

Basic Research Funding in Germany

Instruments of the DFG and Roles of POs for R&D

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Tokyo, January 20, 2005

Topics

- **DFG: Who We Are and What We Do**
- **Head Office of the DFG**
- **Role of Program Officers for R&D**
 - **Facts and Tasks**
- **Funding Programmes**
 - **Research Grants**
 - **Programmes to Promote Early Independence**
 - **Coordinated Programmes**
 - **Other Programmes**
- **Processing a Proposal: From Submission to Decision**

The German Research Foundation



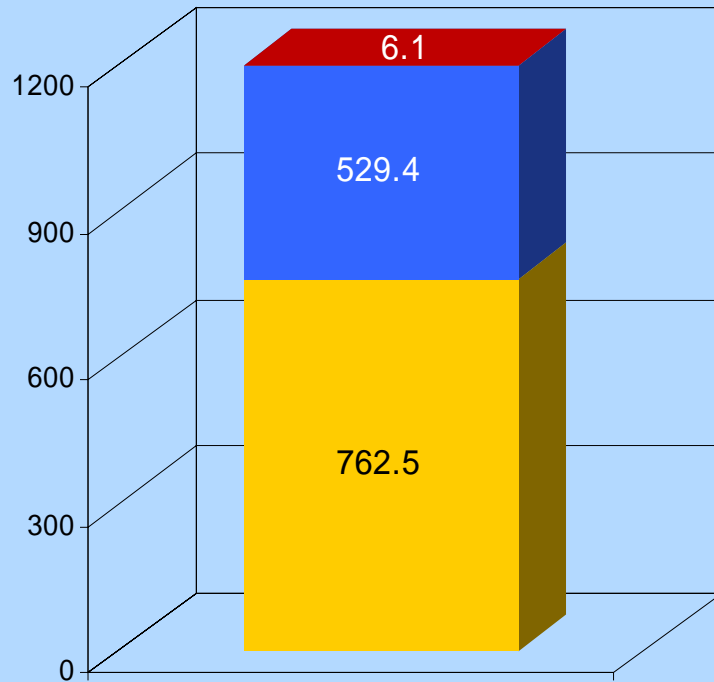
Who We Are

- **central public funding organisation for academic research in Germany**
- **association under private law**
- **self-governing organization of German Science and Research**

What We Do

- **serve science and the humanities in all fields**
- **promote academic excellence on a competitive basis**
- **support the advancement and education of young researchers**
- **advise parliaments and public authorities on research questions**
- **encourage international research cooperation**
- **foster links between science and industry**

Sources of DFG Funding



- private sources
- state governments
- federal government

annual budget

ca. €1.3 billion

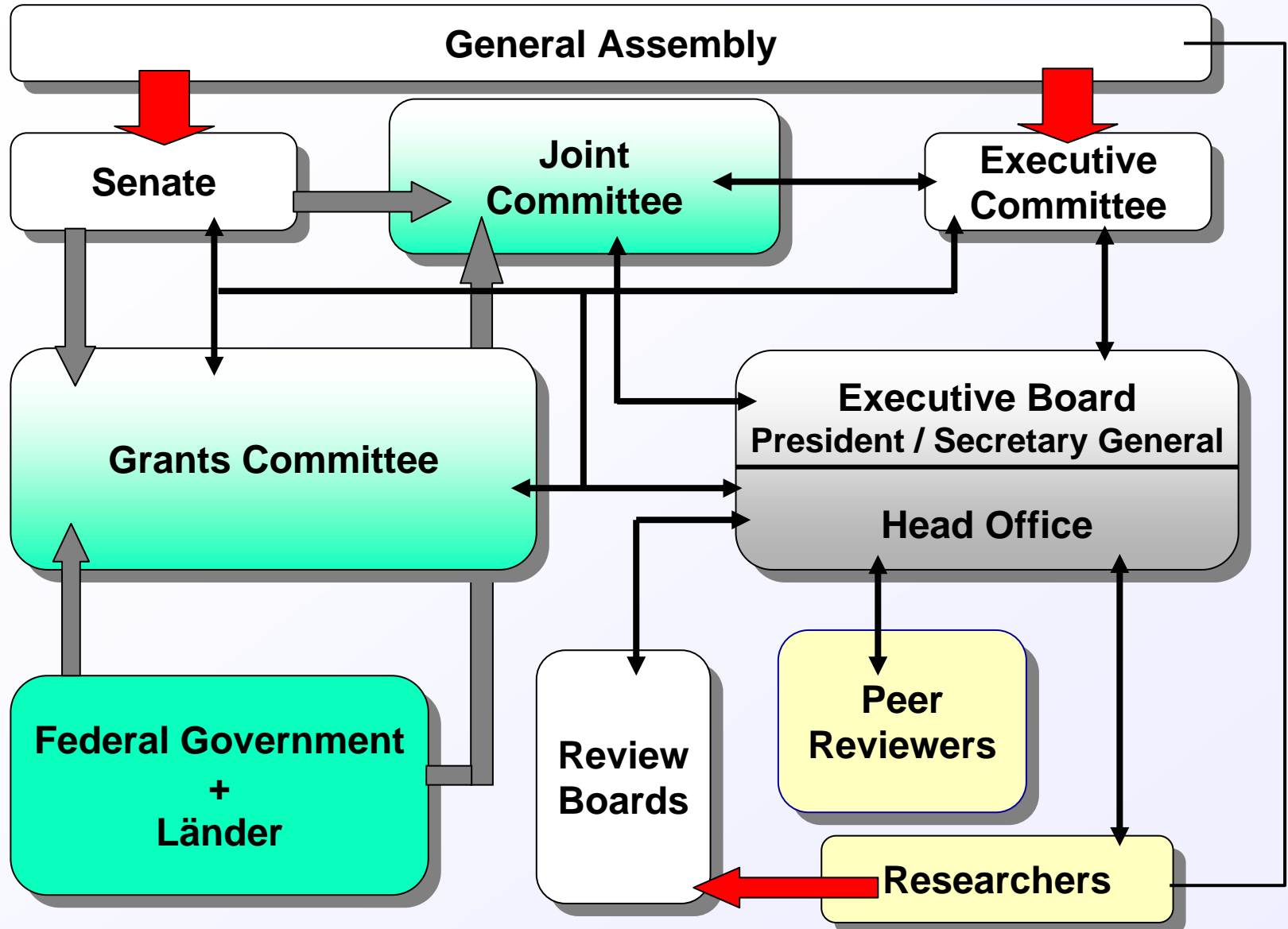
sources:

