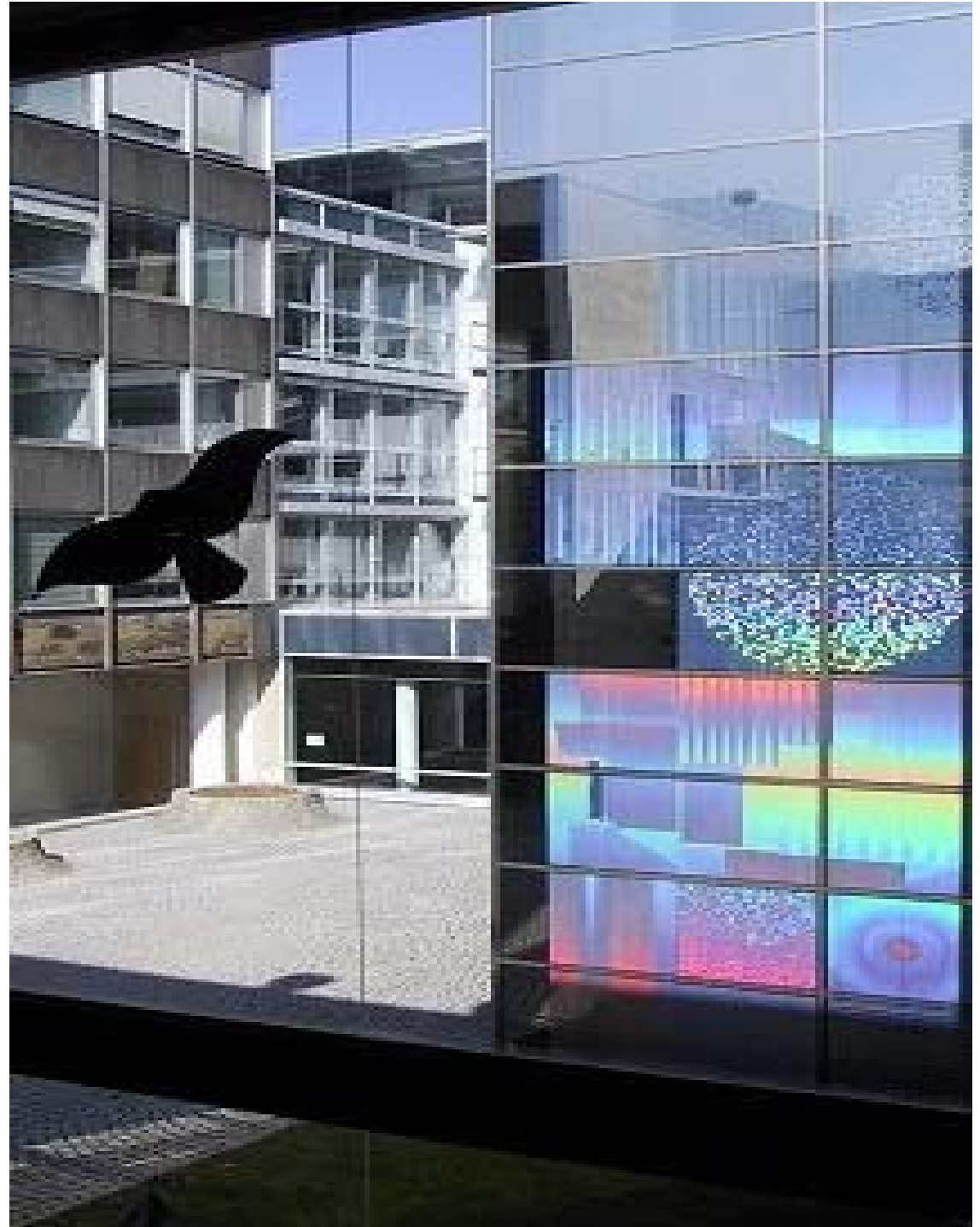


Deutsche  
Forschungsgemeinschaft

International Workshop on  
Accountability Challenges  
Strasbourg, France  
June 5 – June 7, 2007

# Excellence Initiative & Overhead: Shaking up the DFG

Dr. Robert Kuhn  
Director, Budget and Accounting  
Division,  
German Research Foundation



- **The Excellence Initiative – An Overview**  
*The Three Funding Lines*  
*Criteria of Evaluation*
- Selection Procedure
- Reflections on the competition

## Excellence Initiative

- Established 2005
- Joint funding by the government (75%) and the federal states (25%)
- Input: 1.9 billion € for 5 years – 380 million € per year
- Implementation by



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# Germany's Excellence Initiative

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# Germany's Excellence Initiative

## The Wissenschaftsrat



- advisory body to the federal government and the state governments
- founded on 5 September 1957
- issues statements and recommendations, prepares reports on
  - scientific institutions
  - general questions relating to the system of higher education

