

BBS CONSULT



Engineering consultants  
for  
Building constructions  
Building physics  
Reconstructions

Institute for Research and Materials Testing  
in  
Applied Building Physics  
and Building Materials



Germany  
Austria  
China

## About Us



The BBS is anxious to convert the current state of art into practice and consequently to give recommendations to the implementation.

The BBS INSTITUT supports the BBS ENGENIEERING with laboratory tests when working on projects. The characteristics of the building materials and their dependence on the characteristic of the building material are checked in order to develop an optimal concept dense on the locations and under an economic point of views.



Complementary, we give advice on the development of new structures and materials. These new structures and materials will be optimised on the basis of preliminary studies which are based on scientific and practice-orientated researches; also we attend them until launch.

We work on public promoted themes of research as well as on concrete (kind of) questions of the industry and economy.

**BBS**  
more than 15 years competence and networks



BBS founded 1990  
25 employees

#### BBS INGENIEURBÜRO

Engeneering

Niedersachsen (1990)

Thüringen (1993)

Schleswig-Hollstein (1996)

Baden-Württemberg (1998)

Vienna (2004)

Berlin (2005)

#### BBS INSTITUT

Research and development of building materials

Wolfenbüttel (before 2001)

Hildesheim (2001)

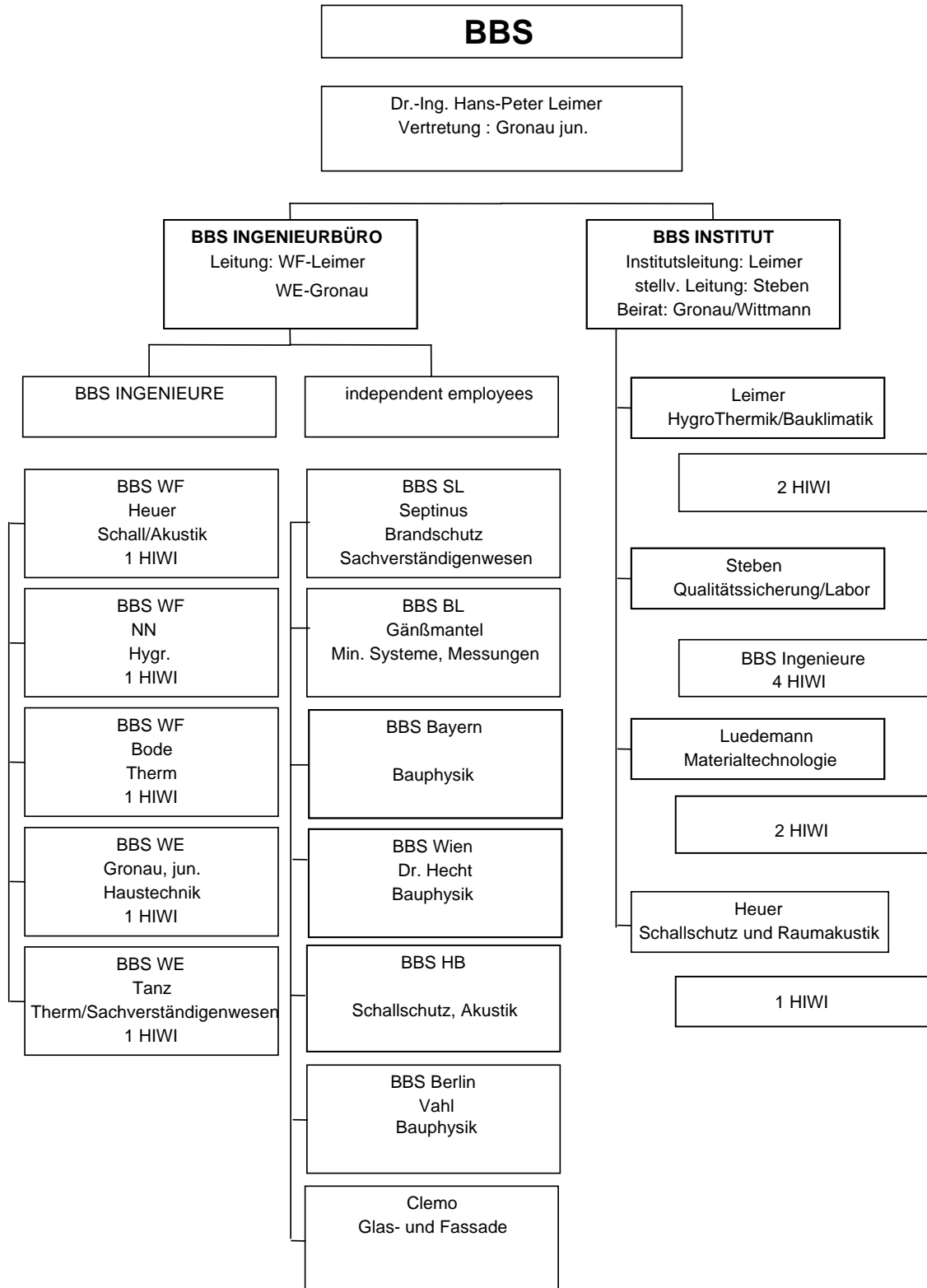
Hefei – China (2007)