federal government: 58.7 %

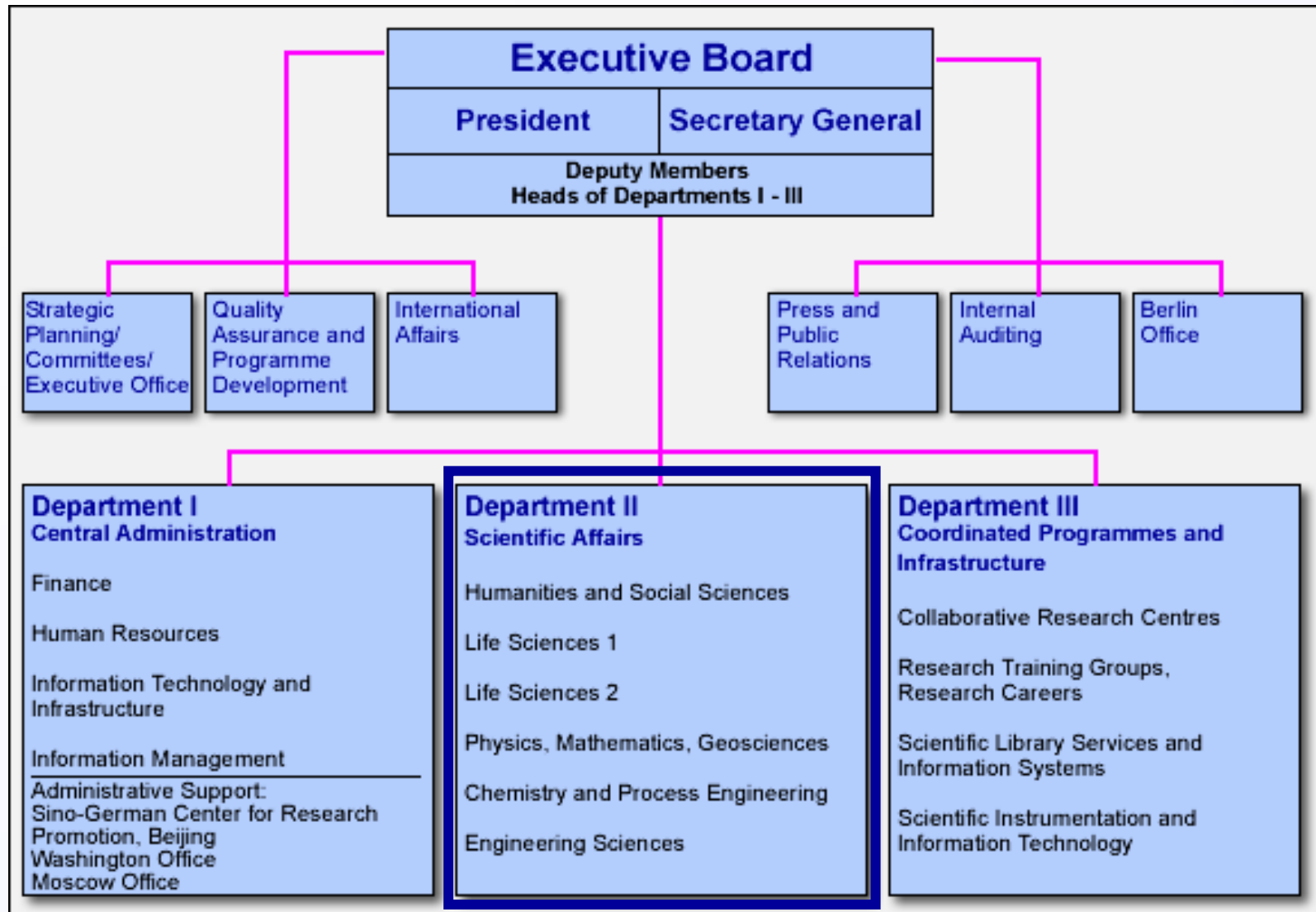
federal states: 40.8 %

foundations: 0.5 %

Structure of the Deutsche Forschungsgemeinschaft



The DFG's Head Office



The DFG's Head Office: Facts

■ Employees

- number of employees (total): ~ 700
- number of academic employees: ~ 100
- number of academic employees
in Department II (Scientific Affairs): ~ 60



total budget: 1.3 billion €/year

number of proposals: ~17.000

Department II (Scientific Affairs)

■ 7 Scientific Sections:

- Humanities and Social Sciences Divions
- Life Sciences Division I
- Life Sciences Division II
- Physics, Mathematics, Geosciences Division
- Chemistry and Process Engineering Division
- Engineering Sciences Division



Academic Staff in Department II (Scientific Affairs)

- around 60 academic colleagues
- regularly employed (mostly on unlimited basis)
- all of them holding a PhD degree or equivalent
- most of them having scientific postdoc experience
- ration female/male around 2:3
- age ranges between 30 and 65



Tasks of Programme Officers in Department II (Scientific Affairs)

Mandatory

- Information and advice
- Processing of proposals
- Management of „own“ budget
- Communication of decisions and their reasons to applicants
- Selection of referees for **other proposals**
- Contribution to internal development
- Contribution to politically important official statements of the DFG
- Representation

Desired and Encouraged

- Contribution to the development of National Science
- International commitment



Basic Categories of Funding Instruments

Individual Grants Programme (**Grants for Projects**)

Enables scientists to carry out a research project on a specifically self-defined topic within a limited time period

Funds for the Promotion of Young Researchers

Enable young scientists to develop and extend their own qualification and to establish independent research groups

(e.g. **Fellowships**; **Own Positions**; **Emmy Noether Junior Research Groups**; **Heisenberg Fellowships...**)

Coordinated Programmes

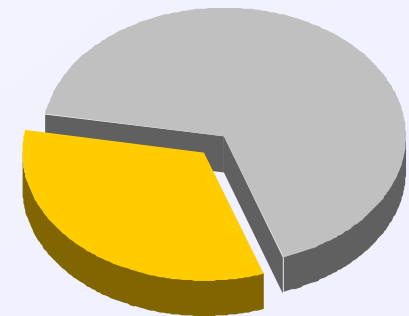
Enable the creation of temporary core research scientific training areas at universities or the building up of nationwide networks

(**Research Units**; **Priority Programmes**; **Research Training Groups**; **Collaborative Research Centres**)

Individual Grants Programme (Research Grants)

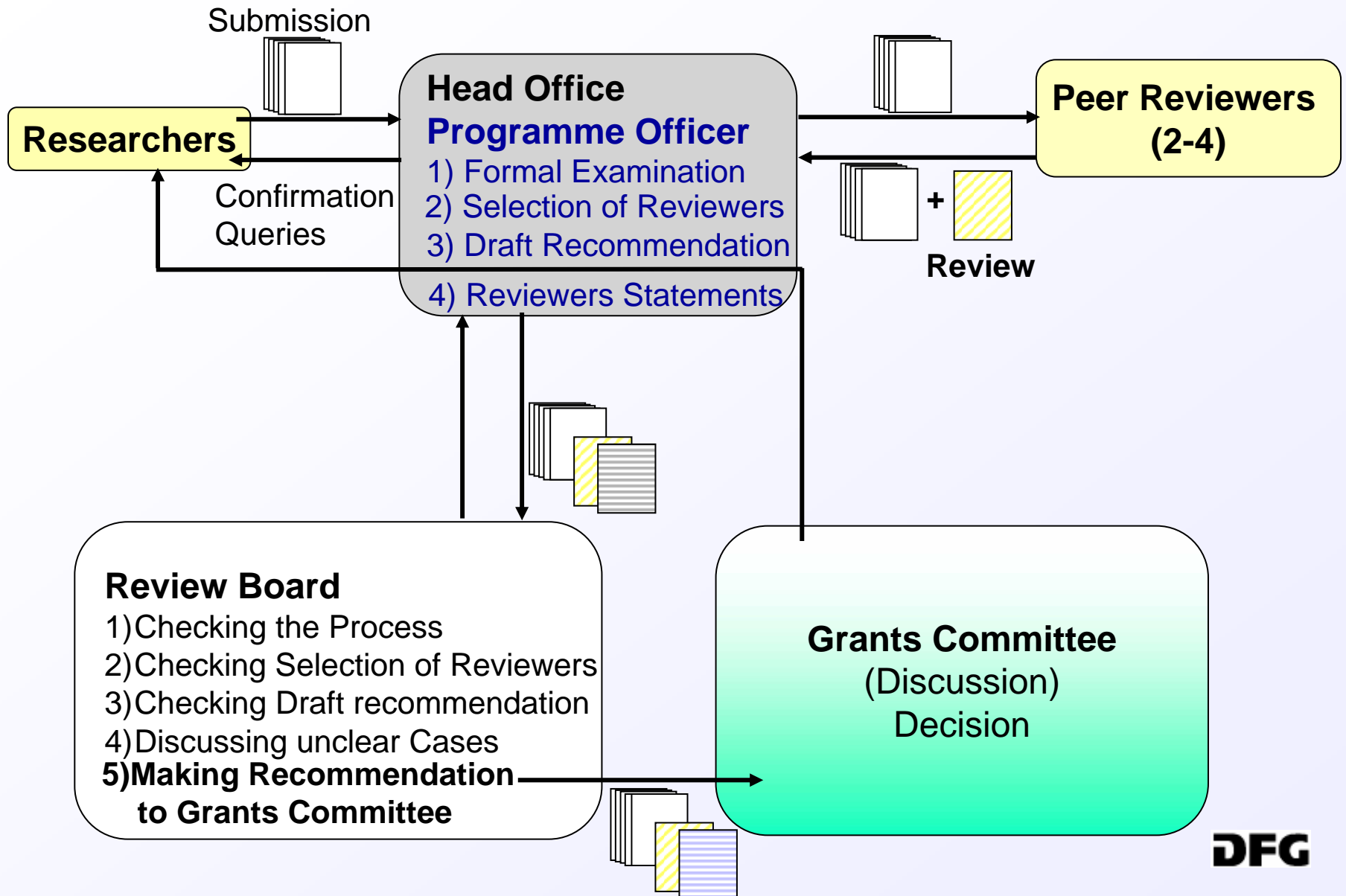
Characteristics

- **meant for:** research projects on a specifically defined topic within a limited time period
- **available funds:** personnel, scientific instrumentation, consumables, travel, miscellaneous and publication costs, one's own position
- **deadline:** neither for submission of proposals nor for decisions
- **funding duration:** maximum ~ 6 years
- **evaluation:** by peer reviewers in writing reviews
final assessment by elected review boards
- **decision:** by Grants Committee



