

# Misconduct in Biomedical Research

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Speaker of the Ombudsman of the DFG

# DFG Memorandum

## Proposals for Safeguarding Good Scientific Practice (1998)

### Recommendation of the Commission on Professional Self Regulation in Science in Germany

*‘The conduct of Science rests on basic principles valid in all countries and in all scientific disciplines. The first among these is honesty towards oneself and towards others. Honesty is both an ethical principle and the basis for the rules, the details of which differ by discipline, of professional conduct in science, i.e. of good scientific practice. Conveying the principle of honesty to students and to young scientists and scholars is one of the principle missions of Universities. Safeguarding its observance in practice is one of the principle tasks of the self-government of science‘.*

<http://www.dfg.de>

## Recommendation 16

*'The DFG should appoint an independent authority in form of an **Ombudsman** and equip it with the necessary resources for exercising its functions. Its mandate should be to advise and assist scientists and scholars in questions of good scientific practice and its impairment through scientific dishonesty, and to give an annual public report on its work'.*

## Recommendation 8

*'Universities and research institutes shall establish procedures for dealing with allegations of scientific misconduct'.*

*Recommendations 9 and 10 include other institutions, like MPG, and learned societies.*

# Six Years Ombudsman of the DFG in Germany (1999-2005)

Report of the first team employed by the DFG (Profs Trute, Geiler, Grossmann)

162 cases:        51 from the medical field  
                         37 from natural sciences  
                         + economy, social sciences and engineering  
                         ....additional 29 calls not considered

.....highest percentage from biomedical research

# What kind of cases have been observed?

(total number of cases 162)

## 1. Falsification and scientific misconduct (35)

Recommendation 1

## 2. Authorship questions (30)

Recommendation 11

## 3. Incomplete references and plagiarism (18)

Recommendation 12

## 4. Others.....(79)

# Fundamentals of Scientific work:

Recommendation 1

- *observing professional standards (quality control)*
- *documenting results (10 years storage)*
- *consistently questioning one's own findings*
- *practicing strict honesty with regard to the contributions of partners, competitors and predecessors*

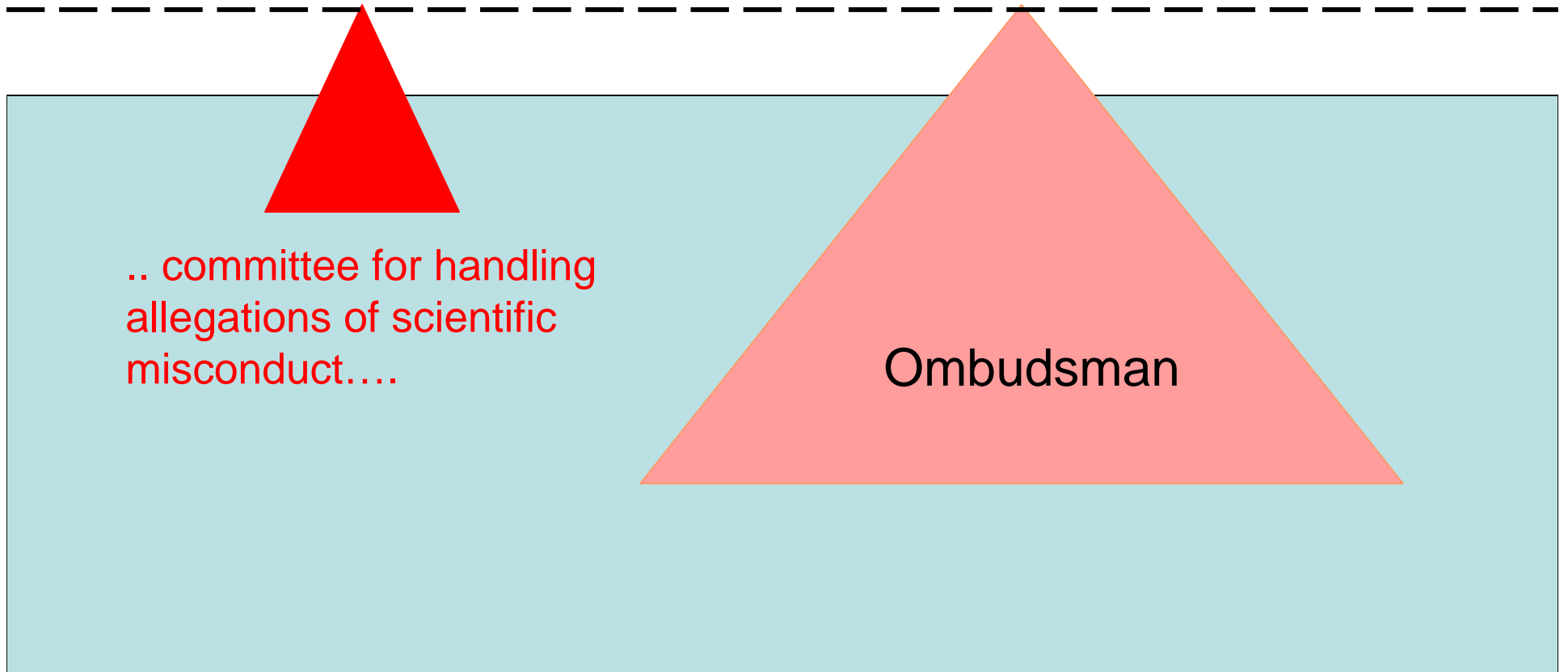
Research is .....any activity which in content and form constitutes a **serious, systematic effort to find out the truth....**

Federal Constitutional Court in 1973 – BVerfGE 35,79

# Situation in Bioscience

Falsification

Dishonesty



# What is special in Biomedical Research?

- lack of reproducibility in living systems
- extremely fast methodological development
- high commercial interest
- public interest and pressure
- ethical problems



## Lack of reproducibility:

- Cases are unique, no verification possible
- Patients samples cannot easily be replaced
- Animal colonies are not identical
- Tissue culture is dependent on 'environment'

## Example 1: Clinical study

Urgent need to include ten additional patients in two weeks.....

Finally 3 more....., but all three pre-operative blood samples are lost while centrifugation.....

**What to do?**

→ be honest and risk career (interest of project leader!)

→ use earlier values and please the 'boss' - **dishonesty**

# Structural Problems in the Medical System

- highly hierarchical system
- little scientific education in medical school
- lack of time for research
- lack of quality control

→ dishonesty helps to get along with these disadvantages

# Problems due to Hierarchy

- leadership problems – group size
- pressure instead of promotion
- lack of communication (unidirectional)
- mainly monetary interest
- authorship problems

# Authorship

Recommendation 11 and 12

*'Authors should be those, and only those, who have made significant contributions to the conception of studies or experiments, to the generation, analysis and interpretation of the data, and to preparing the manuscript...'*

*'..the responsibility for obtaining the fund, contribution of material, training of co-authors, involvement in collection of data and directing the institution .... are not themselves regarded sufficient to justify authorship.'*

## Example 2: Order of Authorship

Graduate student performs all experiments in a project from a head doctor in the clinic of Prof. X....