Cooperation with the research institute of the University of applied Sciences and Arts Hildesheim IFPB

Consulting more than 20 noted companies

Cooperation with e.g. WTA, QIM AG

Network with more than 50 Universitys, universities and research institutes at home and abroad





## Research and development

- BBS INSTITUT connected with
  - ADIFICAT Institute, Prof. Wittmann, ETH Zürich
  - MFPA Weimar, Prof. Gronau
  - IPFB University of Hildesheim, Prof. Leimer

## Studies

- BBS INSTITUTE
  - Products and constructions, procedures
- BBS INGENIEURBÜRO
  - Products and Procedures, Dipl.-Ing. Gänßmantel
- University of Hildesheim
  - Theses
  - Checking different versions

## Tests

- Building materials
  - BBS INSTITUT
    - Certifications, approval of new developed building materials and constructions, IBMB + MPA BS
    - Timber and derived timber products, WKI BS
    - Building constructions
  - BBS INSTITUTE
    - Fire protection requirements; Knauf
    - Sound insulation; IPFB, Knauf
    - Outdoor tests; BBS, IBP Holzkirchen
    - Driving rain; BBS, TU Berlin
    - Statics, dynamics; IBMB, IPFB
- Measurements in situ
  - BBS INSTITUT
    - Sound insulation and room acoustics, IPFB

## Engineering

- Building physics and building constructions
  - BBS INGENIEURBÜRO
    - Wolfenbüttel, Dipl.-Ing. Bode
    - Weimar, Dipl.-Ing. Gronau, Dipl.-Ing. Tanz
- Planning of structural framework, static numerics
  - Engineering company of Michael Gebhardt, Wolfenbüttel

## Working on projects

- BBS INGENIEURBÜRO,
  - Bahlingen, Dipl.-Ing. Gänßmantel
  - Weimar, Dipl.-Ing. Gronau
  - Wolfenbüttel, Dipl.-Ing. Heuer
  - Flensburg, Dipl.-Ing. Septinus
- QIM, including about 15 engineering companies and about 300 civil engineers