Percentage of total funding approved: 32.5% (2003)

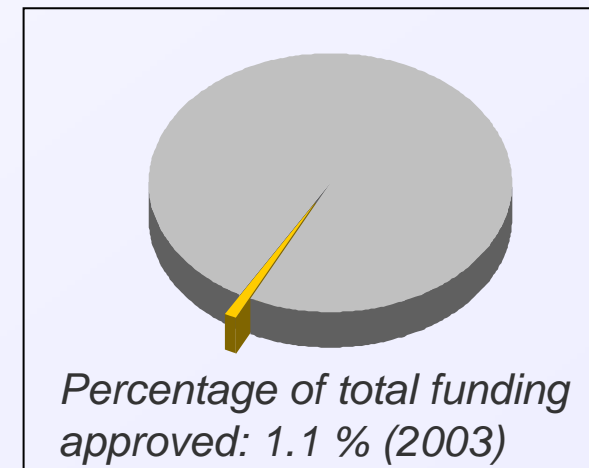
Processing of Proposals: Example I Individual Grants Programme



Promotion of Young Researchers – Research Fellowships

Characteristics

- **meant for:** young researchers to work in a host laboratory, usually abroad, to acquaint themselves with new scientific research methods and to broaden their scientific knowledge
- **requirements:** doctorate necessary
- **available funds:** basic fellowship and minor additional allowances
- **deadline:** neither for submission of proposals nor for decisions
- **funding duration:** usually 1 – 2 Years
- **evaluation:** by peer reviewers in writing reviews
final assessment by elected review boards
- **decision:** by Grants Committee

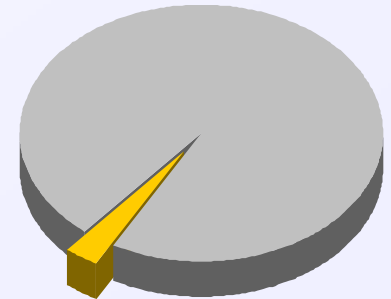


Promotion of Young Researchers – Emmy Noether Junior Research Groups

~110/year

Characteristics

- **meant for:** excellent young researchers who want to establish an own independent research group
- **requirements:** PhD not older than 4 years; postdoc (at least one year abroad); very good to excellent track record; excellent research proposal
- **available funds:** position for the applicant, personnel, scientific instrumentation, consumables, travel, miscellaneous and publication costs (up to 1,8 Mio€/5a)
- **deadline:** neither for submission of proposals nor for decisions
- **funding duration:** 5 Years
- **evaluation:** by peer reviewers in writing reviews
final assessment by elected review boards; personal introduction
- **decision:** by Grants Committee

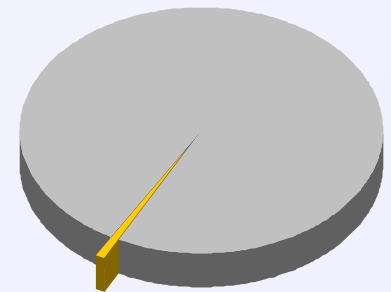


Percentage of total funding approved: 3.1 % (2003)

Promotion of Young Researchers – Heisenberg Fellowships

Characteristics

- **meant for:** providing outstanding researchers who fulfil the requirements for appointment to a long-term professorship with the opportunity to prepare for a leading position in science and research and to use the time to work on an advanced research topic
- **requirements:** habilitation or equivalent qualification; age of 35 and below; very good to excellent track record; excellent research proposal
- **available funds:** basic fellowship; sometimes project funds
- **deadline:** neither for submission of proposals nor for decisions
- **funding duration:** 5 Years max. (3 + 2)
- **evaluation:** by peer reviewers in writing reviews
final assessment by elected review boards
- **decision:** by Grants Committee

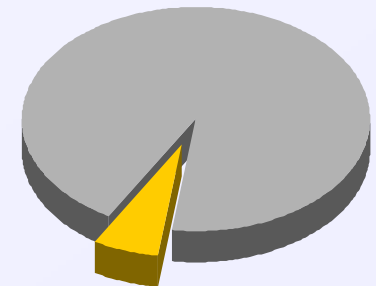


Percentage of total funding approved: 0.8 % (2003)

Research Training Groups

Characteristics

- **located at one cities**
- **meant for:**
 - enabling coordinated research and education on a specifically defined topic
 - synergetic effects by collaboration
- **consisting of:** 5 - 10 interacting working groups; joint education programme
- **available funds:** see Individual Grants Programme; + funds for educational programmes and workshops
- **deadline:**
 - submission: twice a year (April and October)
 - decisions twice a year (May and November)
- **funding duration:** maximum 9 years (2 x 4,5 Years)
- **evaluation:** in peer review group meetings
in comparison with other proposals
- **decision:** by Grants Committee on
Research Training Groups