# Germany's Excellence Initiative

## The Wissenschaftsrat



- co-funded by the federal government and the governments of the 16 states
- consists of two commissions:
  - scientific commission (32 members, scientists)
  - administrative commission (22 members, governmental representatives)
- both commissions meet in the plenary assembly (45 members) to take decisions

## The Wissenschaftsrat



- headed by a chairperson elected for one year, re-election possible
- supported by the secretariat of the Wissenschaftsrat (staff about 70, about half of them with scientific background), that is headed by the secretary general
- seated in Berlin with the secretariat located in Cologne



# Goals of the Excellence Initiative

- Strengthening the **international visibility** of German research
- Strengthening centres of **excellence** in research
- Creating an integrated approach to fostering the development of **young researchers**, especially their early independence
- Strengthening **networks** between universities, research organisations and industry
- Implementing more efficient **management structures** within universities
- Introducing a 20% **contribution** to the funding of the **indirect costs** of research



***Three lines of funding:***

- Graduate Schools
- Clusters of Excellence
- Institutional Strategies

***Common Characteristics:***

- Large scope for unconventional ideas
- Boost research base (e.g. new chairs)
- Integration of non-university potential expected

(Max Planck and other institutes, industry)

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## *Three lines of funding*



### **Institutional Strategy for Top-Level University Research**

*Increase international competitiveness of the  
whole university*

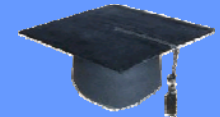
- **approx. 10 Institutional Strategies**
- **approx. 13.5 million €p.a. each**



### **Graduate Schools**

*Highest level research training*

- **approx. 40 Graduate Schools**
- **approx. 1 million €p.a. each**



### **Clusters of Excellence**

*Centres of excellence in research*

- **approx. 30 Excellence Centres**
- **approx. 6,5 million €p.a. each**

## ***Graduate Schools - Aims of the funding line***

- Structured research training in an excellent research environment
- Internationally competitive centres of top-level research by promoting young researchers
- Instrument of quality assurance in graduate education



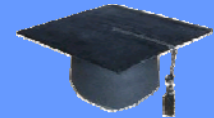
### **Graduate Schools**

*Highest level research training*

- approx. 40 Graduate Schools
- approx. 1 million €p.a. each

## ***Clusters of Excellence – Aims of the funding line***

- Concentrate research competence in particularly innovative fields
- Create internationally visible and highly competitive research priorities
- Significantly raise a university's profile
- Build on already existing strengths



### **Clusters of Excellence**

*Centres of excellence in research*

- **appr. 30 Clusters of Excellence**
- **approx. 6,5 million €p.a. each**

## Institutional Strategy for Top-Level University Research

*Increase international competitiveness of the  
whole university*

- **approx. 10 Institutional Strategies**
- **approx. 13.5 million €p.a. each**

### *Institutional Strategies*

- allow universities to develop and expand their areas of international excellence
- Establish universities as leading institutions in international competition

### *Aims of the funding line*

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***Criteria of Evaluation***
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## *Graduate Schools - Evaluation criteria*

### **Research and Training Environment**

- Quality of the researchers and the research environment
- Contribution to the academic profile of the university and to the research areas involved
- Ability to develop and sustain a doctoral culture
- Interdisciplinary approach
- International visibility

### **Research Training**

- Quality and originality of the research training concept
- Integration of doctoral students into the research environment
- Supervision and strategies to promote research careers
- International networking

### **Structures**

- Organisation, management and support services
- Cooperation with non-university institutions
- Gender equality and affirmative action

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*Clusters of Excellence - Evaluation criteria*

**Research**

- Quality of research; originality and coherence of the research programme
- Added value of interdisciplinary cooperation
- Impact on the scientific field in the future
- Plans for transferring research results into practical application

**People**

- Highly qualified research groups and international visibility
- Career development opportunities and appeal to young investigators
- Research training concepts
- Gender equality

**Structures**

- Integration of local research capacities, e.g. non-university institutions
- Organisation and management

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## *Institutional Strategies – Criteria of Evaluation*

### ***Excellent track-record***

- in top level research: several internationally competitive research areas
- and graduate training

### ***Convincing Institutional Strategy***

- innovative and unique approach to ameliorate the international position of the university
- distinctive profile
- international competitiveness as an institution during the funding period

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1. Phase: 07/05 – 10/06

**157 Clusters of Excellence**  
(pre-proposals)

**135 Graduate Schools**  
(pre-proposals)

**27 Institutional Strategies**  
(pre-proposals)

- *20 Panels (1 year ago)*
- *Interdisciplinary Joint Commission*



**First Selection Phase**

**39 Clusters of Excellence**  
(full proposals)

**39 Graduate Schools**  
(full proposals)

**10 Institutional Strategies**  
(full proposals)

- *24 Panels/ 10 evaluation groups  
(→ June/July 2006)*
- *Interdisciplinary Joint Commission*
- *Grants Committee*