**BBS**  
Partner Universities / Institutes



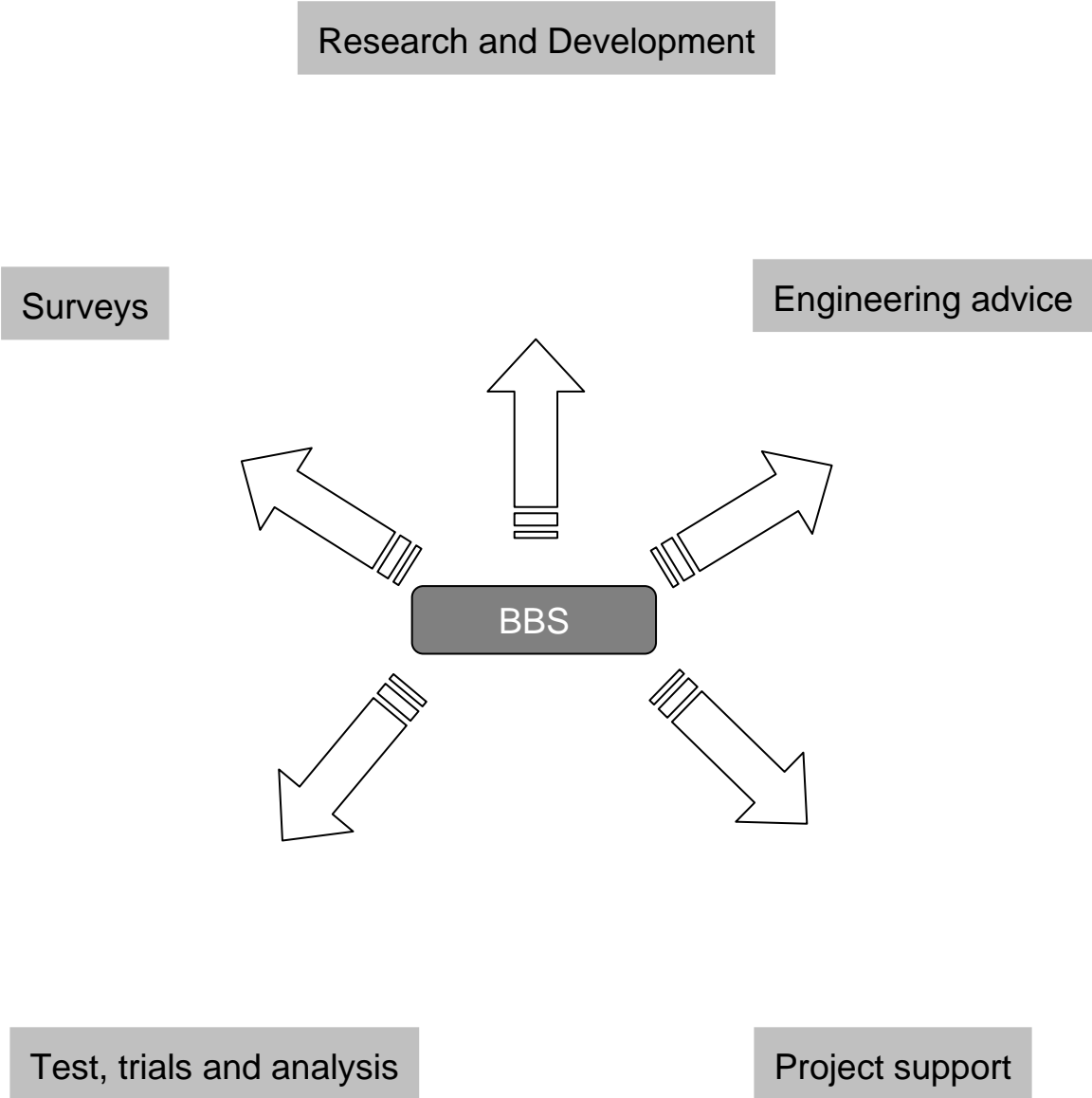
Bauhaus-Universität Weimar	Fachhochschule Nordostniedersachsen	Technische Universität Darmstadt
Czech Technical University		Technische Universität Dresden
CSTB	Fachhochschule Rosenheim	Technische Universität Eindhoven
Centre Scientifique et Technique du Batiment	Fachhochschule Wiesbaden	Technische Universität Hamburg- Harburg
ETH Zürich	Fraunhofer Institut für Bauphysik Stuttgart / Holzkirchen	Technische Universität Wien
Fachhochschule Braunschweig/Wolfenbüttel	Fraunhofer Institut für Holzforschung Braunschweig	Technische Universiteit Eindhoven
Fachhochschule Darmstadt	MFPA Weimar	Università di Ancona
Fachhochschule Erfurt	Politechnika Gdanska	Universität der Bundeswehr München
Fachhochschule Gelsenkirchen	Politecnico di Torino	Universität GH Kassel
Fachhochschule Hildesheim	Staatliche Universität für Bauwesen Rostow-am-Don	Universität Innsbruck
Fachhochschule Holzminden		Universität Leipzig
Fachhochschule Kaiserslautern	Technical an Testing Institute for Constructions Prague	Universität München
Fachhochschule Karlsruhe FB AB	Technical University of Denmark	Universität Rostock
Fachhochschule Karlsruhe Hochschule für Technik	Technische Hochschule Karlsruhe	Universität Siegen
Fachhochschule Konstanz	Technische Universität Berlin	Universiteit Delft
Fachhochschule Lausitz	Technische Universität Braunschweig	Universiteit Gent
Fachhochschule München	Technische Universität Brno	University of Auckland
Fachhochschule Münster	Technische Universität Budapest	University of Lulea
	Technische Universität Cottbus	University of Waterloo