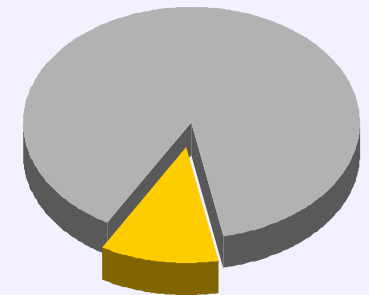


Percentage of total funding approved: 6 % (2003)

Priority Programmes

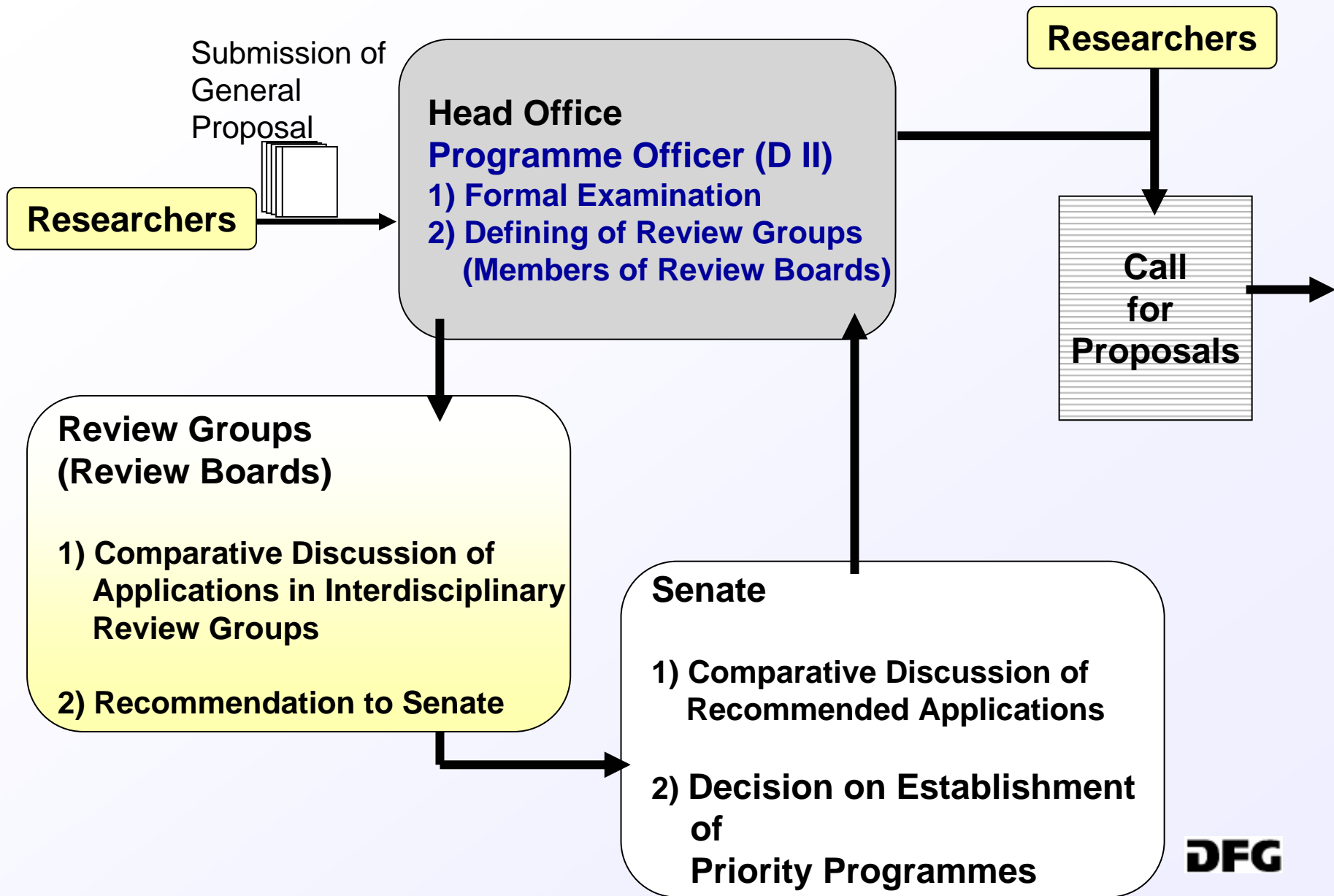
Characteristics

- **nation wide:** open calls for proposals
- **meant for:** - enabling coordinated research on a specifically defined topic in an emerging field of research of relevance
 - synergetic effects by collaboration
- **consisting of:** 10 -25 projects
- **available funds:** see Individual Grants Programme; + funds for administration (~ 1 – 2 Mio€/a)
- **deadline:** - once a year (May) decisions on establishment (by Senate)
 - after establishment call for proposals with deadline
- **funding duration:** maximum 6 years (e.g. 3 x 2 Years)
- **evaluation:** in peer review group meetings
- **decision:** by Grants Committee

