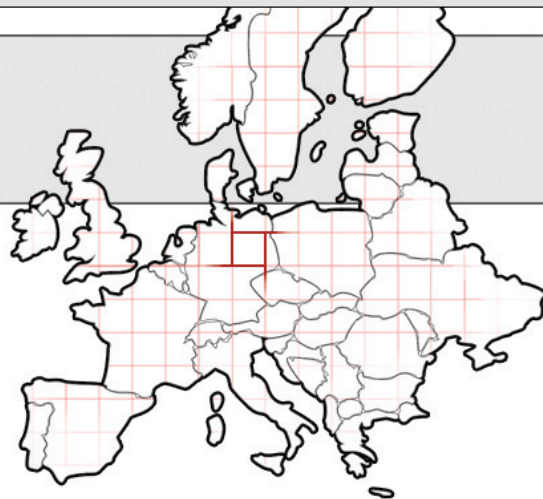


NEWSLETTER

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EDITORIAL

The Berlin Air Show ILA in the second half of May 2008 is a lighthouse that justifies the transport & mobility competences of the German capital region. From 27 May to 01 June 2008, the ILA will be the forum for the international aerospace community with more than 1.000 exhibitors from at least 40 countries. Besides numerous other highlights on the ILA, the Berlin-Brandenburg's capabilities to supply small satellite missions for growing application markets will be presented by the Raumfahrtinitiative Berlin-Brandenburg (RiBB) – a business coalition of forward thinking SME's and innovative research institutes.

With the project "Modern Airport – Testbed for new efficient technologies" partners from the capital region recently launched a joint initiative to make use of the innovative potential of enterprises and academics to optimise the efficiency of the future airport Berlin Brandenburg International (BBI). Last but not least, the 2008 edition on transport and mobility in Berlin-Brandenburg, published in connection with the 10th anniversary of FAV in January 2008, received very positive feedback from partners all over Europe and beyond. One may state: This format has been introduced as an attractive "shop window" of the region's capabilities in the transport sector.



Thomas Meissner
Managing Director
TSB Innovations-
agentur Berlin
GmbH / FAV



RiBB – THE NETWORK OF SPACE SCIENCE AND INDUSTRY FROM GERMANY'S CAPITAL REGION ON BERLIN AIR SHOW

Space affects us all, every day. It facilitates mobile communication and navigation around the globe, it offers support in international crisis and disaster management, and it allows monitoring the earth's climate, weather and eco-system. Unrivaled as an



economic sector, the aerospace industry symbolises cutting-edge technology and the successful collaboration between enterprise and science. Germany's Capital Region has built upon years of research to establish itself as an internationally renowned centre of excellence with specialist research into the field of small satellite technology.

Within RiBB 12 partners from the booming small satellites industry teamed up: 8 highly innovative small and medium

enterprises and 4 research institutes. In addition the strong geospatial industry of the region e.g. the GeoForschungs-Zentrum Potsdam (GFZ), the German Research Centre for Geosciences and RapidEye AG, the worlds first commercial constellation of small satellites for agriculture and forestry, will be present at the Berlin Air Show (ILA).

The transport technology systems network – FAV which manages the RiBB activities invites its readers to visit the stand of RiBB on this years ILA.

Core piece of this years RiBB presentation on the Berlin Air Show is the use of satellite systems for applications on earth. On more than 100m² RiBB - the network of space science and industry from Germany's capital region will present itself in the **space pavilion (stand 9441)**. Each day of the exhibition will have a special highlight:

- **Tuesday 27.05**
2nd German Nanosatellite workshop.
- **Wednesday 28.05**
Press conference: Presentation with real time data from ISS
- **Thursday 29.05**
Day of GeoSciences.
- **Friday 30.05.**
Career Day
- **Saturday 31.05**
Space Sciences at TU Berlin
- **Sunday 01.05.**
TUBSAT – presentation

MODERN AIRPORT – TESTBED FOR NEW EFFICIENT TECHNOLOGIES (MATNET)

MORE INFORMATION ON WWW.MODERN-AIRPORT.DE

Over the next few years, Schoenefeld Airport will expand to become Berlin Brandenburg International (BBI), the new airport for the German capital region. In the fall of the year 2011 BBI will go into operation and replace the three airports of the Berlin-Brandenburg region.

When BBI opens, the capital region will offer business travelers, tourists, and companies a high-tech airport with ideal connections, international flights, direct motorway access, and a rail station below the main terminal. With the airport shuttle it will take only 20 minutes to travel from the airport into the Berlin city centre.