## References



- Knauf
- Knauf Marmorit
- Interpane
- Colfirmit Rajasil
- Haacke+Haacke
- Caplast
- Lafarge Braas
- BBA Nonwovens
- Icopal
- URSA International
- Transpac
- Weiß Chemie
- Deutsche Pittsburgh Corning
  
- Wayss & Freytag
- Bilfinger + Berger
- Müller- Altvatter
- Strabag
- Wiemer + Trachte
- Nileg
  
- Öffentliche Versicherung Braunschweig
- Nord/LB
- LBS

BBS means



BBS means



### **R&D Practiced research and development**

- New building systems to reduce the consumption of energy
- Stabilization of the climate- and room situation with structural measures
- Progressing of the buildings' sustainability
- Increasing of the physical health regarding habitation with the help of building- and ecological methods of construction
- Decrease of the investive and operating costs regarding the buildings' handling by applying optimized climate concepts
- Innovation with new developed building materials

### **Tests**

- Tests of building materials and constructions at the BBS- or another involved (test-) institute
- Assessment of building materials and proposals for optimizing
- Test certifications at the BBS- or another accredited institute
- Expert monitoring when getting a license of building systems at the DIBT or another regional admission office
- Test engineering assistance at present projects
- Quality assurance regarding the internal and/ or external quality control

### **Studies**

- Preliminary studies regarding project drafts
- Studies concerning product inquests
- Market enquiry
- Interviews with customers
- Feasibility studies
- Implementation studies
- Product analysis

### **Working projects**

- Support at projects
- Assumption of technical achievement
- Optimization of national projects with the help of network management
- Developing strategies/ concepts to realize projects and ideas
- Optimizing the connection of technique and marketing
- Training and consulting when launching

### **Energering**

- Processing of projects regarding building physics
- Surveyor
- Buildings' optimizing with the help of sustained yield concepts
- Optimizing the buildings' serviceability
- Developing economical concepts
- Outsourcing
- External processing of orders