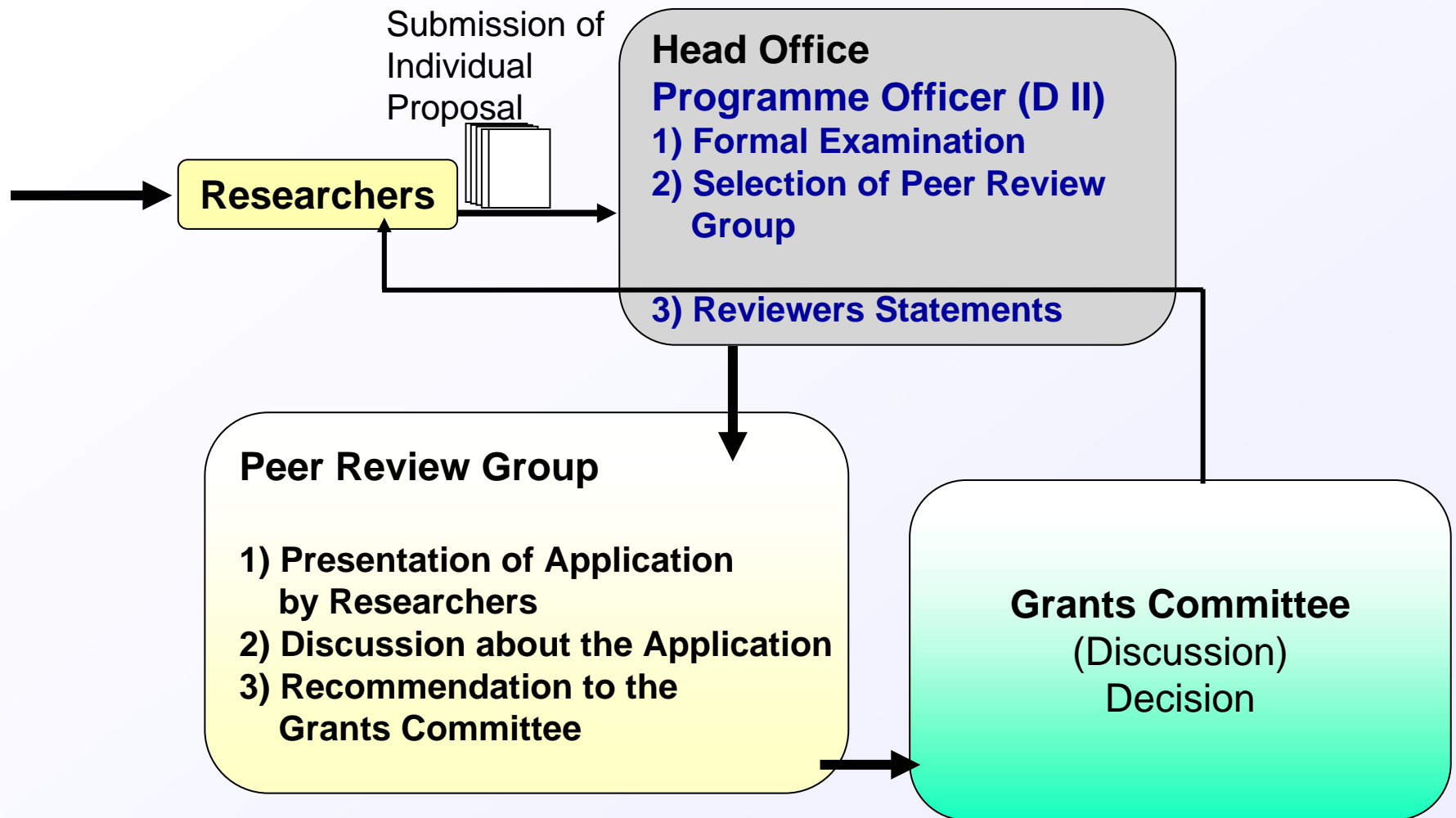


Percentage of total funding approved: 11.3 % (2003)

Processing of Proposals: Example II Priority Programmes



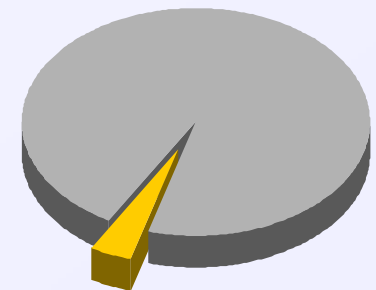
Processing of Proposals: Example II Priority Programmes



Research Units

Characteristics

- **located at one or several cities**
- **meant for:** - enabling coordinated research on a specifically defined topic
- synergetic effects by collaboration
- **consisting of:** 5 - 10 interacting projects
- **available funds:** see Individual Grants Programme; + funds for administration
(~ 0,4 – 0,7 Mio€/a)
- **deadline:** - not for submission of proposals
- decisions twice a year (February and July)
- **funding duration:** maximum 6 years (2 x 3 Years)
- **evaluation:** in peer review group meetings at location
- **decision:** by Grants Committee

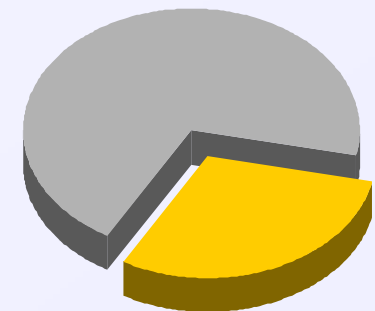


Percentage of total funding approved: 4.4% (2003)