The construction of a new airport is one of the most complex infrastructural endeavours of today. Within a tight time schedule and a limited budget a tough task has to be completed, which from the day of the airport opening on has to prove that the goals have been reached: Smooth operation, efficiency and cost effectiveness.

A new “green-field”-airport offers the opportunity to install the newest technology. But incorporated technology has to be approved when the investment decision is made. Otherwise there is a risk of a non-fully operational airport. Best example for this was the recent opening of Terminal 5 in London Heathrow.

On the other side airports are infrastructures which should be prepared for operation of several decades and therefore it is worthwhile to look into new technologies already today. Airports have to comply with the highest energy standards and they have to run safely under any condition. They have to provide a maximum freedom

of movement to the passenger and a maximum in safety and security to the society. Today air traffic is a very important asset which is crucial to the economic success of the capital region and Germany.

The airport authorities are committed to offer one of the most modern airports of the world to the passengers. In order to do so, a technology officer

on technology is intended to offer companies and research institutes the opportunity to demonstrate their potential and capabilities to contribute the realisation of BBI. Berlin Airports will raise specific issues to be discussed in workshops, enabling both sides to gain better insight into requirements and implementation options. Although these discussions cannot anticipate the corporate decisions made by Berlin Airports when awarding contracts, they can contribute to create a better basis for decision making for all those concerned.

So far two workshops were held: On 2nd November 2007, the kick-off event for the project “Modern Airport” with 150 participants, including many representatives

of companies and research institutes from Berlin and Brandenburg, focused on two issues: First the airport development in the capital region, which led to the construction of the new BBI and the associated economic and technological expectations, and second the potential of near field communication technologies for airport processes: baggage and airport logistics, localisation, passenger services, border crossing processes and access control. The contributions to the near field communication showed an enormous technological innovation potential for new services around the airport. The task remains to find the appropriate solution.

The second workshop covered the video surveillance issue. This technology offers many solutions to security issues on airports. The meeting showed that a video surveillance system has to be planned carefully and according to the task to be performed, otherwise the user will be submerged in the enormous data generated by the cameras. The user of these techniques need smart data



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Picture from Animation of Berlin Brandenburg International (BBI)

was appointed to streamline the search for potential innovations for airport operations. The Berlin Airports (FBS) together with several regional organisations such as the Berlin-Brandenburg Aerospace Alliance (BBAA), the Forschungs- und Anwendungsverbund Verkehrssystemtechnik (FAV) of the TSB Innovationsagentur Berlin GmbH and the Brandenburg Economic Development Board (ZAB) have joined forces to ensure that the new BBI Airport in Schoenefeld generates widespread attention as a modern Airport in Europe. The partners set up the project Modern Airport – Testbed for New Efficient Technologies (MATNET).

The aim of the project is to foster innovative potential of companies and research institutes within the capital region of Berlin-Brandenburg providing incentives for developing new products and procedures to optimum use in realising and operating the future airport BBI.

A wide-ranging dialogue focusing

compression and data management strategies in order to minimize the data handling problem.

On the occasion of the ILA 2008 a **workshop on data fusion of video information on air, rail and road for airport operation** will be held on the **27th May, 9:30 to 12:00**. There are

several organisations which collect video data such as the Deutsche Bahn and the Verkehrsmanagement Zentrale Berlin. This video information might be valuable for the airport in order to optimise the passenger throughput.

More Information can be found on the website **www.modern-airport.de**.

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INTERVIEW WITH STATE SECRETARY DR. HANS-GERHARD HUSUNG, SENATE DEPARTMENT OF EDUCATION, SCIENCE AND RESEARCH, STATE OF BERLIN

What are the developments of Berlin as a science location in recent years, and what are the perspectives?

Husung: The results of the excellence initiative are proof that Berlin is a top location for science and research in Germany. The master plan "Knowledge shapes Berlin's future" will open further possibilities to strengthen Berlin's position as a science location, make it more attractive and increase its visibility.

Fact is that the general financial conditions for science and research have improved over the past years. This means that the budget for research institutions with public funding will increase by three percent every year until 2010 according to the 2004 agreement on research and innovation. The increase of available spaces in university courses thanks to the 2020 university agreement and the Berlin master plan will allow greater freedom in the design of universities and courses.

