



Center for Biomedical Technology and Innovation

BiomeTI is a common project of the three Hannover universities and the Laser Zentrum Hannover e. V.

Executive Board of the Center for Biomedical Technology and Innovation e.V.



- **Prof. Dr.-Ing. Dr.-Ing. E. h. mult. Dr. med. h.c. Heinz Haferkamp**
- speaker of the board –

Leibniz Universität Hannover, Center for Biomedical Engineering
Laser Zentrum Hannover e.V.



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University of Veterinary Medicine Hannover, Foundation,
Small Animal Clinic



- **Prof. Dr. Wolfgang Ertmer**

Leibniz Universität Hannover, Institut für Quantenoptik.



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Hannover Medical School
Department of Cardiothoracic, Transplantation and Vascular Surgery



- **Prof. Dr. med. Thomas Lenarz**

Hannover Medical School
Clinic for Laryngology, Rhinology and Otology



- **Prof. Dr. Uwe Morgner**

Leibniz Universität Hannover, Institut für Quantenoptik



- **Prof. Dr. med. Henning Windhagen**

Hannover Medical School
Clinic for Orthopaedic Surgery (in the Annastift Hospital)

The Center for Biomedical Technology and Innovation (BiomeTI)

Mission:

BiomeTI bundles the scientific activities of all academic groups working in the field of medical technology in and around Hannover.

Covering the entire value chain, from the clinical problem up to the prototype of the technical solution, BiomeTI supports the associated scientists through professional project management, networking and matchmaking activities with industry partners and financiers.

Excellence & Competence:

More than 30 scientific groups, led by clinicians, engineers, physicists, chemists and economists join forces in the BiomeTI network.

Three specific competence peaks have been rewarded internationally as world-leading areas of excellence: Biophotonics; Implantable Hearing Devices and Neurobionics; Intelligent Implants (cardiac, orthopaedic)

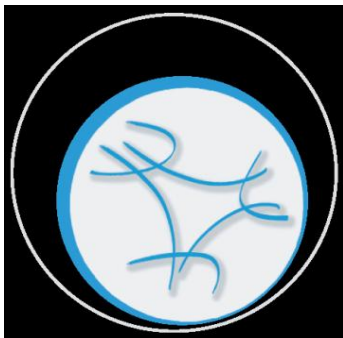
Outbound Activities:

BiomeTI approaches additional partners in other countries to increase its international network.

BiomeTI explores other markets to look for perfect matches for its members ideas and products.

Success Stories

Competence networks
Examples



Collaborative Research Centre (CRC) 599, “Sustainable bioresorbable and permanent implants of metallic and ceramic materials”



Cluster of Excellence
From Regenerative Biology to Reconstructive Therapy



Lower Saxony Center for Biomedical Engineering, Implant research and Implant development



Interdisciplinary Center of Biocompatibility and Implant Immunology in Medical Engineering



Transregional special research area SFB/Transregio 37 “Micro and nanosystems in medicine – Reconstruction of biological functions”

NIFE

- Niedersachsen Center for Biomedical Engineering, Implant Research and Development (NIFE)
- Collective scientific institute of the academies of Hannover
- Partners: Hannover Medical School (MHH), Leibniz Universität Hannover (LUH), University of Veterinary Medicine Hannover (TiHo), Laser Zentrum Hannover e.V. (LZH)
- Building will be completed in 2015
- Operations have already begun in CrossBit and VIANNA
- One of the international leading facilities of biomedical research and development
- Topics range from development of biocompatible materials for implants and infectious biology to imaging, laser medicine and regenerative therapies
- For example: orthopedic implants, heart valves, cochlear implants

REBIRTH

- Development of therapies from regenerative sciences and medicine
- Creation of synergies by connecting science and practice
- Education of young people
- Promotion of international cooperation
- Medical School Hannover has one of the most active and progressive organ transplantation centres worldwide
- Extensive exchange of people and ideas for many decades
- Partners: Medical School Hannover, Leibniz Universität Hannover, Laser Zentrum Hannover e.V., Max Planck Institute for Molecular Biomedicine, University of Veterinary Medicine Hannover, Industrial Partners and many more.

