged to participate – in collaboration with universities – in unique projects such as flight test campaigns or parabolic flights. The DLR_Graduate_ Program, a high-quality qualification and research programme designed for post-graduate students, gives participants a good grounding in their chosen field and the skills needed for future career stages, such as managing a research group.

DLR.de/Education

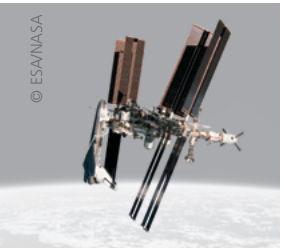
One of the first school laboratories in Germany was the DLR_School_Lab, founded by DLR in Göttingen in 2000.

The DLR_Graduate_ Program seminars are customised to meet the needs of doctoral students

"DLR is the ideal employer for me. Here, I have the flexibility to maintain my work-life balance."

Antje Wörner

Space research



The International Space Station, ISS, on 24 May 2011 with docked Space Shuttle and Automated Transfer Vehicle (ATV)

At DLR, the field of space research includes the development, use and operation of space infrastructure and technologies. This process makes significant contributions that benefit society, especially when the aim is to explore our environment, to identify and understand changes and interrelationships within it, and to develop new communication and navigation technologies. The aims of DLR space research also include learning more about our planetary neighbours in the Solar System, to increase our knowledge of Earth's origin and evolution, and to drive space exploration forward. Space research also includes investigating the life sciences and materials under the specific environmental conditions of space, the development of robotic systems and the operation of control centres.

This sector of research includes Earth observation, communications and navigation, space exploration, microgravity research and life sciences, space transport and technologies for space systems.

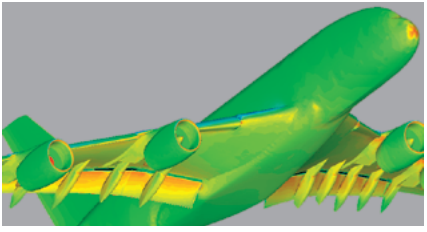
DLR.de/Space

Aeronautics research

As well as conducting basic research, DLR is engaged in application-oriented aeronautics research. DLR's main objective is to strengthen the competitiveness of the German and European aircraft industry and aviation sector, as well as to meet the requirements established by politicians and society. DLR has set itself the challenge of making the fast-growing air transport sector efficient, environment-friendly and sustainable. The core research themes are: greater performance capabilities of the air transport system, improvement of the cost-effectiveness of development and operational work, reduction of noise and noxious emissions, and a better quality of air transport and flight safety.

By virtue of the capacity of its institutes, its involvement in wind tunnel operations and its fleet of research aircraft, DLR is able to approach the air transport system from a whole-system viewpoint. Research is divided into fixed-wing aircraft, rotary-wing aircraft, propulsion systems, air traffic management and in-flight experiments.

www.DLR.de/Aeronautics



Simulated pressure distribution for an Airbus A380 on final approach

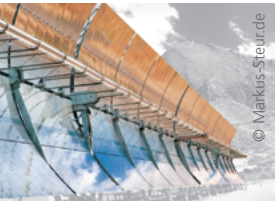
Transport research

The transport sector ensures mobility, creates employment and constitutes a significant portion of the German economy. However, it does have some negative implications for people and the environment. DLR aims to devise solutions for traffic problems to ensure the mobility of people and goods, protect the environment and natural resources, and increase transport safety standards without losing sight of the need for cost-effectiveness.

DLR makes important contributions through its research and development efforts into state-of-the-art transport technologies, concepts and strategies. The focus is on the next generation of cars, commercial vehicles and trains, which should be lighter, use less energy, produce less noise and have improved aerodynamics, safety and comfort. Innovative approaches to the management of road, rail and sea transport and airports are key to improving the effectiveness and efficiency of infrastructure. DLR views the multimodal transport system as a whole – from its origins, through its development and out to its impacts and effects.

DLR conducts research into driver assistance systems on its dynamic drive simulator

DLR.de/Transport



Using the Sun – parabolic trough in Almería, southern Spain.