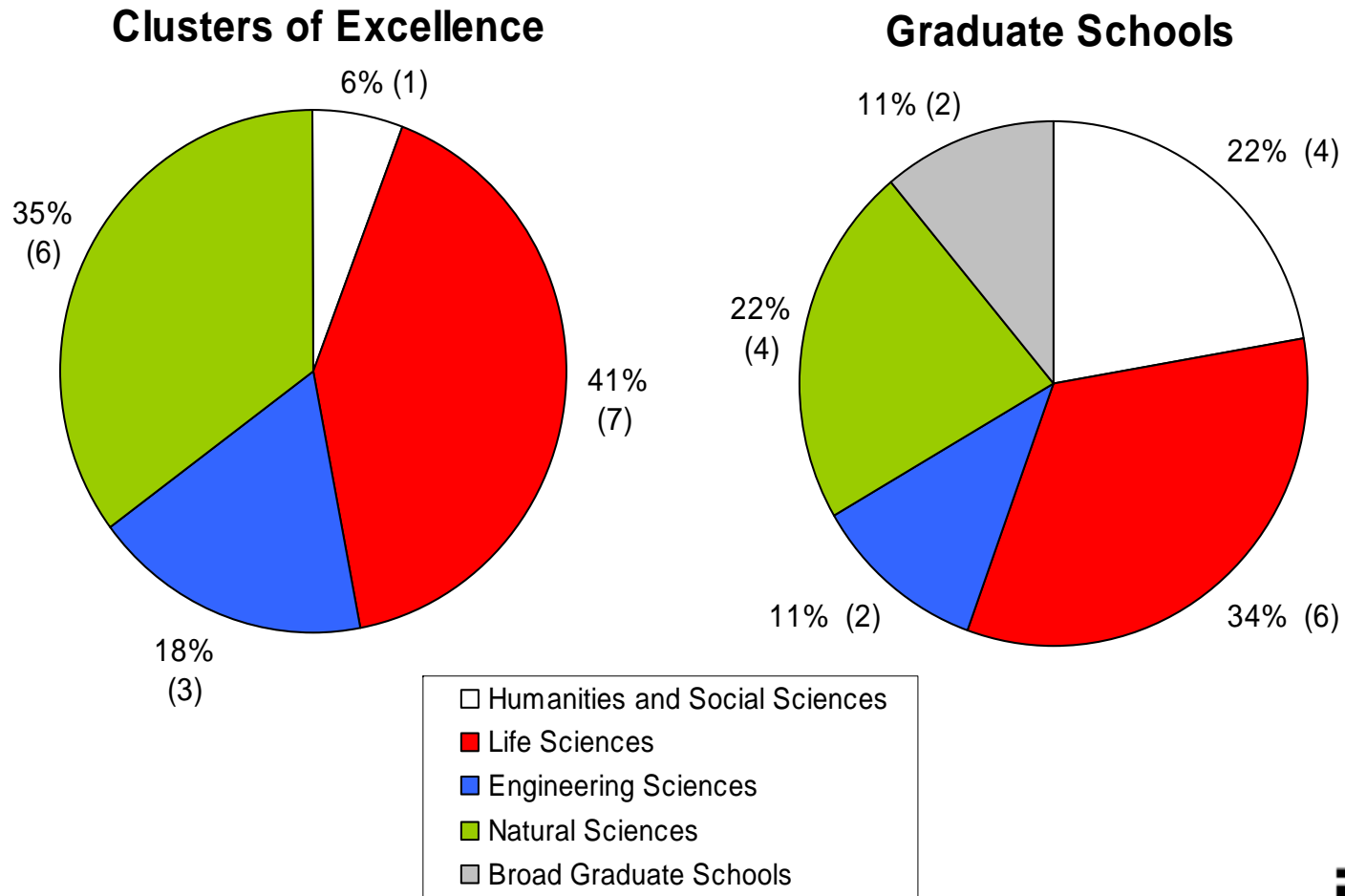
**Second Selection Phase**

**17 Clusters of Excellence**

**18 Graduate Schools**

**3 Institutional Strategies**

## Proposals funded according to disciplines



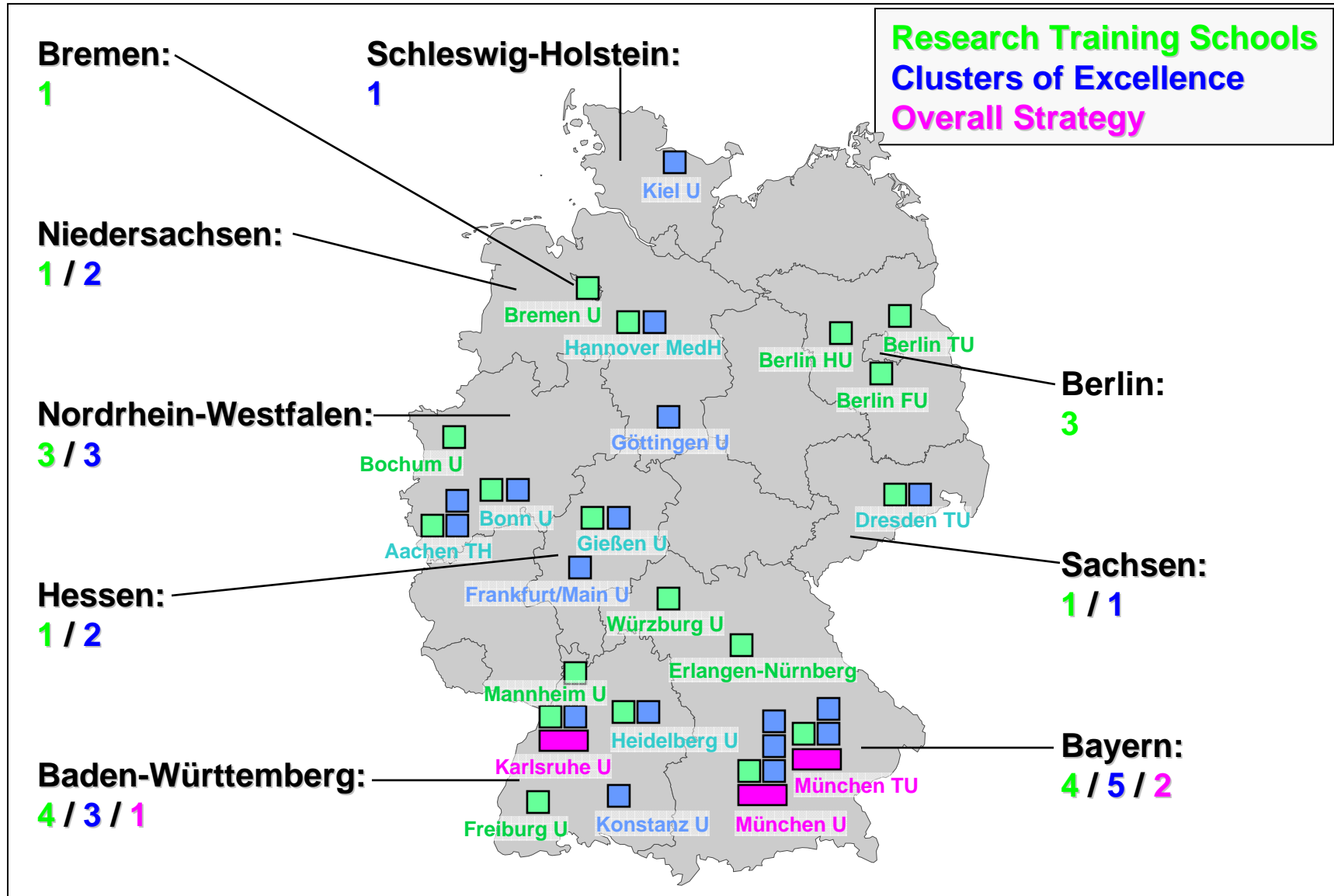
## **Results Phase 1 - *Graduate Schools***

- **Institute for Advanced Studies in Computational Engineering Science, Aachen**
- **Graduate School of North American Studies, Berlin FU**
- **Berlin School of Mind and Brain, Berlin HU**
- **Berlin Mathematical School, Berlin TU**
- **Ruhr University Research School, Bochum**
- **Bonn Graduate School of Economics, Bonn**
- **Global Change in the Marine Realm, Bremen**
- **International Graduate School for Biomedicine and Bioengineering, Dresden**
- **Graduate School in Advanced Optical Technologies, Erlangen-Nuremberg**
- **Molecular Cell Research in Biology and Medicine, Freiburg**
- **International Graduate Centre for the Study of Culture, Gießen**
- **Hannover Biomedical Research School, Hannover Medical School**
- **Graduate School of Fundamental Physics, Heidelberg**
- **Karlsruhe School of Optics and Photonics, Karlsruhe**
- **Empirical and Quantitative Methods in Economic and Soc. Sciences, Mannheim**
- **Graduate School of Systemic Neurosciences, Munich LMU**
- **International Graduate School of Science and Engineering, Munich TU**
- **Graduate School for Life Sciences, Würzburg**