Auditory Valley – „Hearing 4 all“

- Area between Hannover and Oldenburg located in Niedersachsen
- Slogan: Hearing for all! All people and all situations
- Combination of technologies used in audio systems, hearing aids and cochlear implants
- Research and development for audio systems at University Oldenburg, Hoerzentrum Oldenburg, Hoertech and Sennheiser electronics
- Research and development for hearing aids and cochlear implants at Hannover Medical School, Hoerzentrum Hannover, VIANNA, Advanced Bionics, MED-EL Cochlear Implants, Cochlear and Phonak Hearing Systems
- Research and development for hearing devices at Kind Hearing Devices and Audio Service
- New Cluster of Excellence „Hearing 4 all“ has emerged out of this already existing collaboration

Projects

BioRegion

Landesinitiative Gesundheitswirtschaft -
Life Sciences Niedersachsen



AMI-4Europe

Advanced, Cross Disciplinary & Integrated Medical
Imaging for all Europeans through a Network of
Regional Clusters and Development Strategies



IN2LifeScience

Transnational Innovation Incentives for Life Science
SMEs





**Landesinitiative
Gesundheitswirtschaft –
Life Sciences
Niedersachsen**

Life Science in Niedersachsen

BioRegionN

History:

- BioRegionN developed from the 1996 BioRegio-competition of the Federal Ministry for Education and Research and is the central contactpoint for life sciences in Niedersachsen
- Since 2000: Funding from Niedersachsen has been a regional initiative
- Since January 2010: The Center for Biomedical Technology and Innovation (BiomeTI e.V.) has run the BioRegionN office.

Assignment:

- Clustermanagement in the following areas:
 - Biotechnology
 - Biomedical engineering
 - Health economy



Building boom at the Hanover Medical School. Based on a master plan, extensive reconstruction and new construction as well as renovation projects will be implemented in the coming years. This will help to optimize the organizational structure of clinics, research and education facilities.

© Medizinische Hochschule Hannover

The Aim of BioRegionN

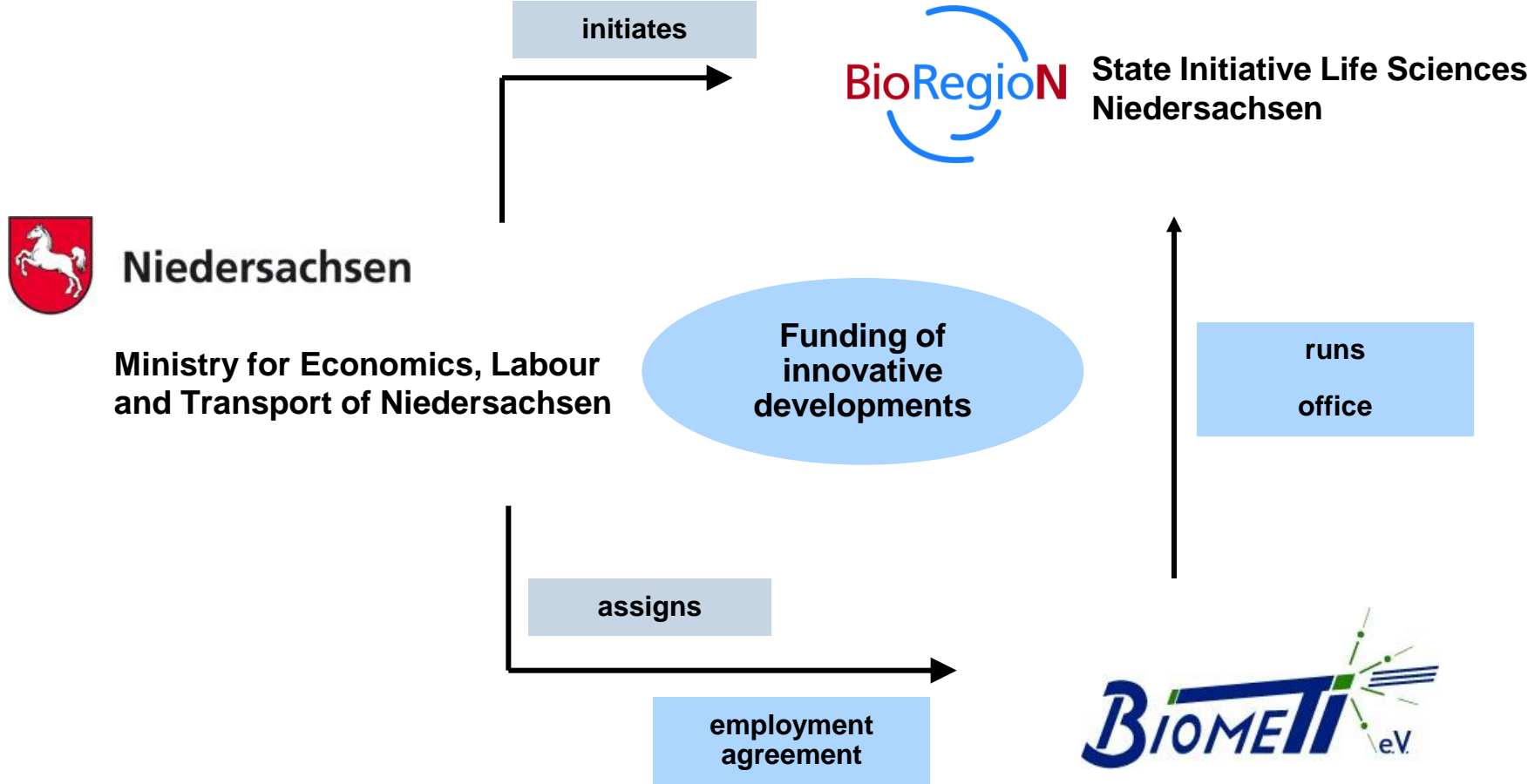
Overall Aim:

To maintain and strengthen Niedersachsen's position as an innovative leader within the competitive international life sciences market.

Central Tasks:

- Strengthen networking structure within the life sciences industries
- Sustainably ensure and expand the competitive position of companies
- Access existing opportunities for innovation and pursue new avenues for advancement
- Strive for increased market and application orientation for scientific research

Operator of the BioRegion



Activities - Translation / Transfer

R&D Cluster:

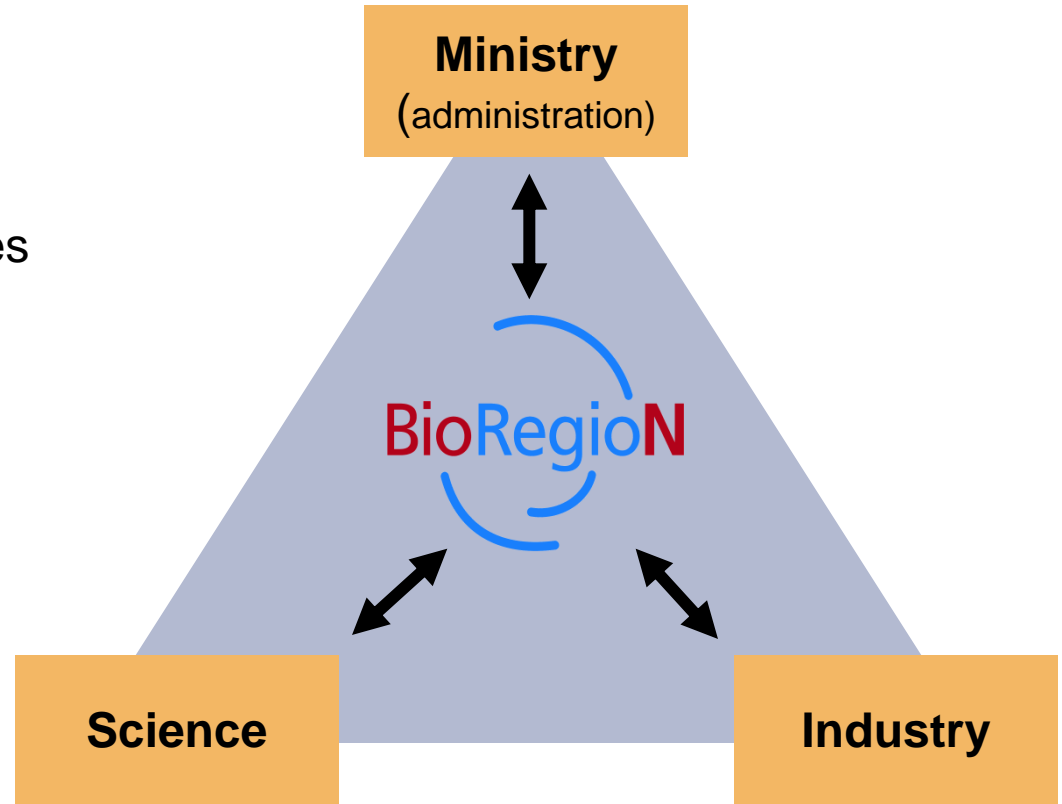
Topic orientated

Primarily SME's, university institutes

R&D partnerships:

Institution orientated

Large research institutions,
large industrial companies



Life Sciences in Niedersachsen

Approximately 205 companies

Biotechnology 158

(Bio-)Medical Engineering 47

Research & Development

21 Universities

34 R & D institutions

Leading research & development



Boehringer Ingelheim is building their European research center for veterinary vaccines in Hanover. The Hanover University of Veterinary Medicine is a partner in this project



With up to 500 Cochlear implant operations annually, the Otolaryngology Clinic at the Hanover Medical School is the global leader among Cochlear centers

Outstanding Companies

- Otto Bock Healthcare:
global player for technical orthopaedics (Orthobionic®) and
rehabilitation (Bionimobility®) products
Topics: prostheses, orthoses, wheelchairs, neurostimulation,
paralympic sport
well known product: C-Leg
- Kind Hearing Devices:
global player for hearing aid acoustics
brandleader in Germany, one of the leading companies
worldwide
- Sartorius:
one of the world's leading providers of laboratory and process
technologies and equipment
several different products for laboratory like filters, membranes,
bioreactors and laboratory balances



Activities - Funding

Subsidies advice:

Intensive cooperation with NBank and hannoverimpuls, a joint-business development company

Venture capital:

- Bio@venture Conference
- cooperation with NBank
- IN2LifeSciences Project supported by several bioregions

Bio@venture

Activities - Events

- Business Teas
- Workshops
- Life Science Day
- TopX N LifeSciences
- Fairs
 - Biotechnica
 - COMPAMED (Medica)