Collaborative Research Centres

Characteristics

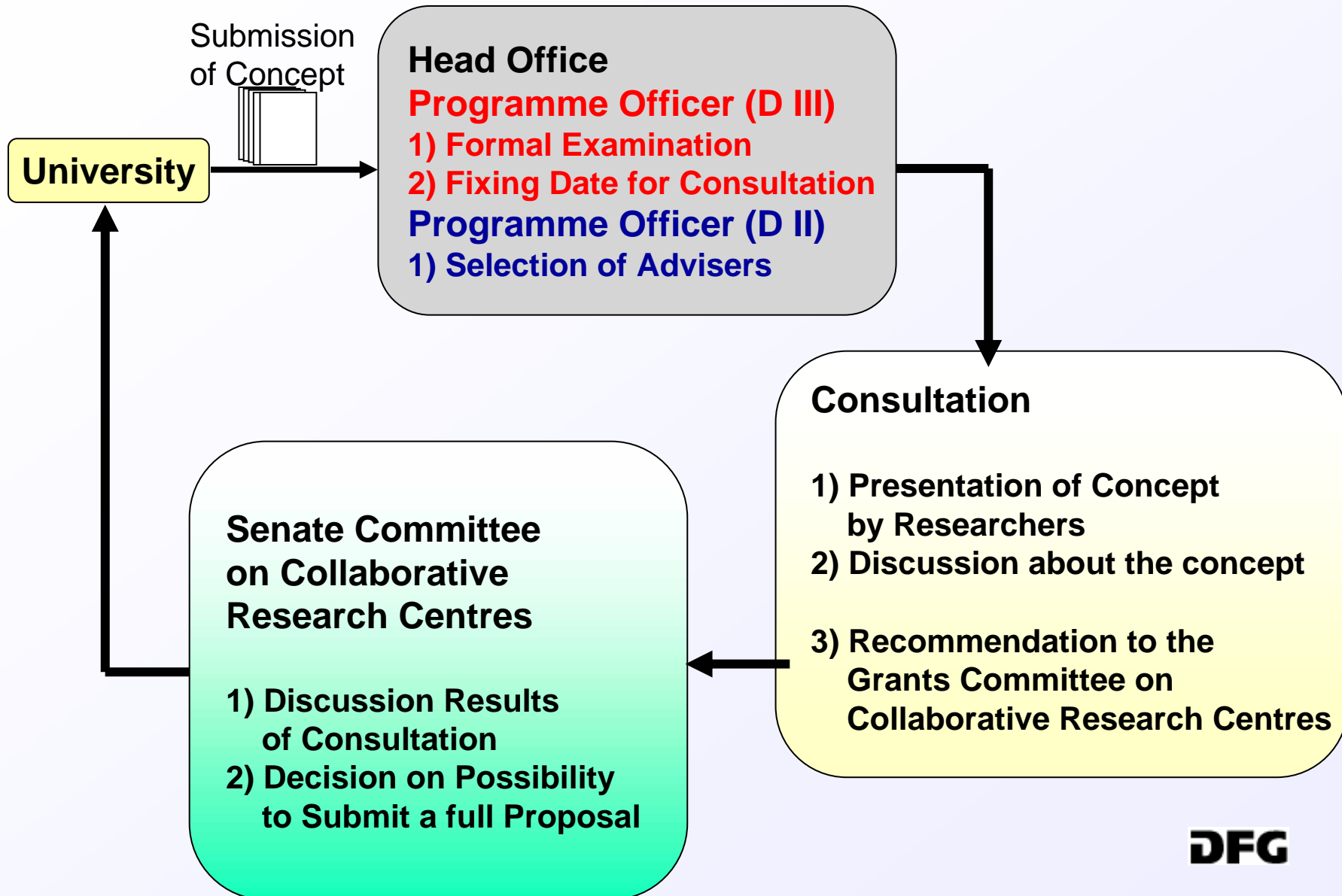
- **located at one city !**
- **meant for:** - enabling interdisciplinary research on a common question of interest
 - fostering added value by collaboration
 - fostering structural development at/ contribution by universities
- **consisting of:** 15 –25 interacting projects
- **available funds:** see Individual Grants Programme; + funds for administration (~ 1 –1,7 Mio€/a)
- **deadline:** - not for submission of proposals
 - decisions twice a year (Mai and November)
- **funding duration:** maximum 12 years (3 x 4 Years)
- **evaluation:** in peer review group meetings at location
- **decision:** by Grants Committee on Collaborative Research Centres



Percentage of total funding approved: 30 % (2003)