Exciting results should be published!

What is the order of authors?

→ 1. student; 2. head doctor

→ 1. head doctor; 2. student; 3. ~~Prof. X~~ **Honorary Author**

## Example 3: 'Overseen' Authors

Graduate student or postdoc X performs all experiments in a project – finishes his thesis/project – leaves the lab for his further career (even though the project leader wants to keep him).....

before leaving X prepares a first draft of a manuscript.....  
not yet perfectly written.....

**What should the project leader do?**

→ rewrite the manuscript and publish alone since X left

→ correct the manuscript and publish it with X

# Publication Policies in Biomedical Science

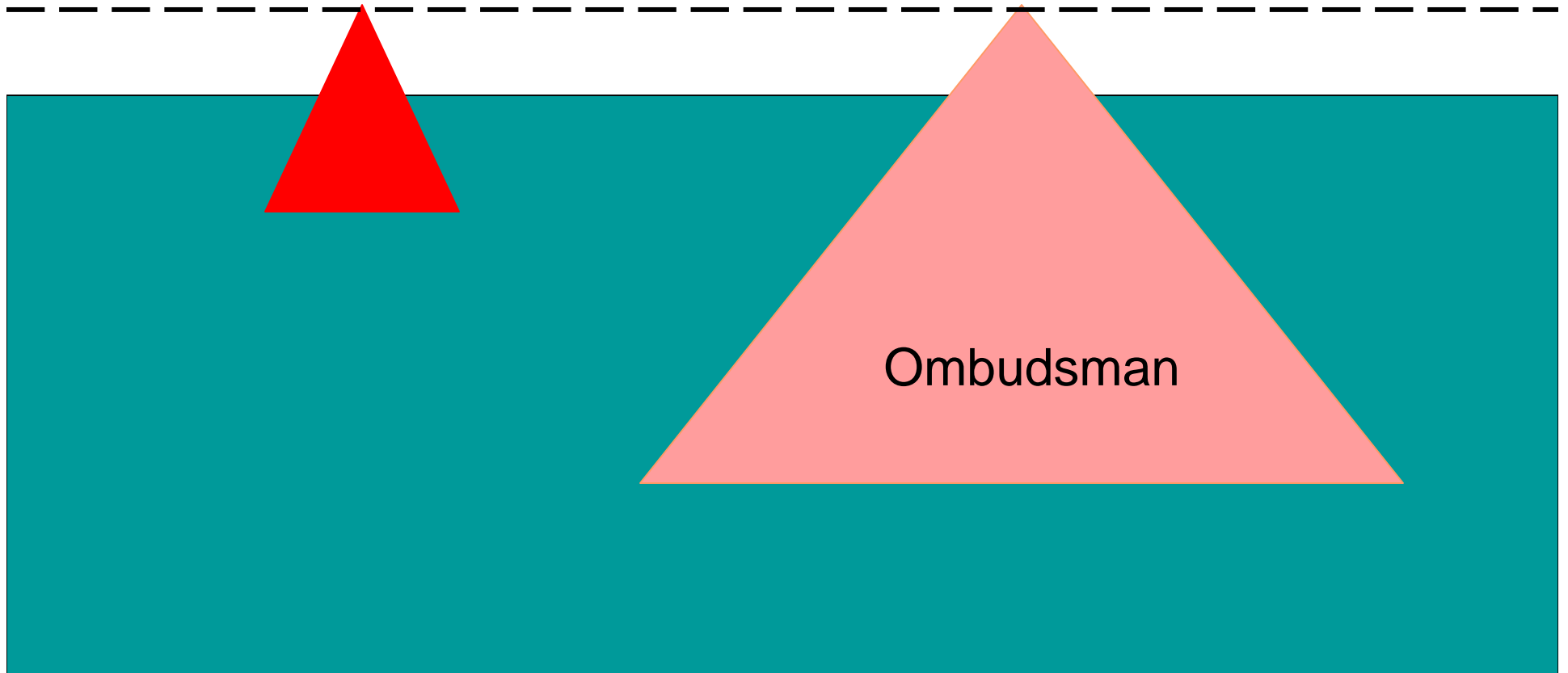
- number of publication counted instead of quality assessment Recommendation 6
  - fragments published instead of whole story
  - too many journals of low quality
  - reviewers not enough time
- online publication – how can we keep quality ?



# Situation in Bioscience

Falsification

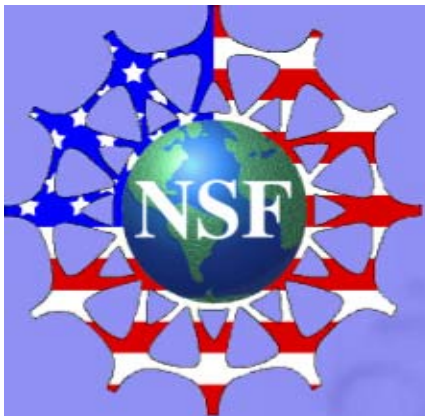
Dishonesty



# Future Strategies for the Ombudsman

together with Prof. Loewer and Prof. Hunklinger

- increase the awareness for good scientific practice
- increase the acceptance of the Ombudsman
- encourage young scientist to request honesty
- improve system of mentorship at universities
- implement adequate organizational structures to improve communication and reduce hierarchy

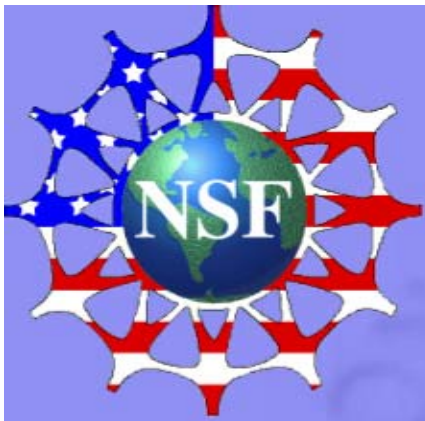


# **National Science Foundation Office of Inspector General**

**Misconduct vs. Fraud**

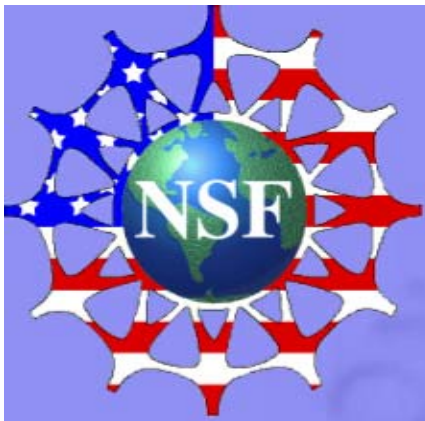
**Christine C. Boesz, Dr.P.H.**

**Inspector General**



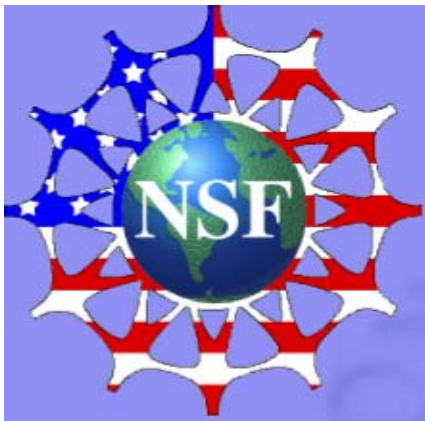
# U.S. v. Dr. S.