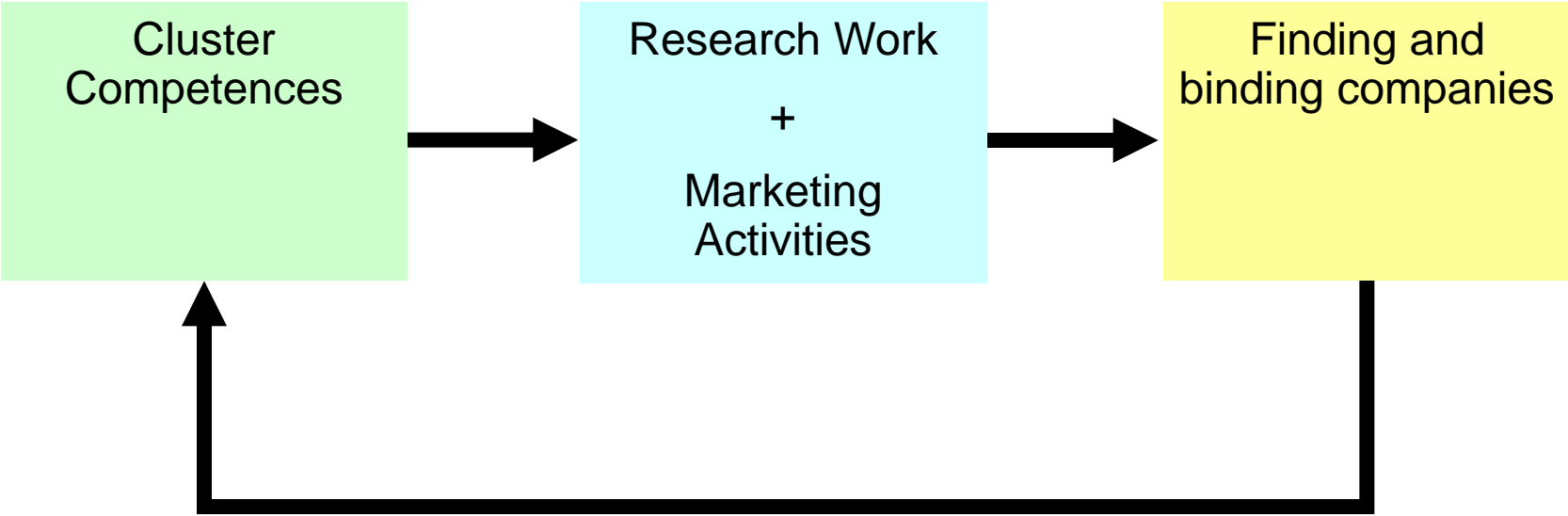


Intensive conversations at the 2nd business tea 2011 in Hannover

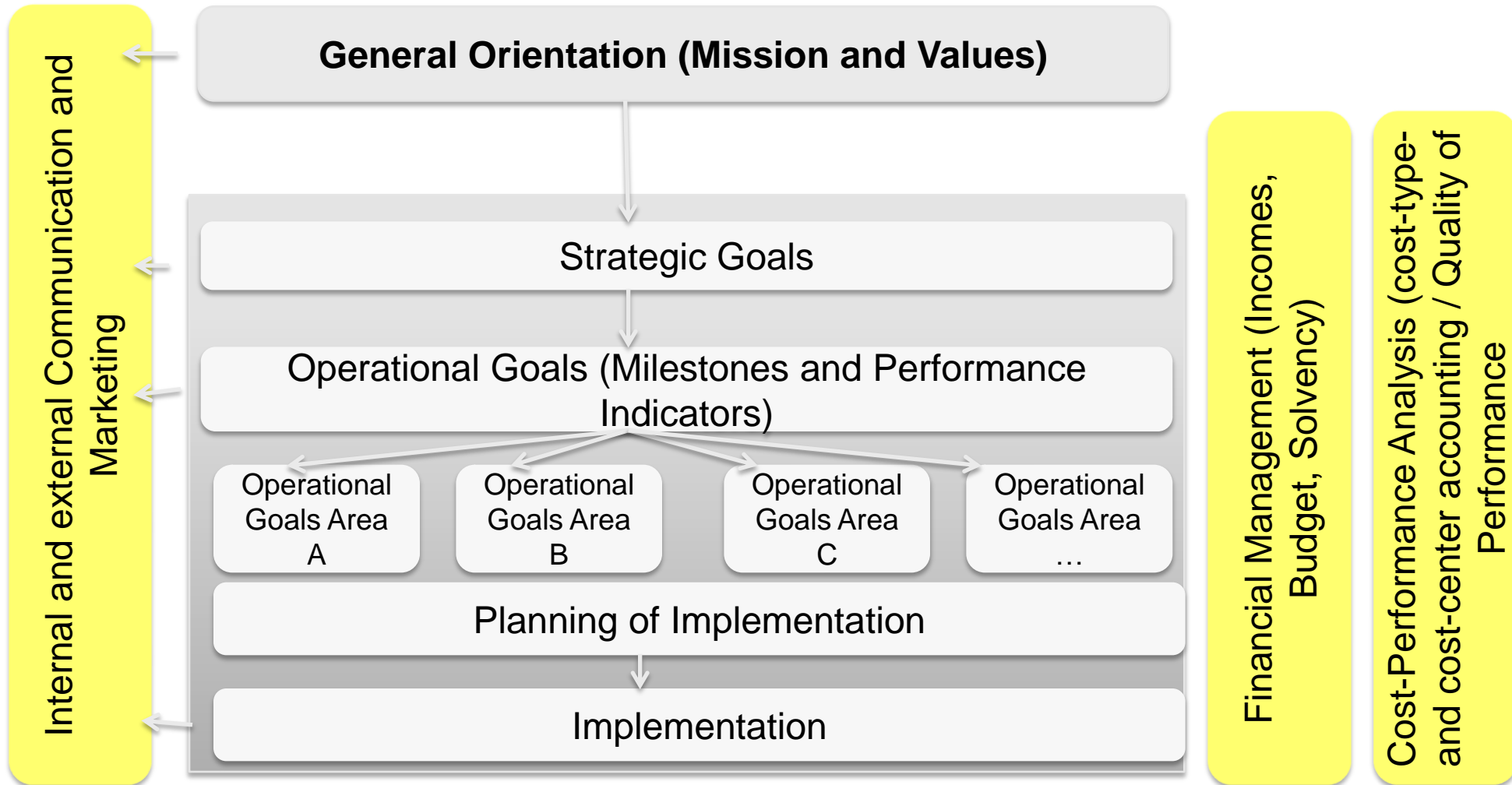


In conversation (f. l. t. r.): Prof. Nolte, Dr. Hohenhoff, State secretary Dr. Liersch

Cluster Development



Clustermanagement





Thank you for your attention!!!



Workshop Questions

- Team Marketing
 - Is it important to have a comprehensive Marketing structure? – Why?
 - Who are your customers? – Are there different target groups?
 - How do you communicate with them? – How do you vary your Marketing approaches?

- Team Financial Management
 - How is the cluster financed?

- Team Operational Goals
 - What are your operational goals for the next 3 years? Are there Performance Indicators?