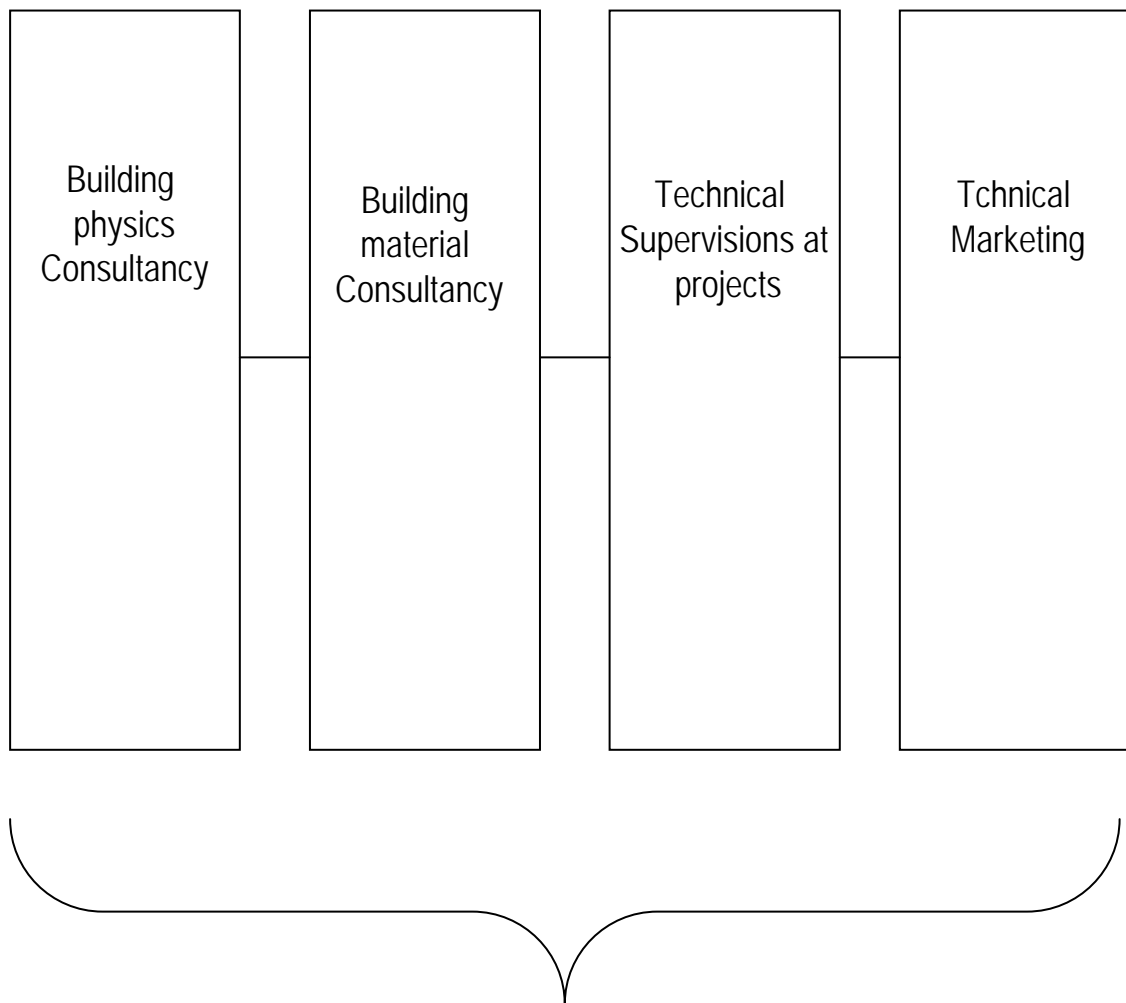
**BBS**  
TSP – Technical Service Provider



BBS as a Technical services Provider leads independently with its network or under coordination of the customer extensive project-treatments or supports the customer by his development.

Studies and market-analyses are the basis that on this occasion through research - and developments is supplemented. In own or foreign laboratories, materials or constructions are tested for its application-efficiency. With classical engineer-planning's buildings are planned.

With the direct access in BBS during the development, the customer keeps to reproach the area of authority by himself without high costs for research and development departments.