- **Offense:**
  - Dr. S, a professor at a U.S. university, submitted a Small Business Innovation Research (SBIR) proposal to NSF in the name of his wife, as president of a small business
  - NSF awarded a Phase I grant for \$99,300
  - No research was done; they simply wrote checks to themselves for salary, rent, and materials — and to their son's college for tuition



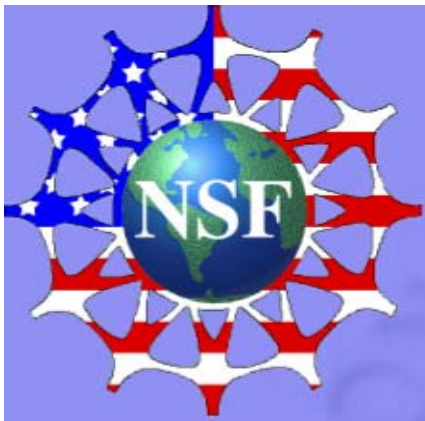
# U.S. v. Dr. S

- **Offense, cont'd:**
  - **Dr. S. submitted a Final Report to NSF for the Phase I grant--text was copied from his former student's Master's thesis**
  - **Dr. S submitted a Phase II proposal to NSF in his wife's name — NSF awarded a Phase II grant for \$399,982, made first payment of \$99,974**
  - **They paid most of the money to themselves, but did pay for some research done by a subcontractor, and began setting up a lab**



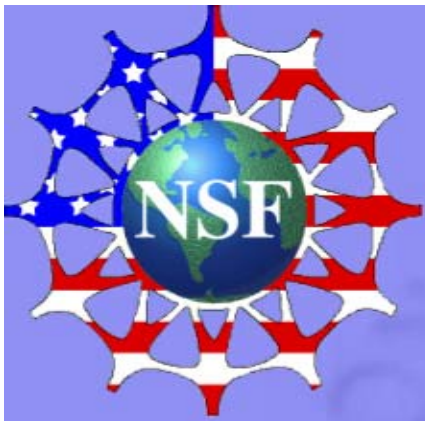
# U.S. v. Dr. S

- **Investigation:**
  - The university found out — notified NSF — began process to fire Dr. S — he eventually resigned
  - OIG interviewed the former student whose Master's thesis was copied into Phase I Final Report
  - When Dr. S requested the next grant payment from NSF, he learned about OIG interest — he called OIG and offered for both he and his wife to come and talk to us — both made significant admissions



# U.S. v. Dr. S.

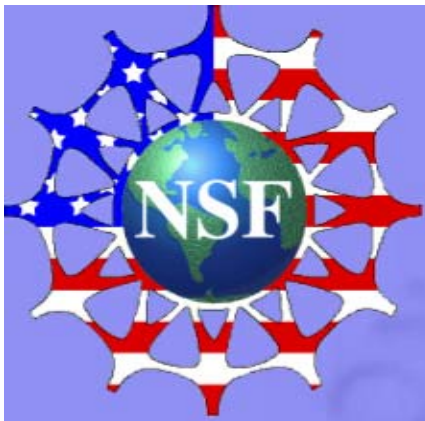
- **Investigation / Prosecution:**
  - **OIG recommended that NSF suspend the grant (which NSF did), issued subpoenas, and referred the case to the Justice Department Criminal Division, which accepted it**
  - **At a meeting at DOJ with their attorneys, all tentatively agreed:**
    - **Dr. S. was primarily responsible and would plead guilty to a criminal count**
    - **They would repay all grant funds**
    - **No action would be taken against his wife**



# U.S. v. Dr. S.

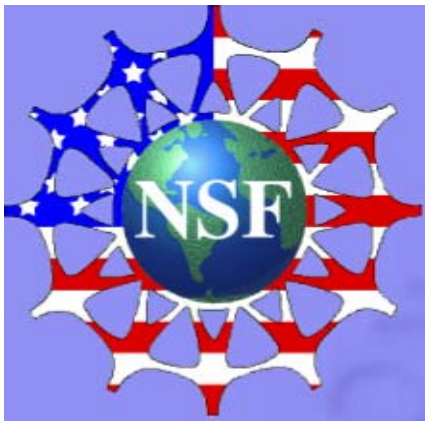
- **Restitution:**
  - To demonstrate good faith, they offered to immediately pay back more than they stole
  - But NSF cannot supplement its appropriations, so could only receive reimbursement of \$199,274
  - However, NSF can receive unrestricted gifts, so they donated additional \$27,500 to NSF
  - Total received by NSF: \$226,774





# U.S. v. Dr. S.

- **Sentencing:**
  - Under the Federal Sentencing Guidelines, the dollar amount charged is important — in this case, charging less than \$120,000 would give Dr. S. a chance to avoid jail
  - Dr. S. was charged with the \$99,300 fraudulently received under Phase I, and not the Phase II funds
  - Judge imposed sentence: 5 years probation + \$15,000 fine



# U.S. v. Dr. S.

- **Administrative settlement terms:**
  - Grant terminated, company dissolved
  - Dr. S debarred government-wide for 3 years
  - Dr. S. can get a new faculty position, and only has to disclose debarment to new employer if he is going to be involved with federal funds



