Bavarian Strategy on Aeronautics 2030.
Bavaria is an outstanding location for the aerospace sector and looks back on a long tradition. More than one third of the annual turnover in the German aeronautics industry is generated in Bavaria. Due to dynamic international markets, the structure and main areas of the industry have changed considerably over the last few years. All stakeholders involved are required to take various measures to enable both quantitative and qualitative growth of infrastructure and employment opportunities in the future in order to participate in the global sales growth predicted for the aerospace sector. The Bavarian Strategy on Aeronautics forms the basis for the discussion of the future of the Bavarian aeronautics sector and addresses the following target groups:

- Decision-makers from the political and administrative sector: Concise presentation of basic principles, objectives and areas of activity of a sustainable aeronautics policy and benchmark for the strategic orientation of individual measures.
- Stakeholders in the aeronautics sector, i.e. large aerospace companies, small and medium-sized companies, trade unions and employee representatives, universities and other institutes of higher education as well as research institutes: Basis for discussion on the strategic direction and networking.
- Interested public: Demonstration of the importance of the aeronautics sector and basis for the discussion of its future development.

The full version of the Bavarian Strategy on Aeronautics is available online (only in German).

Strong objectives.

**Strengthening international competitiveness**
The Bavarian Aeronautical Research Programme is already contributing to ensuring the future viability of Bavaria as an aerospace location. In cooperation with industry and research institutes, the Bavarian state government’s challenge is to continuously adjust the programme’s content and framework conditions to suit the national and international agenda. The programme focuses on the following key aspects:

- Investments in research and development
- Networking and internationalisation
- Ensuring sufficient availability of young specialists
- Improving the commercial exploitation of innovation

**Preserving and developing core competencies**
In addition to preserving core competencies, the objective is to adapt the competency portfolio within the aeronautics sector to changing market conditions. Therefore, the ability to potentially expand or shift the portfolio plays a crucial role. The use of synergies with other industry branches as part of so-called cross-innovation approaches entails great opportunities for preserving and developing core competencies. In particular, these include:

- System capability
- Propulsion technologies
- Aerospace systems
- Material science
- Unmanned aerial systems
- Systems engineering

**Increasing international visibility**
It is necessary that the Bavarian aeronautical industry identifies company-specific challenges of globalisation and enforces appropriate measures. Customer acquisition and customer orientation in new markets are of particular importance in this respect. The aerospace cluster bavAIRia e.V. supports its members in their globalisation efforts and plays a central role in promoting Bavaria as an aerospace location in the future.
Strong objectives.

Maintaining and developing existing industry sites
Companies in the aeronautics sector are requested to incorporate a strong sense of loyalty in terms of their business locations into their corporate culture. The state government supports relevant measures to expand or increase the attractiveness of Bavarian industry sites and infrastructure.

Supporting the federal aerospace strategy
The Bavarian state government supports the German federal government in implementing the federal aerospace strategy. Interdisciplinary and federal coordination on developing and promoting the German aerospace sector is of particular importance in this context. Cooperation on a national level is the key for successful support of the domestic aeronautical industry. Especially aspects of national concern like the healthiness of the supply chain or future markets like unmanned aerial systems will be strengthened in the future.

Strong tools.

The Bavarian innovation system in aerospace
Collaborations, networks and partnerships bear a high potential for further internationalisation and thus diversification of the customer base. This aspect opens up new opportunities for tackling the increasing demands with respect to efficiency, environmental protection, cost, and system capability in order to be able to remain successful in global competition in the future. There is also great potential for ensuring the availability of specialists in the long term and for increasing international visibility of Bavarian research and industry sites, thanks to the networks that have been established between educational institutions and the industry (e.g. Excellent Graduate Programmes). There are already several Bavarian initiatives aimed at bundling competencies and using synergy effects in the areas of education, research and industry. These initiatives primarily include:

» Aerospace cluster  → www.bavaria.net
» Bauhaus Luftfahrt  → www.bauhaus-luftfahrt.net
» Munich Aerospace  → www.munich-aerospace.de
» Ludwig Bölkow Campus  → www.lb-campus.com
» M•A•I Carbon top cluster  → www.mai-carbon.de
» Invest in Bavaria  → www.invest-in-bavaria.com
» Foreign trade in Bavaria  → www.aussenwirtschaft-in-bayern.de
Research funding
Application-oriented and fundamental research with a focus on aeronautics is carried out at universities and non-university research institutions. The most important pillar of fundamental research is institutional funding (core funding) provided by the federal government and the state government. Institutional funding ensures continuity which is particularly important in fundamental research. At the same time, it also enables sufficient leeway for unconventional concepts as well as approaches driven by scientific curiosity. Project funding in the area of lower technological maturity levels is supplemented by various resources with different objectives. These include funds from research programmes from various departments on state and national level. In addition, funds from cross-sectional programmes, specialised programmes and foundations play a pivotal role. The following are of particular importance in the aerospace sector:

» Institutional funding of basic research
» Federal Aeronautical Research Programme
» Bavarian Aeronautical Research Programme
» Research funding for medium-sized companies
» European Framework Programme

Financing instruments
In addition to research funding, there is a large variety of different financing instruments intended for market-oriented development, investments and business start-ups. The Unternehmerkredit (entrepreneur loan) of the KfW Group and LfA Förderbank Bayern are particularly important for companies. Helpful programmes for start-ups include EXIST Transfer of Research, the High-Tech Gründerfonds, or Bavaria-based programmes such as the Programme for Supporting Technology-Oriented Business Start-ups (BayTOU) or FLUGGE (a funding programme which seeks to facilitate the transition when establishing a start-up). The wide variety of specific financing instruments available in Germany and Bavaria can be found in the www.foerderdatenbank.de portal.
Aerospace in Bavaria.

Bavaria is one of the leading high-tech regions in Europe
The aerospace branch has always been a major focus of the Bavarian state government. Annual revenues of approx. 7 bn. € are generated in the manufacturing aerospace sector. Overall, more than 60,000 employees are working in around 550 companies in Bavaria – including airlines and airports.

World-leading OEMs such as Airbus Defence and Space, Airbus Helicopters Germany and MTU Aero Engines are headquartered in Bavaria. Tier 1 suppliers such as Diehl Aerospace, Premium Aerotec and Liebherr Aerospace have already chosen Bavaria as one of their main business locations. In addition, a substantial number of niche suppliers, market leaders in their respective fields, such as FAG Aerospace, EME, ESG, IABG, Leistritz or Telair characterize the aerospace cluster in Bavaria.

Manufacturing of systems and subsystems in aviation, space, defence and security, unmanned aerial systems as well as top-quality engineering services enjoy a long tradition in Bavaria. Bavaria is one of just a few regions worldwide that covers the entire value chain from fundamental research, industrial research and development, prototyping and manufacturing to maintenance, repair and overhaul.

The Bavarian Aerospace Strategy discusses key aspects of the future of this high-tech sector to facilitate economic growth and leadership.

Contact

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