## **Results Phase 1 – *Clusters of Excellence***

- **Integrative Production Technology for High-Wage Countries**, Aachen
- **Ultra High-Speed Mobile Information & Communication**, Aachen
- **Mathematics: Foundations, Models, Applications**, Bonn
- **From Cells to Tissues to Therapies**, Dresden
- **Macromolecular Complexes**, Frankfurt
- **Cardio-Pulmonary System**, Gießen
- **Microscopy at the Nanometer Range**, Göttingen
- **From Regenerative Biology to Reconstructive Therapy**, Hannover Medical School
- **Cellular Networks**, Heidelberg
- **Center for Functional Nanostructures**, Karlsruhe
- **The Future Ocean**, Kiel
- **Cultural Foundations of Social Integration**, Constanz
- **Munich Center for Integrated Protein Science**, LMU
- **Munich-Centre for Advanced Photonics**, LMU
- **Nanosystems Initiative Munich**, LMU
- **Cognition for Technical Systems**, TU Munich
- **Origin and Structure of the Universe**, TU Munich

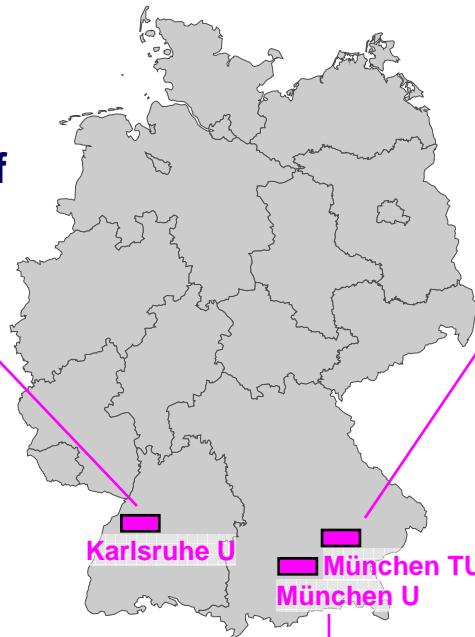
# Results in the 1<sup>st</sup> Round of the Excellence Initiative (Oct. 2006)



## The Three „Institutional Strategies“

### **Karlsruhe: The foundation of the Karlsruhe Institute of Technology (KIT)**

- merger of Karlsruhe University and the Research Centre Karlsruhe into KIT (modelled on MIT)



### **TUM: The Entrepreneurial University**

- at the centre: TUM Institute of Advanced Study (modelled on the IAS in Princeton)
- establishing a research-friendly administration

### **LMUexcellent: Working Brains – Networking Minds – Living Knowledge**

- institutional strategy focussing on new proactive recruiting strategies (headhunting)
- cooperations with MPis and other universities
- creating a Center for Advanced Studies (strengthening interdisciplinarity)



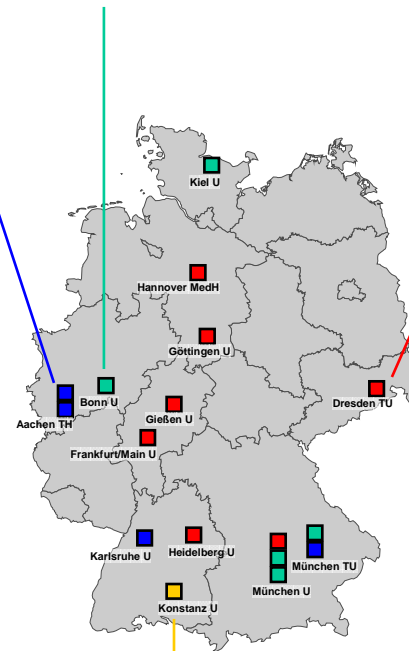
# Clusters of Excellence – 4 Examples

## Bonn U: Mathematics: Foundations, Models, Applications

- series of thematic priorities, interdisciplinarity
- cooperation of international guest professors with colleagues in Bonn  
e.g.: G. Faltings (Fields-Medal), R. Selten (Nobel prize economics)

## Aachen TH: Integrative Production Technology for High-Wage Countries

- researching the conditions for producing successfully in high-wage countries
- building on the existing technology roadmap, incorporating 12 business and industry cases with partner companies



## Dresden TU: From Cells to Tissues to Therapies

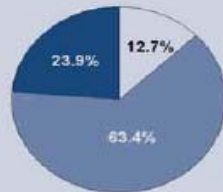
- research on human stem cells
- top-up funding for the DFG Research Centre on Regenerative Therapies established in 2005

## Konstanz U: Cultural Foundations of Social Integration

- social integration and desintegration on all social strata
- incorporating recent trends