# Overhead Costs in Research Grants in the Netherlands



Gertjan Boshuizen, NWO

International Workshop on Accountability in Science Funding

June 1, 2005

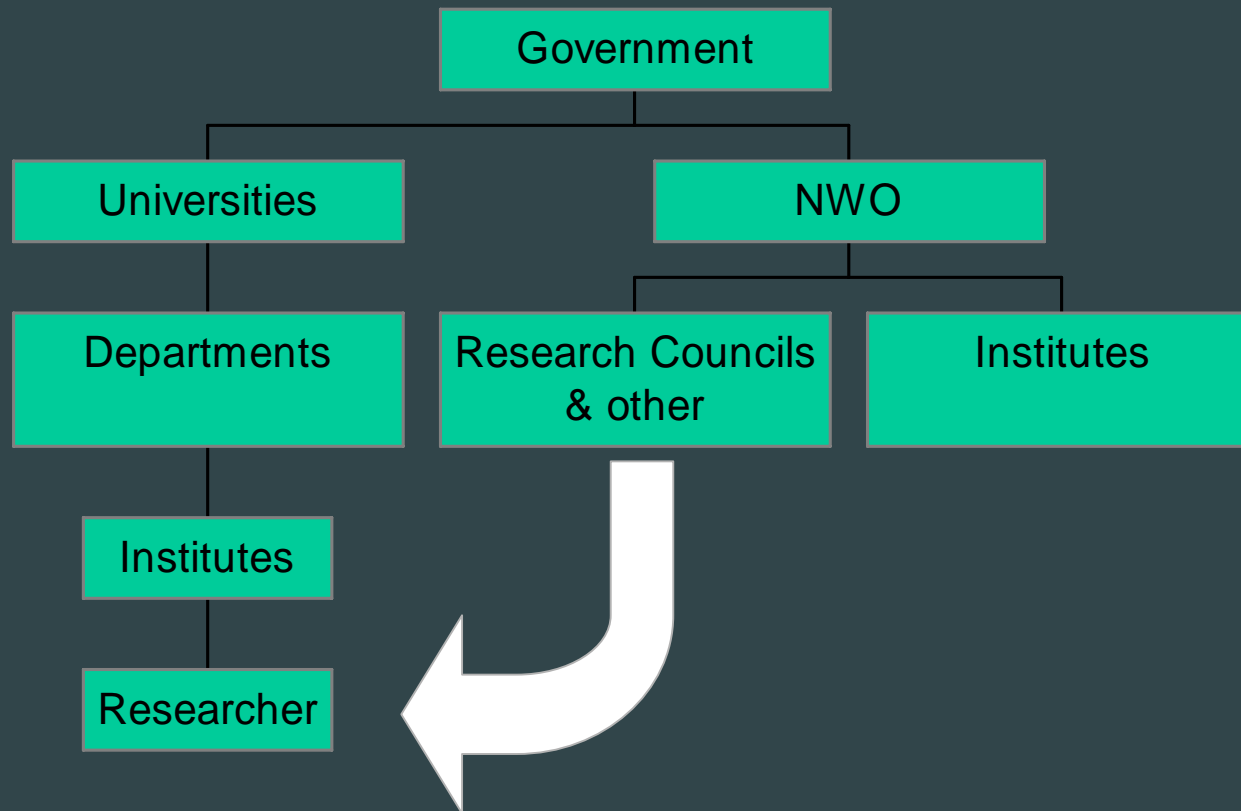


## Situation in the Netherlands

- Funding NWO
  - Matching: the price of succes
  - Other remarks
- 
- Overhead = indirect costs



# Public Research funding in The Netherlands





## Funding NWO (till 1999)

- NWO paid:
  - Researchers (on pay-roll NWO)
  - Other direct costs (material, consumables)
- Arrangement for all the other costs (infrastructure, etc)
  - Part of the direct Government funding
  - M€ 40
  - Share per university fixed from 1993



## Funding NWO after 1999

- Salary per categorie (Phd, postdoc)
- Fixed percentage for social security, pension
- Fixed percentage for certain overhead costs
  - Used to be costs for NWO till 1999
- Amount for risk of unemployment
- Direct material costs
  
- Still: arrangement M€ 40 (but nobody knows anymore)
- Pressure on direct material costs (i.e. laptop)



## Developments in the Netherlands

- Other funding parties use NWO (industry)
- Growth in funding NWO & sources funding
- Growth in funding other organisations (EU)
  