**4PE = 4 Party Engineering**

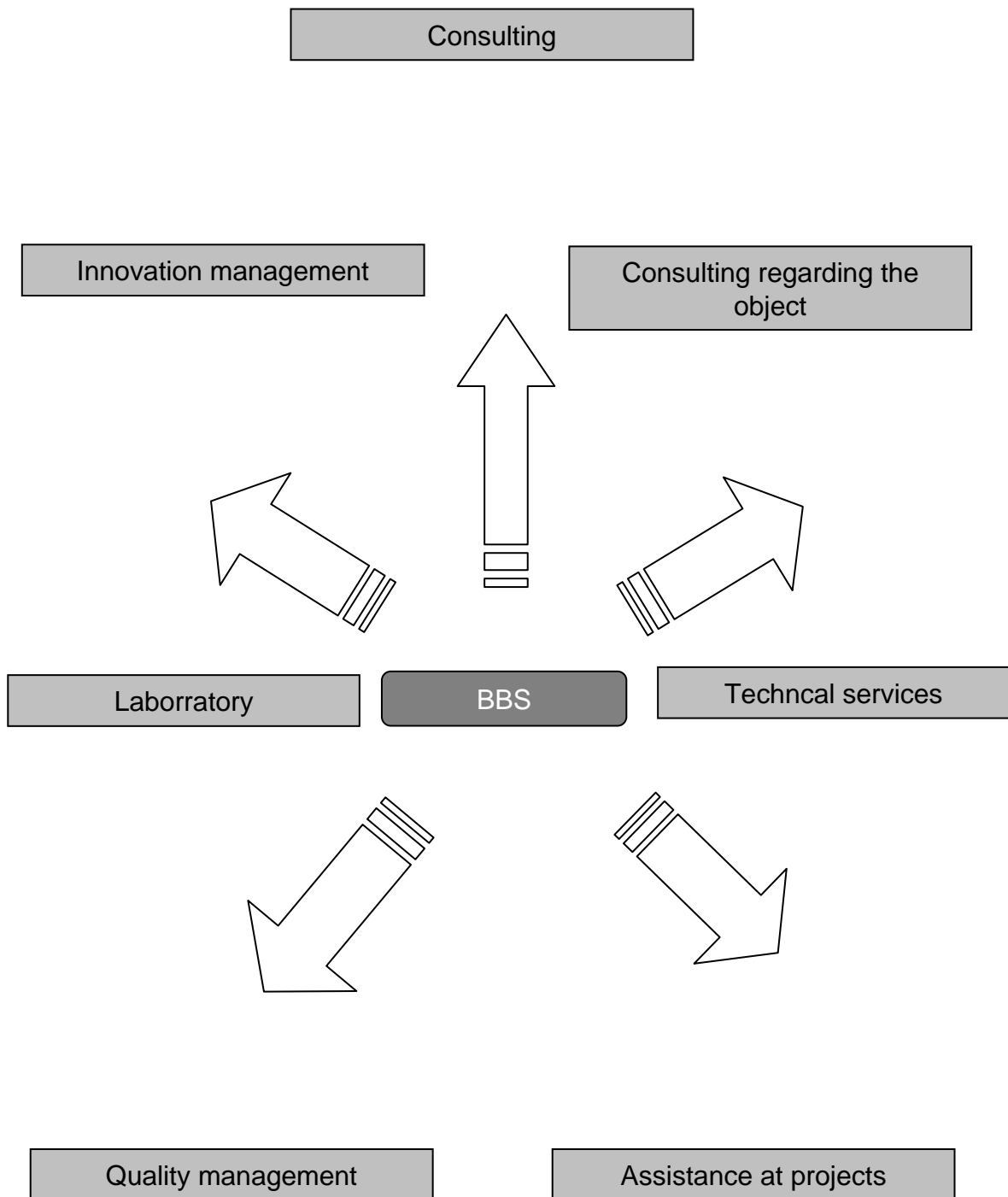
## TSP / 4PE



4PE is an integrator which bundles capabilities, competence and know-how to develop and actuate extensive solutions for technical assistance.

- Creating transparency regarding test demands
- Containment of the complexity of building physics
- Assistance in developments regarding standards and rule types

BBS  
Summarization of the TSP





**Innovation management**

- Development of new building techniques
- Making proposals to complete the product line
- Updating product- databanks
- Initiation of research projects
- Dissertations at conferences and conventions

**Development of products**

- Supervision and having account for the development
- Preliminary studies and analysis of competition products
- Conducting conversation with producer of “sub- products”
- Tests of “sub- materials”
- Tests of the new developed product
- Developing launching concepts
- Optimization and coordination of building products
- Coordination of the involved parties
- Quality assurance and quality surveillance

**Innovation management**

- Development of new building techniques
- Making proposals to complete the product line
- Updating product- databanks
- Initiation of research projects
- Dissertations at conferences and conventions

**Development of products**

- Supervision and having account for the development
- Preliminary studies and analysis of competition products
- Conducting conversation with producer of “sub- products”
- Tests of “sub- materials”
- Tests of the new developed product
- Developing launching concepts
- Optimization and coordination of building products
- Coordination of the involved parties
- Quality assurance and quality surveillance

**Laboratory**

- Tests at the BBS- laboratory
- Assistance of tests at other institutes
- Analysis of tests
- Reception inspection of products

**Quality management**

- Quality surveillance
- Assistance at claims
- Assistance to get a certification

**Technical support**

- Support at the technical marketing
- Contacting other technical areas/ themes

**Consulting at technical problems**

- Hotline
- Courses of instructions
- Testing details and doing the further development of these construction details
- Experts on location
- Checking the sales documentation
- Checking the web presence
- Consulting of marketing and public appearances



## Implementation of products in other countries

Due to our technical know-how in testing and certification of building products in Europe and Russia, we support our partner-colleges, -universities and -research establishments in the countries by advising them on the implementation of products.