Energy

Existing ways of providing energy have adverse impacts on our environment and atmosphere. In addition, low-cost fossil fuels are going to become increasingly scarce in the foreseeable future. Great pressure for action is building up for the energy business and for energy research. New and innovative technical solutions are in demand. There are three paramount objectives here: the drastic reduction of energy requirements through greater efficiency, an increase in energy conversion efficiencies, particularly with regard to electricity generation, and the swift replacement of fossil fuels through the widespread introduction of renewable energy sources.

In particular, the energy researchers at DLR are working on innovative power station concepts, such as highly efficient gas turbines and solar thermal power plants, wind farms and fuel cells.

Key interdisciplinary topics include energy storage systems, materials research and systems analysis of the energy industry.

DLR.de/Energy

Large research facilities and aircraft fleet

DLR operates many large-scale research facilities, including rocket test stands, wind tunnels, engine and combustion chamber test stands, a solar furnace, plasma spraying equipment, a rolling road for vehicle testing and driving simulators as well as test benches for materials testing and laser research. DLR has access to Europe's largest test centre for concentrating solar technologies – the Plataforma Solar in Almería, Spain – and operates the solar tower in Jülich.

With its own fleet of 13 aircraft and helicopters, DLR is the largest civilian operator of research aircraft in Europe, giving it the capability to tackle almost any mission, whether for DLR institutes or external customers. These threads are drawn together at DLR's sites in Oberpfaffenhofen and Braunschweig. Oberpfaffenhofen uses its aircraft as platforms for the measuring equipment it employs to conduct research into the atmosphere, climate, environment and transport. Braunschweig deals primarily with developments on aircraft and helicopters.

DLR operates the largest civilian fleet of research aircraft in Europe

DLR.de/research-aircraft

"As my employer, DLR supports me and gives me a enough freedom to develop my own ideas and make personal contributions. An important foundation behind the expertise at this research facility is the experience of its employees. For me, DLR stands for continuity and long-term objectives, while still always managing to come up with some exciting surprises."

Andreas Giez

Cologne
Linder Höhe
51147 Cologne
Telephone +49 2203 601-0

Augsburg
Am Technologiezentrum 4
86159 Augsburg
Telephone +49 821 319874-1000

Berlin
Rutherfordstraße 2
12489 Berlin
Telephone +49 30 67055-0

Bonn
Königswinterer Straße 522-524
53227 Bonn
Telephone +49 228 447-0

Braunschweig
Lilienthalplatz 7
38108 Braunschweig
Telephone +49 531 295-0

Bremen
Robert-Hooke-Straße 7
28359 Bremen
Telephone +49 421 24420-1101

Göttingen
Bunsenstraße 10
37073 Göttingen
Telephone +49 551 709-0

Hamburg
Blohmstraße 20
21079 Hamburg
Telephone +49 40 42878-4196

Jülich
Karl-Heinz-Beckurts-Str. 13
52428 Jülich
Telephone +49 2203 601-0

Lampoldshausen
Langer Grund
74239 Hardthausen
Telephone +49 6298 28-0

Neustrelitz
Kalkhorstweg 53
17235 Neustrelitz
Telephone +49 3981 480-116

Oberpfaffenhofen
Münchener Straße 20
82234 Weßling
Telephone +49 8153 28-0

Stade
Ottenbecker Damm 12
21684 Stade
Telephone +49 531 2953701

Stuttgart
Pfaffenwaldring 38-40
70569 Stuttgart
Telephone +49 711 6862-0

Trauen
Eugen-Sänger-Straße 50
29328 Faßberg
Telephone +49 5055 596-15

Weilheim
Reichenbergstraße 8
82362 Weilheim
Telephone +49 8809 14-0

Deutsches Zentrum
für Luft- und Raumfahrt
German Aerospace Center

Corporate Communications

Linder Höhe
51147 Cologne

Telephone +49 2203 601-2116
Telefax +49 2203 601-3249
Email kommunikation@dlr.de

DLR.de/en

Das DLR_mini_GB_09-2016