- Government funding: more directed by performance



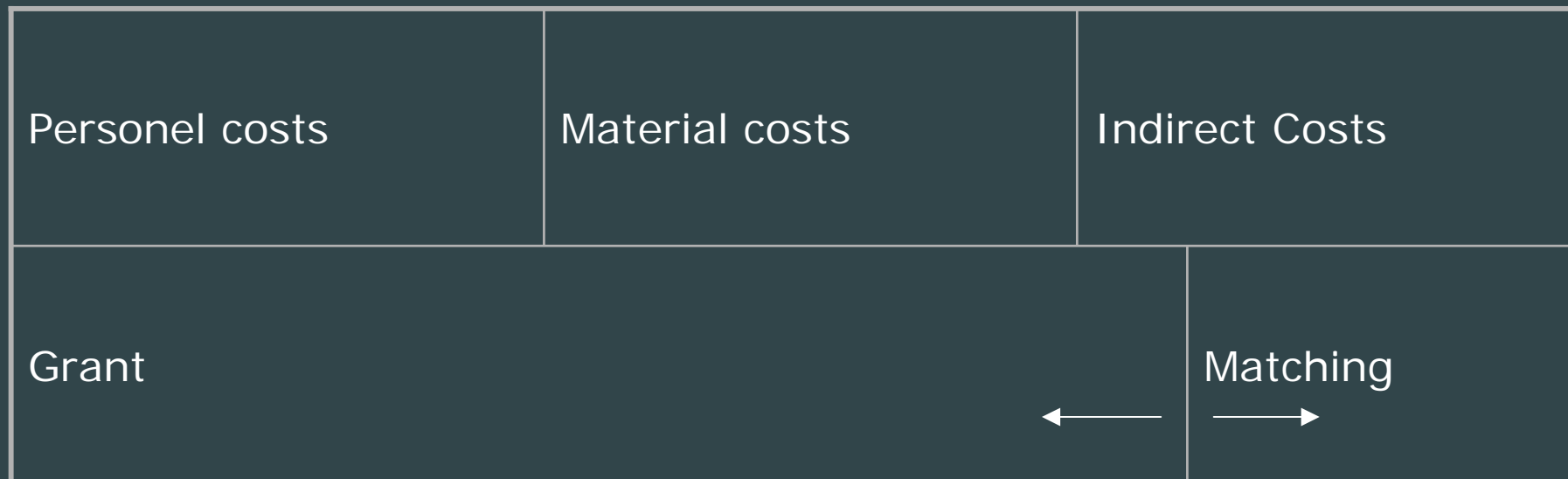


## Matching: the price of succes

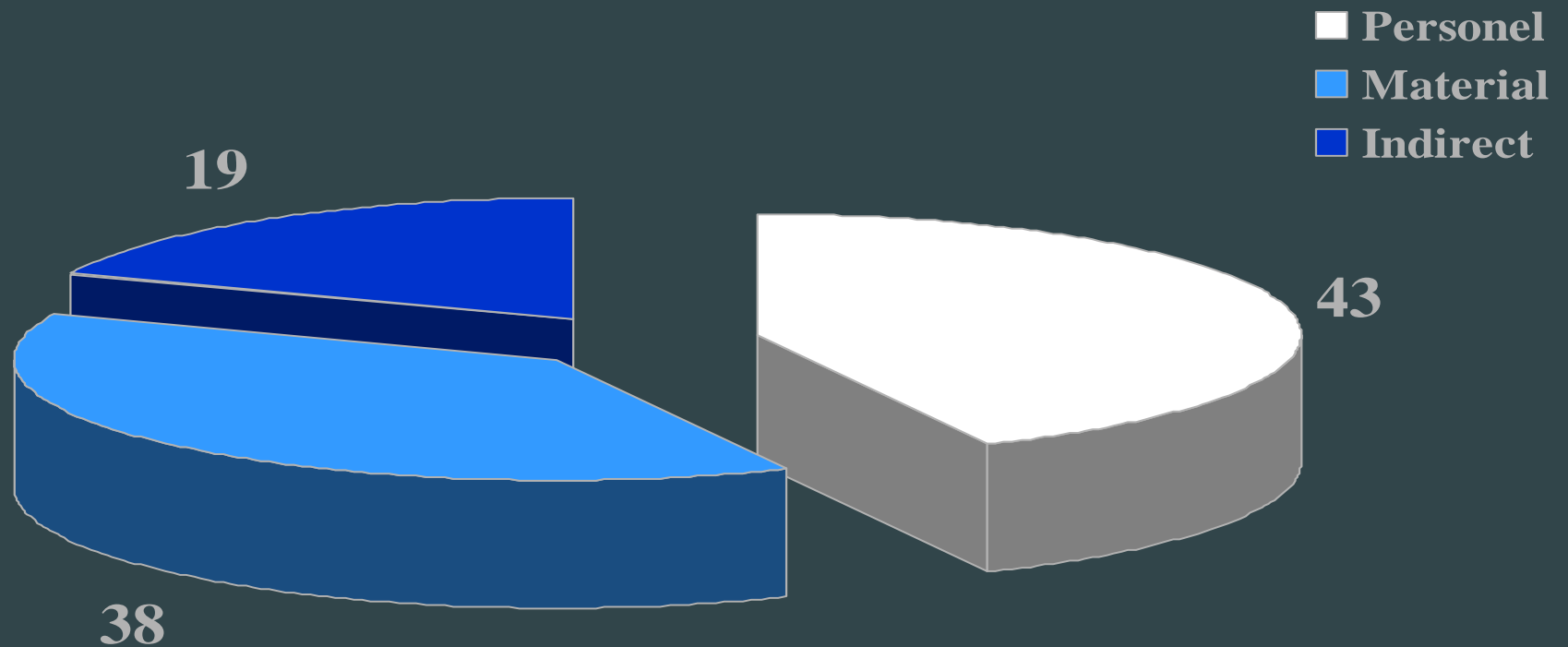
- Report Advisory Council for Science and Technology Policy (AWT)
- Restrictions on scope for expenditure
- Study by E&Y
- Practice of matching at five universities