## 2006 Excellence Initiative Funding Decisions

### Awards by funding line

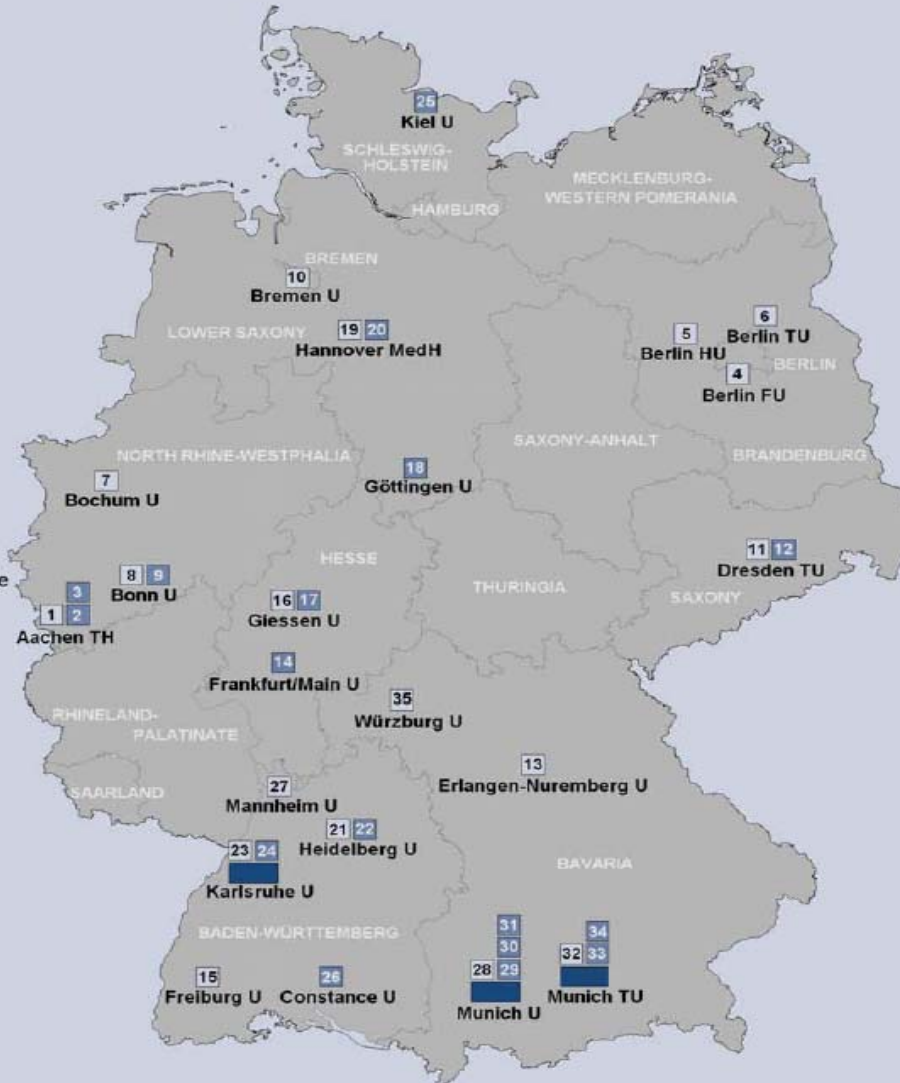


Based on:  
€ 873.4 million  
over five years

-  Graduate schools to promote young researchers
-  Clusters of excellence to promote world-class research
-  Institutional strategies to promote top-level university research



FU = Free University  
HU = Humboldt University  
TH/TU = University of Technology  
U = University  
MedH = Medical School



2. Phase: 04/06 – 10/07

<b>123 Clusters of Excellence</b> (pre-proposals)	<b>118 Graduate Schools</b> (pre-proposals)	<b>20 Institutional Strategies</b> (pre-proposals)
--	--	---