In following countries, we can offer our help

- China
- Austria
- Russia, as well as former Soviet-Republics
- Poland
- Hungary
- The Czech Republic
- Slovenia
- Switzerland
- France
- Benelux
- Denmark
- Sweden
- Finland
- Turkey
- Indonesia
- and from foreign countries to Germany.

Our performances are particularly

- Creating of explanations to tests- and application-standards
- Formulation of the foundation for the admission and aptitude of the products on the foundation of the respective valid test- and -application-standards
- Performance of laboratory - and application-examinations on the foundation of the respective valid
- test- and -application-standards
- Creating of certificates for the serviceability of the products in the respective climate-regions
- Formulation of comparison-certificates with the respective country to determine the conformity
- Creating of test certificates
- Performance of accreditations

On this occasion, we impart our good contacts not only to our partners in the colleges, universities, research-establishments and Chambers of Crafts, but also to established and interested companies, sales-partners and distributors. On demand, we lead the conversations and correspondence for you or we help you with the local linguistic peculiarities in the respective countries.

# Surplus value



from Consulting

to Studien

zu Projects

Integration

from BBS in the clients company



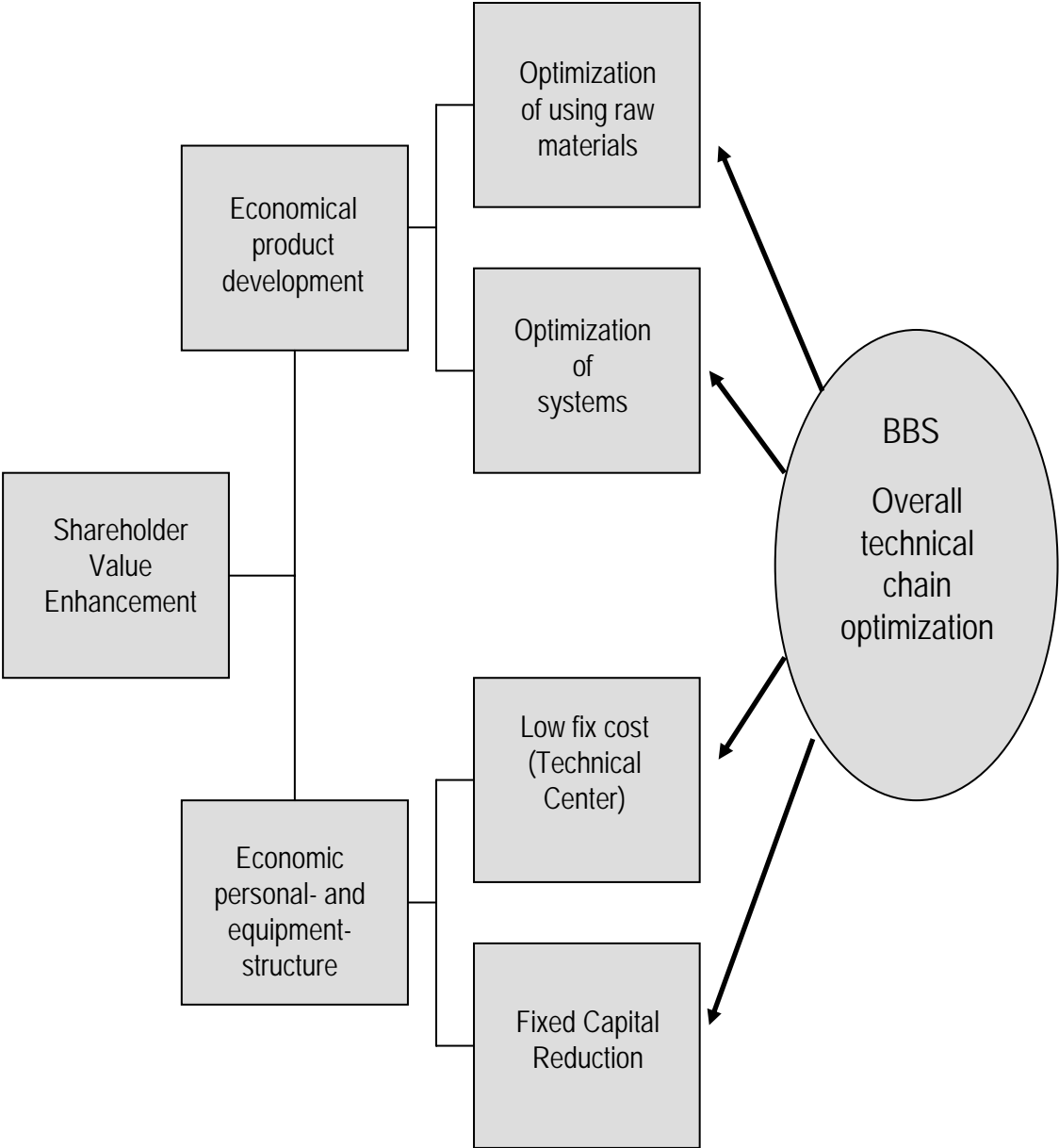
Increasing the potential for development  
using and integrating the technical competence of BBS