## Full costs, overhead & matching



## Results E&Y (division full costs)

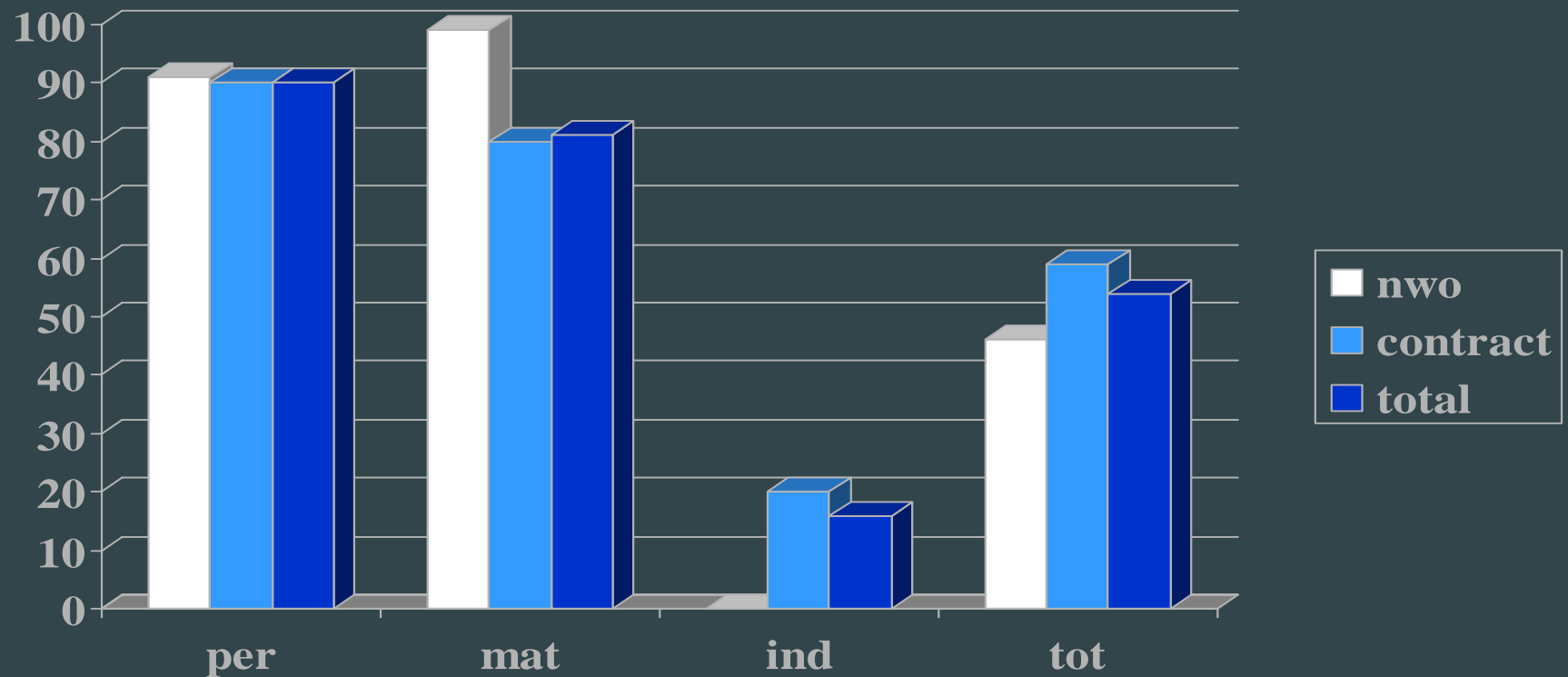




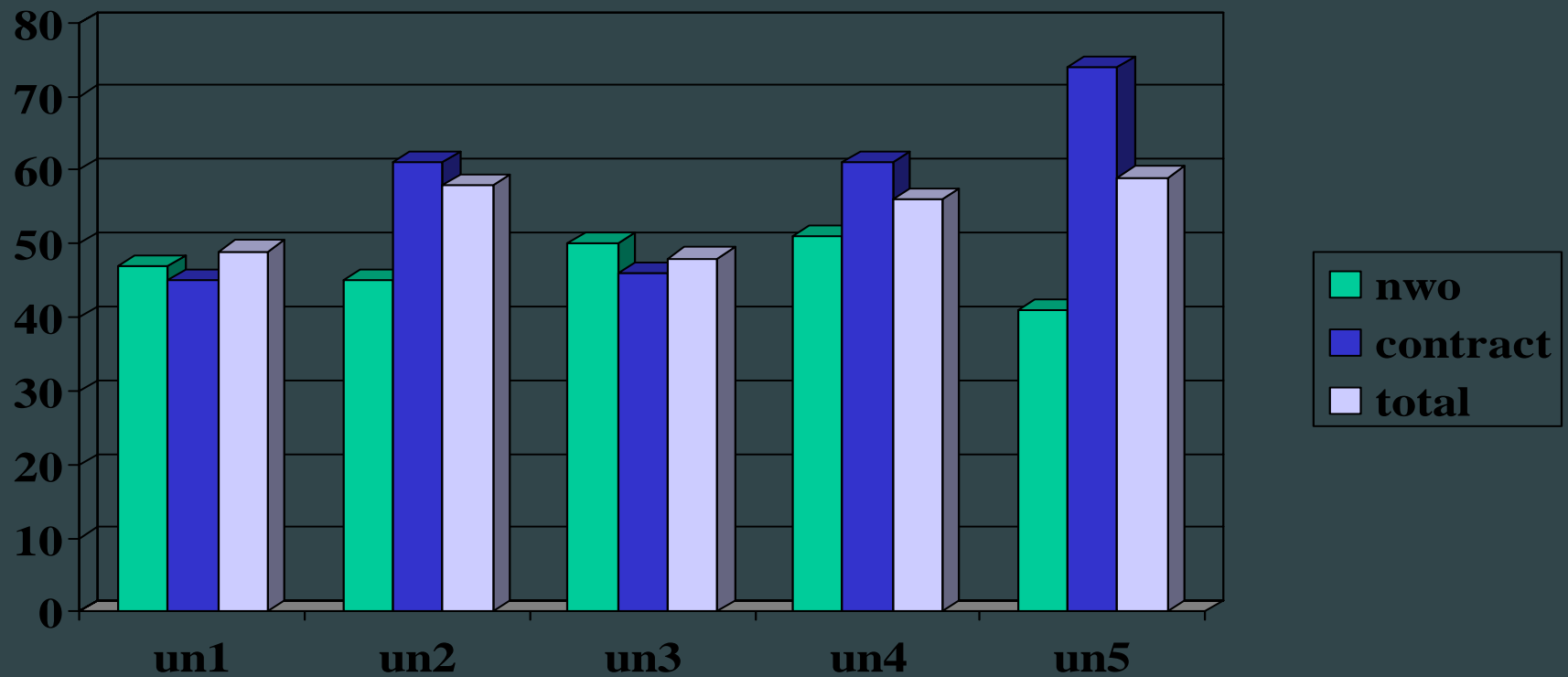
## Indirect costs

- Traceable overhead:
  - Support by other researchers (ca 10 % personel costs)
  - Support staff: laboratory, technicians
  - Housing
  - Equipment etc
  - Computer
- Common Overhead: finance dept, hrm dept
- Poor cost accounting systems

## Results (% of costs funded)



## Results (% of full costs funded per university)





## Results leads to next figure (2002, M€)

Government funding	2.550		
For research	1.500		
NWO & contract-research		985	54 %
Matching	826	826	46 %
Full costs		<hr/> 1.811	100 %
Strategic research	674		



## Conclusion study E&Y

- Subsidies mostly limited to direct costs personnel & material
- Using the existing research infrastructure
- More than half of total budget government funding tied up





## Conclusion AWT

- Serious problem with matching
- Undermining strength and quality research
- Strategic choices are difficult:
  - Time horizon
  - Uncertainty
  - Broad variety



## Position NWO

- Funding Government:
  - Infrastructure
  - Common overhead
- NWO: funds direct costs of top quality research
  - Open competition
  - Talent
  - Themes (only here influence on content research)
- Contract research should be up to 100 % of full cost



## Why bother about overhead costs?

- Do we bother about the overhead costs of KPMG, E&Y or PWC?
- Overhead costs of research institutions:
  - Are based on (different) cost accounting systems
  - Different allocation methods
  - Contain inefficiency
- Costs of accounting and checking



## Conclusion

- Why overhead in grants:
  - Depends on direct government funding
  - In the end: no research
- How much:
  - Depends on direct government funding
  - No funding of inefficiency and overcapacity
  - Somewhere between 0 % and 50 %
- How checked:
  - Not relevant
  - Part of audit by CPA



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# Implications of Full Economic Costing

Dr Ian Carter  
Director of Research  
University of Liverpool



# Context

- Sector over-trading
- Seven years of reviews, consultations, policy changes, SR allocations ... Treasury-led
- Government requirements of HEIs and of some funders
  - Expects institutions to take responsibility for their own financial sustainability, particularly in respect of research infrastructure
  - Cost and price all research and related activity based on FEC
  - Show there are sufficient funds to meet the full costs of all research, year on year



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# Implication

⇒ In US terms, effectively moving from undocumented cost sharing to documented cost sharing



# Broad Issues

- Issues are pervasive, managerial, and cultural
- TRAC timetable is to 2009, not just 2005
- Affects T as well as R
- Issues for the individual researcher, the HoD, the Dean, the admin
- What to support ... strategic choices ... effects on careers
- Management and allocation of core funds





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# Areas of Change

- Implementing the technical changes
- Addressing managerial and cultural change
- Pricing and market interactions
- Accountability issues



# Technical Changes

- National TRAC Manual
  - Minimum requirements over a time period
  - Plus “best practice”
- Changes to accounting and management systems
- Understanding staff time use
- Application, award and operational processes
- Variation between funders



# Managerial and Cultural Change

- Planning and Resourcing
  - Changes to resource allocation and to budgeting / planning cycle
  - Role of relevant committees and individuals
- People and HR
  - Staff management and engagement
  - Integration of personal objectives with departmental planning
- Management Structures and Responsibilities
  - Relative responsibilities between HoD, Dean, PVC and SMT
  - Levels of devolved responsibility



# Pricing and Market Issues

- How are prices affected, now we know costs?
- Regulated markets:
  - Research Councils required to change their funding mechanism
  - Charities “not affected” ... but potentially greater charging of direct costs
  - European Commission: FP7 and ERC on an FEC basis?
- Unregulated markets:
  - Price negotiation: need to offer value to customer



# Accountability

- Future QA / Dipstick processes are not yet clear
- Funders' recognition of real costs
  - Schemes that require cost sharing
  - Audit requirements that aren't an eligible cost
- Differences between funders
  - Potentially significant burdens imposed by bodies providing small proportion of funds



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# Summary of Issues

- Pervasive nature
- Technical, managerial and cultural change
- Forces consideration of “difficult” issues
- Opportunity for clarity ...