In the coming years, it will be crucial to make optimum use of past successes, the positive atmosphere of change, the increased enthusiasm for cooperation and of all financial possibilities. The master plan with its two pillars education and research will serve as a roadmap. In regard to the scientific influence of Berlin, the grouping of excellent Berlin research areas in one common sub-company including university and non-university institutions with the working title International Forum of Advanced Studies Berlin is an important step.

How significant is transport research in Berlin's research policy? What requires improvement, including education?

Husung: Transport research has been one of the region's special competence fields for many years. This is reflected in the coherent innovation strategy of the Senate. In the field of transport research, the region boasts more than 25 research institutions as well as a number of important companies. The construction of the BBI Airport in Schönefeld is expected to have an extensive influence on this special field and on logistics research and the logistics industry in the region, not only from an economic but also from a scientific point of view. We are facing an important task for education and economic politics: Especially when looking at the future of transport research and transport system technology in the region, it is crucial to raise more interest in natural and engineering sciences, increase the number of students and ensure they graduate in time and, this is the hard part, stay in the region. One important challenge is to increase the appeal of technical courses for women.

How do you think the transfer between science and economy in Berlin can be improved?

Husung: In recent years, the cooperation between economy and science has improved immensely. I have pointed out the coherent innovation strategy of the Senate earlier. Various studies show that we are making headway in networking scientific potential and applications in the economy. Surveys of the Regional Baden-Württemberg Bureau of Statistics see the German capital as one of the most innovative regions in Europe. A survey by the IBB from October 2006 determined that Berlin's manufacturing industry has by far the highest R&D intensity as well



Dr. Hans-Gerhard Husung

as above average research intensive production. This is a clear sign for the innovative abilities of the Berlin economy and proof for the scientific foundation of the Berlin innovation system.

The Berlin innovation system is well structured as it is, but of course there is always room for improvement. Our goal is to further increase knowledge transfer to small and medium enterprises. In numerous discussions we are currently evaluating requirements of the economy, especially in regard to training skilled personnel. I am sure this is subject to possible optimisations. Regarding partnerships with small and medium enterprises, universities of applied science are exceedingly important. We are confident that there is untapped potential to support SMEs in finding solutions to problems. It is important to improve the possibilities for contact. At the same time, working on problem solutions stimulates scientific thinking for scientists and students and might lead to the development of ideas and products for equipment.

DAY OF TRANSPORT BUSINESS

A DIALOG BETWEEN INDUSTRY, SCIENCE AND OPERATORS

The day of transport economics, staged by the FAV (and supported by high-ranking representatives of the administration and industry of Berlin) was held on 31st January 2008. Aim was to present regional potentials of industry, science and operators, as well as to attract new members for the cluster of transport and mobility.

Once more the event exemplified that Berlin-Brandenburg is developing to be a leading location for transport economics in Germany. Aerospace engineering, logistics or railway system technology; along with research facilities, many small and medium-sized companies just as big system vendors like Siemens and Bombardier Transportation contribute to this position.

On 140 pages, the updated edition of the Branch report "Transport and Mobility" serves to inform the regional transport sector, international projects and future-expectations regarding new technologies and employment. Over the last two years, more than 2.500 new jobs have been generated in about 400 producing companies and research facilities – an increase of 5 %.

All in all the sector accounts for approximately 150.000 employees and a transaction volume of 5 billion €. Based on these rates, the Berlin Senate is aware of the vital significance of the transport sector and thus renders specific support through the cluster of transport and mobility. Managed by the FAV, its main objec-

tive is to enhance the network and to foster innovations. One example is the technique developed by Amovis GmbH to make further use of the heat generated by combustion engines. "Amongst others Amovis is cooperating with BMW - but more important is the local application." was accentuated by

to produce in the region." underlined Mr. Wiesenhütter. "Berlin needs to make a consistent use of its research and science capabilities." added Bruno Broich, CEO of TSB GmbH. "There is no other region with such a number of researchers per industrial employees."



Christian Wiesenhütter, Thomas Meissner and Jörg Collisi (l.t.r) after press conference

Christian Wiesenhütter, acting director of the Berlin Chamber of Industry and Commerce.

While the research area with its small, highly innovative companies has a strong international reputation, the production sector still has space for improvement.

"We need to provide the basic framework, enabling industrial enterprises

UPCOMING EVENTS

29.08. - 03.09.08

COOPERS Demonstration Kick off
IFA-Berlin Stand: Fraunhofer Society
Information: www.coopers-ip.eu

23.09. - 26.09.08

InnoTrans 2008 Berlin
International Trade Fair for Transport Technology

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