- *27 Panels*
- *Interdisciplinary Joint Commission*



**First Selection Phase**

<b>~ 45 Clusters of Excellence</b> (full proposals)	<b>~ 45 Graduate Schools</b> (full proposals)	<b>~ 10 Institutional Strategies</b> (full proposals)
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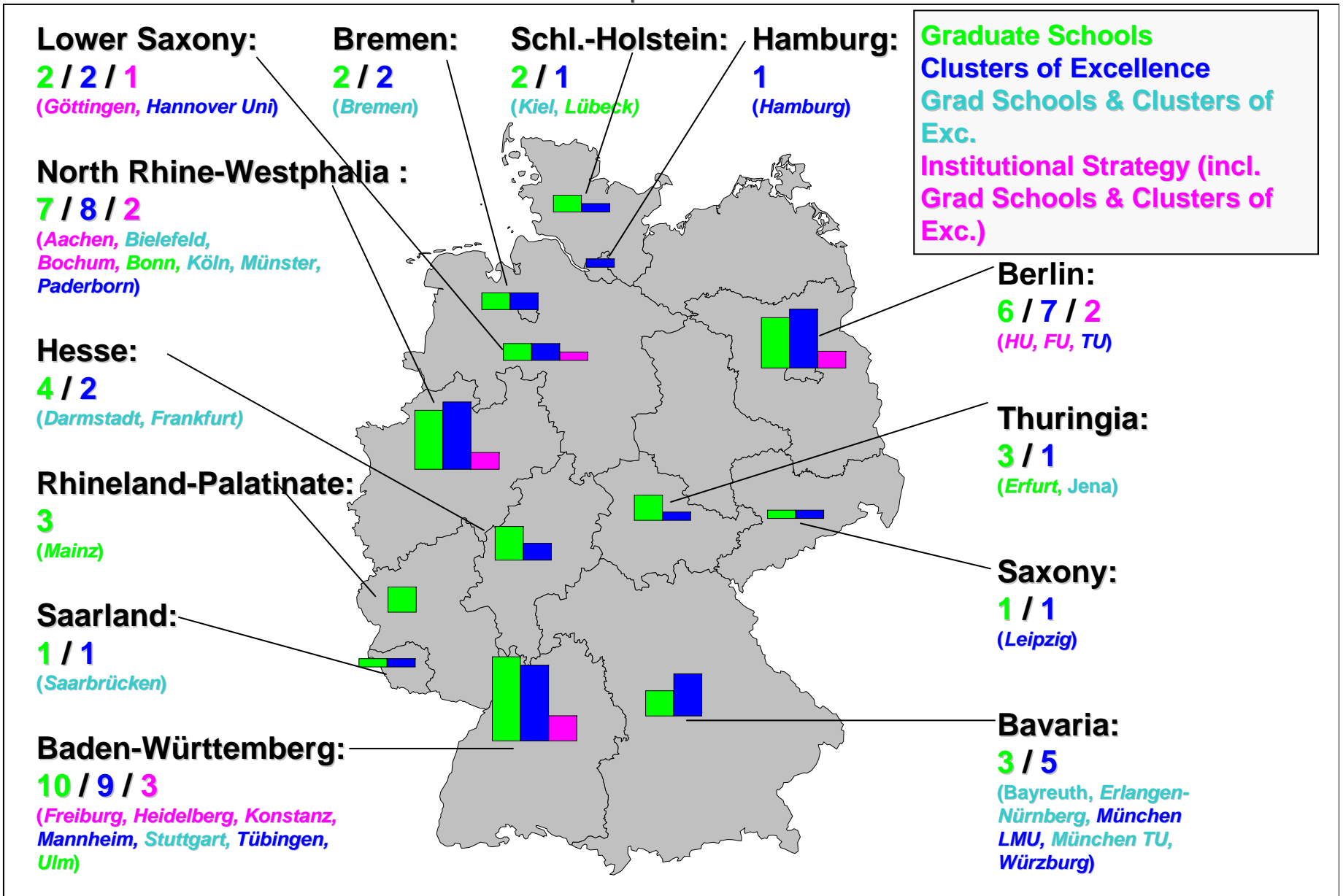
- *XX Panels/ X evaluation groups*  
(→ June/July 2007)
- *Interdisciplinary Joint Commission*
- *Grants Committee*



**Second Selection Phase**

<b>~ 15 Clusters of Excellence</b>	<b>~ 20 Graduate Schools</b>	<b>~ Institutional Strategies</b>
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## 2<sup>nd</sup> Round: Invited to Submit Full Proposals