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# Implications of Full Economic Costing

Dr Ian Carter  
Director of Research  
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# IMPROVING ACCOUNTABILITY OVER NSF GRANTS: A CASE STUDY

## Grant Accountability Framework

*International Workshop on Accountability in  
Science Funding*

*June 2, 2005*

08/02/2005





# Objective

- ▶ *To provide:*
  - ▶ *An overview of NSF's processes for overseeing and monitoring its research and education awards;*
  - ▶ *An understanding of the NSF Office of Inspector General's role in evaluating these processes; and*
  - ▶ *How NSF and OIG, together, are working to improve the agency's accountability for research funds.*



# Background

- ▶ *NSF:*
  - ▶ *Receives an annual budget of about \$5.5 billion (US) to promote and advance the progress of science and engineering; and*
  - ▶ *Makes about 10,000 awards each year to over 2,500 institutions.*



# Background

- ▶ *NSF's ability to carry out its mission depends on how well it manages its awards and builds accountability into its grant management processes.*



# Elements of Grant Accountability

- ▶ *NSF's grant process has three basic phases:*
  - ▶ *Preaward;*
  - ▶ *Active Award; and*
  - ▶ *Closeout.*



# Elements of Grant Accountability

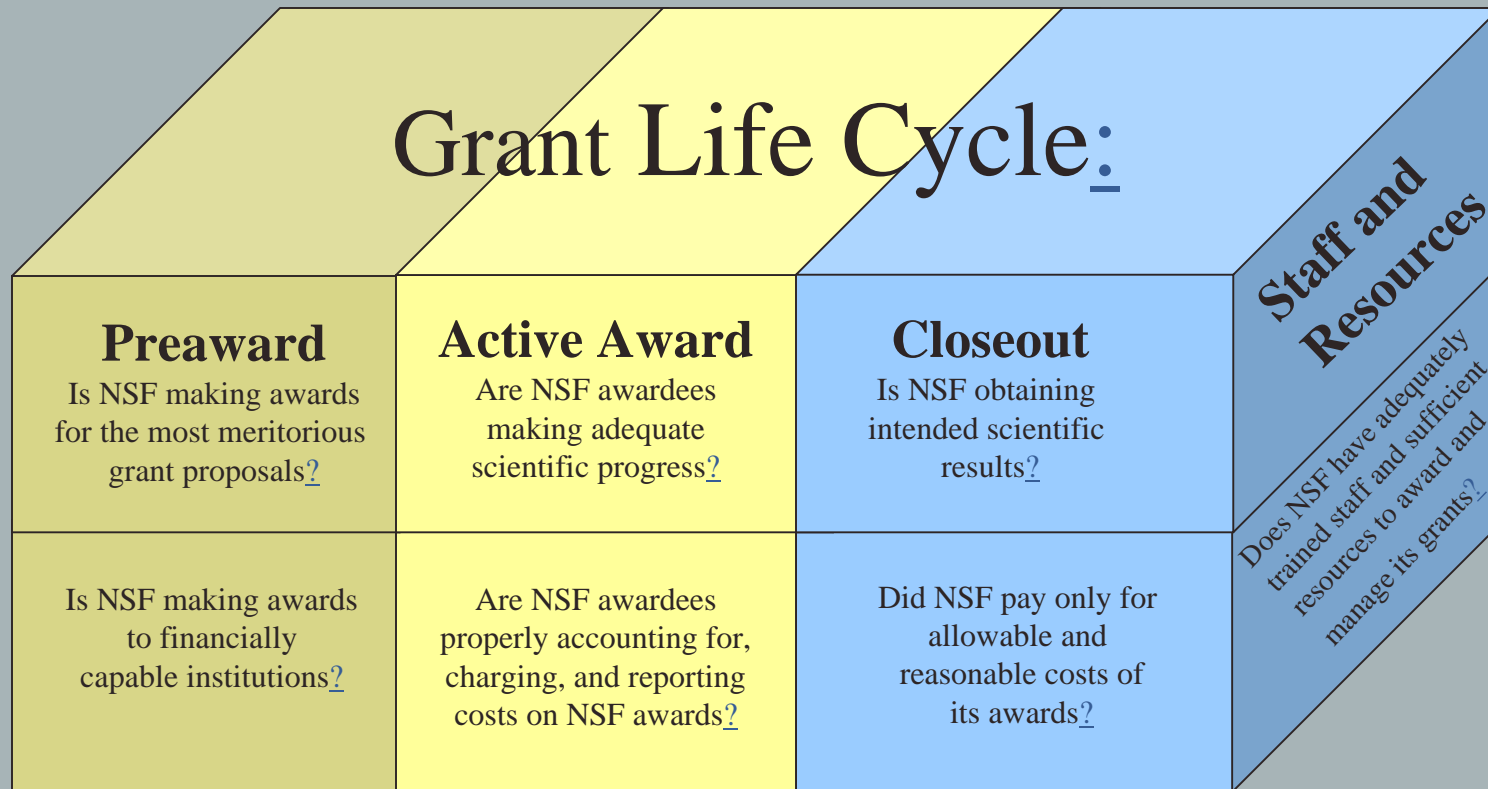
- ▶ *Two principal forms of accountability affect each of these grant phases:*
  - ▶ **Scientific**—*focuses on scientific or programmatic performance; and*
  - ▶ **Financial/administrative**—*focuses on compliance with accounting and administrative requirements.*



# Grant Accountability Framework

Elements of Accountability

Financial Scientific



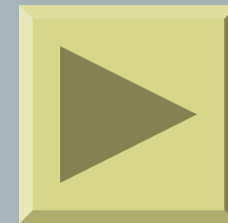
Post Award Phase



# Grant Accountability

- ▶ *Is requiring significant effort by NSF management and the OIG to:*
  - ▶ *Address these scientific and financial accountability questions; and*
  - ▶ *Ensure NSF has adequate controls in place to continuously manage its awards throughout their life.*

08/02/2005



# Scientific Accountability in Preaward Phase

- ▶ *NSF relies on selected researchers to evaluate the scientific merit of the research proposals it receives.*
- ▶ *NSF maintains a database of about 300,000 potential reviewers.*
- ▶ *NSF received almost 44,000 proposals in FY 2004, and selected more than 96% of its research awards through the merit review process.*





# Scientific Accountability in Preaward Phase

- ▶ *NSF uses two merit review criteria to evaluate its proposals:*
  - ▶ *Intellectual merit; and*
  - ▶ *Broader impacts.*



# Scientific Accountability in Preaward Phase

- ▶ *External reviewers are essential inputs that inform the judgment of the Program Officer.*
- ▶ *Program Officers recommend to award or not to NSF senior management, considering additional issues.*
- ▶ *Each Program Officer's goal is a well-balanced portfolio of research awards within a given program.*



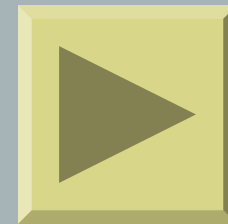
# Scientific Accountability in Preaward Phase