# Shareholder Value Enhancement



Customer

BBS



BBS INSTITUT



Institute for Research and Materials Tests  
in Applied Building Physics and Building Materials

Institut Management  
*Prof. Dr.-Ing. Dipl.-Arch. Hans-Peter Leimer*

UNIVERSITY  
University of Applied Sciences and Arts  
HAWK Hildesheim  
Hohnsen 2  
31134 Hildesheim-Germany

Hefei University  
372 Huangshan Lu  
230022 Hefei Anhui China

Fon +49 (0)5331-97 17-30  
Fax +49 (0)5331-97 17-31  
e-mail: [info@BBS-INSTITUT.de](mailto:info@BBS-INSTITUT.de)  
[www.BBS-INSTITUT.de](http://www.BBS-INSTITUT.de)

Laboratory  
Am Forst 27  
38302 Wolfenbüttel - Germany  
Fon +49 (0)5331-97 17-25  
Fax +49 (0)5331-97 17-17

Hefei University  
372 Huangshan Lu  
230022 Hefei Anhui China

# BBS INGENIEURBÜRO



Company for Engineering  
of  
Structural Design - Building Physics - Redevelopment-Techniques

Management  
Prof. Dr.-Ing. Dipl.-Arch. Hans-Peter Leimer  
Bauingenieur+Architekt

## **BBS DEUTSCHLAND**

Niedersachsen

*Prof. Dr.-Ing. Hans-Peter Leimer*

Am Forst 27

D-38302 Wolfenbüttel

Fon +49 (0)5331-97 17-0 Fax +49 (0)5331-97 17-17

e-mail: wf@BBS-INGENIEURBUERO.de

www.BBS-INGENIEURBUERO.de

Schleswig-Holstein

*Dipl.-Ing. Frank Septinus*

Stapelholmer Weg 98

D-24988 Oeversee

Fon +49 (0)4638-83 32 Fax +49 (0)4638-83 42

e-mail: sl@BBS-INGENIEURBUERO.de

Thüringen

*Dipl.-Ing. Uwe Gronau*

Thomas-Müntzer-Straße 6

D-99423 Weimar

Fon +49 (0)3643-50 00-11 Fax +49 (0)3643-50 00-13

e-mail: we@BBS-INGENIEURBUERO.de

Baden-Württemberg

*Dipl.-Ing. Jürgen Gänßmantel*

Silcherstraße 9

D-72358 Dormettingen

Fon +49 (0)7427/91 47 46 Fax +49 (0)7427/91 49 64

e-mail: bl@BBS-INGENIEURBUERO.de

Berlin

*Dipl.-Ing. Gerald Vahl*

Römerweg 114

D-10316 Berlin

Fon + Fax +49 (0)30-25 32 14 25

e-mail: berlin@BBS-INGENIEURBUERO.de

## **BBS ÖSTERREICH**

Wien

*Dipl.-Ing. Dr.-techn. Clemens Hecht*

Hütteldorfer Straße 343-345/15

A-1140 Wien

Fon +43 (0)1-58801-20 65 4 Fax +43 (0)1-58801-20 69 8

Fon + Fax +43 (0)1-95 23 57 6

e-mail: wien@BBS-INGENIEURBUERO.de