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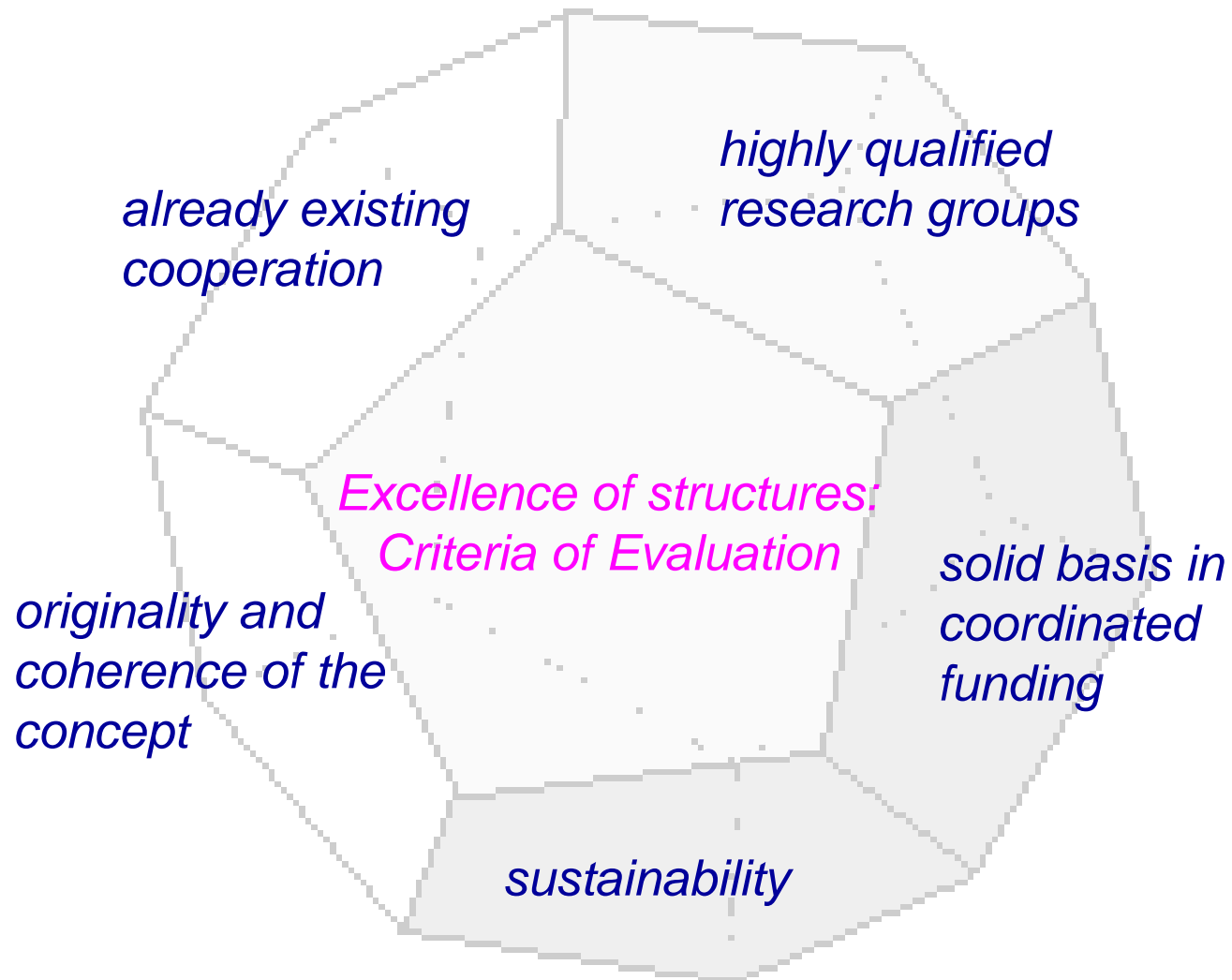
## *Characteristics of the competition*

*International  
standards*

*Two stage selection  
procedure:  
draft proposals  
& full proposals*

*Scientificly  
driven*

*Open access:  
open call for proposals /  
no quotas assigned*



## Paths to overheads – An Overview

- the German higher education pact
- financial plan
- challenges



## The German higher education pact

### ➤ Diagnosis:

Until the year 2020 the number of new a-levels in Germany will increase substantially due to demographic reasons and a change in the German school scheme ( 8 instead of 9 years grammar school).

### ➤ Therapy:

Budget increases for the Universities

## The German higher education pact

➤ two columns:

Column one: teaching

Column two: research

## Column one: teaching

- 90.000 additional freshmen expected for the year 2010 compared to the year 2005
- Federal government gives 565 Mio. € to the states (calculation base 22.000 € per freshman and year for 4 years)
- Apportionement between the states still under discussion

## Column two: research

- proposition by DFG to introduce “grant scheme lump sums” (i.e. overhead)
- unanimously accepted by the federal government and the states
- still pending because of a junctim between the two columns of the higher education pact

## Column two: research

➤ Basic idea:

A lump sum on top to cover indirect, additional and variable expenses caused by the project but not immediately and exclusively attributable to the project.

Grant scheme lump sum is 20 % of the granted direct project expenses.

## Financial Plan

- Introduction of the grant scheme lump sums in several annual steps:
  - for the year 2007 grants for Collaborative Research Centres, DFG Research Centres and Research Training Groups (i.e. annual grants)
  - starting with year 2008 all new grants

## Financial Plan

➤ overall volume 703,5 Mio. €

2007	100,2 Mio €
2008	138,9 Mio €
2009	206,9 Mio €
2010	<u>257,5 Mio €</u>
	703,5 Mio €

## Financial Plan

- 100 % reimbursement for DFG from the federal government, guaranteed until the year 2010
- grant scheme lump sums to be continued from the year 2011, sharing of the costs between federal government and states to be decided then.



## Challenges

- possible lack of constitutional competence and hence financial responsibility of the federal government
- form of grant uncommon to German budgetary law/law of grants; requires only partial reimbursement of expenses
- continued financing of the excellence initiative and the grant scheme lump sums may lead to a bigger share of the federal government in supporting DFG:

*Who pays the piper calls the tune.....*



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Thank you  
for your attention !

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**DFG**