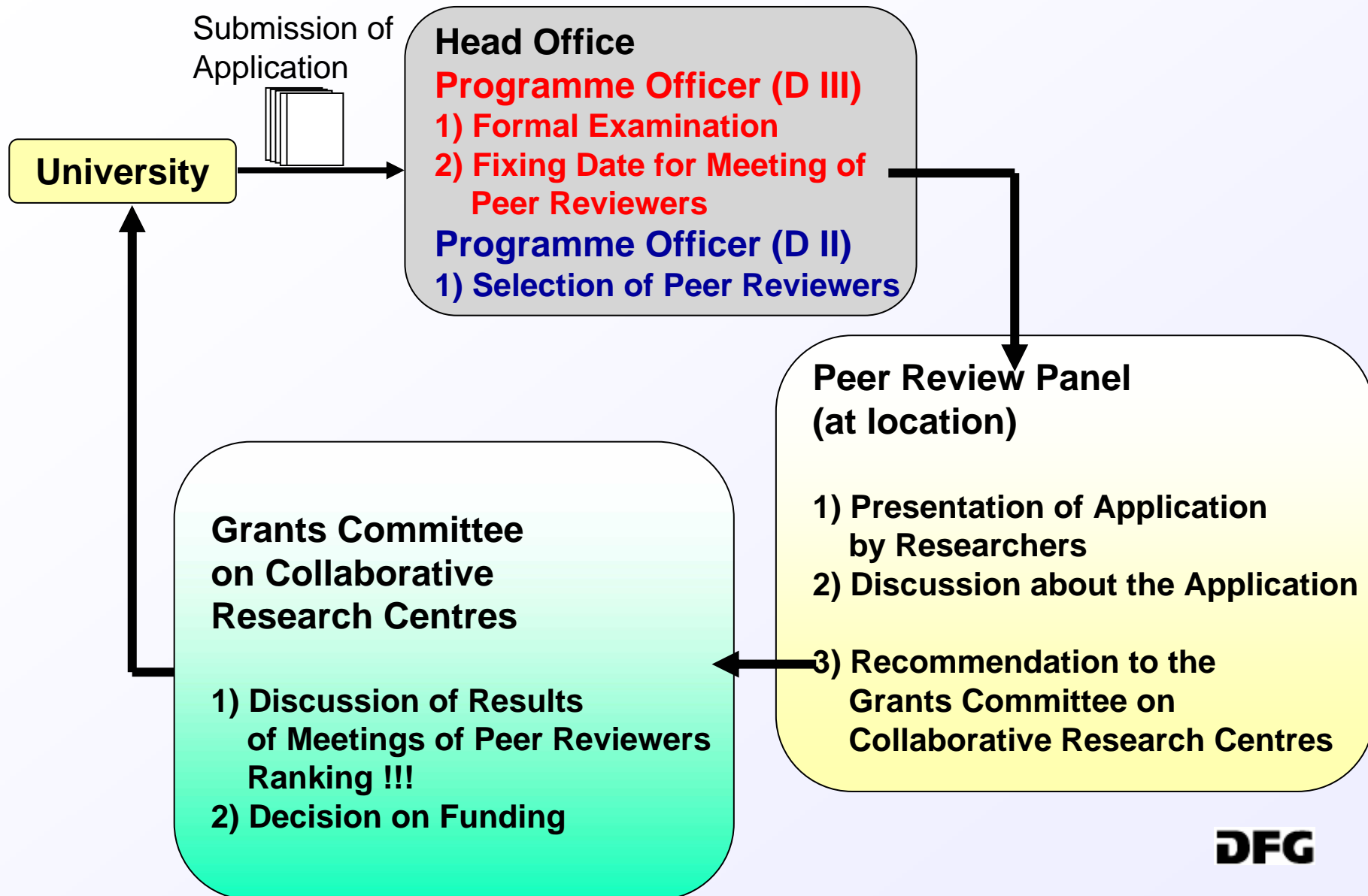
Processing of Proposals: Example III Collaborative Research Centres

Consultation Phase



Processing of Proposals: Example III Collaborative Research Centres

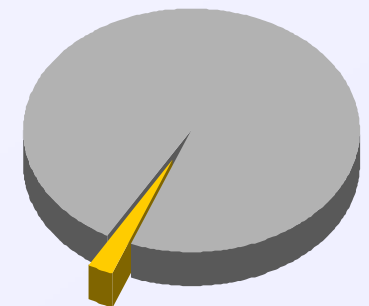
Proposal Phase



DFG Research Centres

Characteristics

- **located at one city !**
- **meant for:** - important strategic funding instrument to concentrate scientific research competence in particularly innovative fields and create temporary, internationally visible research priorities at research universities
- **available funds:** for all kinds of expenditures on research and infrastructure; especially e.g. the establishment of professorships
(~ 5 Mio. €/year)
- **deadline:** submission only on calls for proposals
- **funding duration:** maximum 12 years (3 x 4 Years)
- **evaluation:** in peer review group meetings at location
- **decision:** by Joint Committee



Percentage of total funding approved: 2.4 % (2003)

Other Funding

Gottfried Wilhelm Leibniz Prize („German Nobel Prize“)

- awards prizes to exceptional scientists and academics for their first-class achievements in the field of research

Roundtable Discussion and Colloquia

- workshop with up to 30 participants

Conference Trips

- participation in conferences abroad

Conference Funding

- organisation of international conferences in Germany

Bilateral Projects

- cooperative research stays, preparatory trips

DFG Funding Chain: First Semester to Professorship

phase of qualification					university chair
undergraduate level (~ 6 years)	doctoral studies (~ 4 years)	postdoc qualification (~ 3 years)	assistant professorship (~ 5 years)	associate professorship (~ 5 years)	
Student in DFG Project or Research Training Group	Position in a DFG-funded research project	Position in a DFG-funded research project	Position in a DFG-funded research project	Position in a DFG-funded research project	
	Research Training Group Fellowship	Research Fellowship	Research Fellowship	Research Fellowship	
		Emmy Noether Fellowship	Emmy Noether Ind Junior Research Group	Heisenberg Programme	
		Research Training Group Postdoc Fellow	Ind Junior Research Group in Collaborative Research Centres, in Research Units		
		Ind Postdoc Position	Ind Postdoc Position		

Conflict of Interest

- **very strong awareness of this aspect in the DFG Head Office; which results in**
 - **detailed examination of applications (e.g. of collaborations, joint publications)**
 - **consideration of formally unverifiable aspect (e.g. personal antipathy)**
 - **guidelines for reviewers**
- **only slowly increasing awareness in scientific community (especially with respect to “*appearance of a conflict of interest*”)**

Conflict of Interest (continued)

There is an apparent conflict of interest if there is/are

- **personal relations (e.g. relatives, conflicts)**
- **close scientific collaborations**
- **direct scientific competition**
- **teacher/student relationships**
- **dependent relationship in employment (during past 3 years)**
- **activity in advisory boards of the applicants institution**
- **participation in mutual review processes**
- **personal economic interests in the funding decision (competitive or common)**

Thank you for your attention!

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▶ further information www.dfg.de