- ▶ *NSF relies on its Committees of Visitors (external advisors) to help assess effectiveness of the merit review process.*
  - ▶ *Committees of Visitors assess NSF's technical and managerial stewardship of a specific program or cluster of programs approximately once every three years.*
  - ▶ *This assessment includes commenting on:*
    - ▶ *The quality, effectiveness, and implementation of merit review process; and*
    - ▶ *The program's award accomplishments and results, as selected by NSF Program Officers.*



# Scientific Accountability in Preaward Phase

- ▶ *OIG assesses the effectiveness of NSF's merit review process as low to medium risk.*
  - ▶ *Audits have found few issues with the process.*
  - ▶ *At the request of Congress, the National Science Board has initiated a "structured evaluation of NSF's system of merit review."*



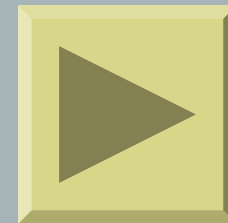
# Financial Accountability in Preaward Phase

- ▶ *NSF policy requires grant recipients to have financial management systems that provide accurate and complete accounting of NSF award funds and claim only allowable costs.*
- ▶ *To ensure financial capability, NSF policy requires preaward reviews of all new awardee accounting systems, proposed budgets and indirect cost proposals.*



# Financial Accountability in Preaward Phase

- ▶ *OIG assesses effectiveness of NSF's financial preaward reviews as medium to high risk.*
- ▶ *OIG has not reviewed NSF's preaward review process, but:*
  - ▶ *OIG preaward and post award audits have found grant management and accounting problems at awardee institutions; and*
  - ▶ *OIG has concerns about the sufficiency of NSF staff to perform preaward reviews.*



# Scientific Accountability in Active Award Phase

- ▶ *NSF policies generally task Program Officers with monitoring the scientific, engineering, and educational aspects of their awards.*
- ▶ *However, policies provide no specific guidance as to how Program Officers should accomplish this oversight.*
- ▶ *NSF's Grant Policy Manual specifically charges the grantee institution with responsibility for monitoring a project.*



# Scientific Accountability in Active Award Phase

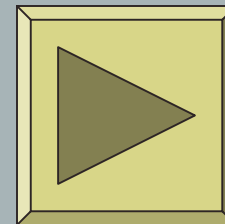
- ▶ *While not specifically described as monitoring, a few NSF policies outline requirements that involve monitoring.*
  - ▶ *PO approval required for situations such as changes in project scope or change in PIs.*
  - ▶ *Annual progress reports required for longer-term awards, generally lasting 24 months or more.*
  - ▶ *For continuing grants, NSF provides funding incrementally, with the funding dependent upon NSF's receipt of progress reports.*





# Scientific Accountability in Active Award Phase

- ▶ *OIG assesses the effectiveness of NSF's monitoring of scientific progress as medium to high risk.*
  - ▶ *NSF has few specific requirements and procedures for Program Officers to monitor scientific progress,*
  - ▶ *NSF indicates heavy workload and insufficient staffing and travel funds as limiting project oversight.*
  - ▶ *OIG audit identified issues with untimely and missing progress reports.*



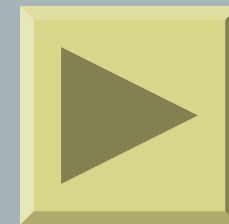
# Financial Accountability in Active Award Phase

- ▶ *NSF policy holds the awardee responsible for the day to day accounting of costs charged to the award.*
- ▶ *Quarterly, the awardee must report and certify its award expenditures, and NSF reconciles these reported expenditures to its cash balance records.*



# Financial Accountability in Active Award Phase

- ▶ *OIG assesses effectiveness of NSF review of financial reports as medium to high risk.*
  - ▶ *The audit of NSF's financial statements identified the need to better monitor financial reports:*
    - ▶ *Is the information provided complete?*
    - ▶ *Does the cash flow reconcile with reported expenditures?*
- ▶ *OIG post award audits continue to find unallowable and unsupported costs.*



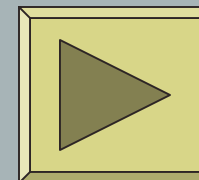
# Scientific Accountability in Closeout Phase

- ▶ *NSF relies on advisory committees to assess and report on the outputs and outcomes of its investments.*
  - ▶ *Committees of Visitors assess performance of approximately 1/3 of NSF's programs annually.*
  - ▶ *An Advisory Committee for Performance Assessment annually assesses NSF performance as a whole, based primarily on these Committees of Visitors' assessments.*



# Scientific Accountability in Closeout Phase

- ▶ *OIG assesses the effectiveness of NSF's assessment and reporting on outputs and outcomes of its investments as medium to high risk.*
  - ▶ *OIG audit found Committees of Visitors were useful to NSF in managing its programs, but NSF needed to improve its disclosures for performance reporting.*
  - ▶ *OIG audit of Math and Science Partnerships identified issues with how each project planned to evaluate its research activities.*



# Financial Accountability in Closeout Phase

- ▶ *NSF relies on a risk-based award monitoring program and financial audits of awardees to ensure the propriety of awardee expenditures under its grants.*



# Financial Accountability in Closeout Phase

- ▶ *NSF initiated, in 2003, a program to assess risk of its awardees and to perform on-site reviews of financial operations of high-risk awardees.*
- ▶ *NSF awardees also must be audited by an external public accounting firm if they spend \$500,000 (US) or more in federal funds, including NSF funds (known as Single Audits).*
- ▶ *OIG also conducts audits of 20 to 30 NSF awardees annually.*



# Financial Accountability in Closeout Phase

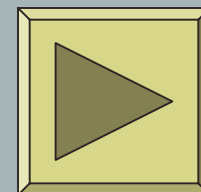
- ▶ *OIG assesses effectiveness of NSF's risk-monitoring program as medium to high risk.*
  - ▶ *Annual audits of NSF's financial statements have:*
    - ▶ *Identified post award monitoring as a continuing issue; and*
    - ▶ *Recommended improvements in NSF's risk assessment model, its on-site visit procedures, and the availability of adequate staff and resources.*
  - ▶ *Outside consultants recommended improvements in NSF's monitoring activities.*





# Financial Accountability in Closeout Phase

- ▶ *OIG has concerns with overall quality of awardees' single audits and the extent that NSF awards are tested.*
- ▶ *OIG audits of NSF awardees continue to identify financial control weaknesses and unallowable costs.*
- ▶ *NSF will need to implement, in 2006, a plan to statistically sample its annual awardee expenditures to identify unallowable costs under the Improper Payments Act of 2002.*
- ▶ *NSF also plans to contract out some post award monitoring activities.*



# Scientific and Financial Accountability Throughout Award Life

- ▶ *NSF manages over 35,000 active awards and processes over 40,000 proposals annually.*
- ▶ *NSF's budget has grown from \$3.9 billion to \$5.5 billion over the past 5 years, but its total staffing levels have remained relatively stable at about 1,500.*
- ▶ *Each Program Officer manages an average of 50 active awards.*



# Scientific and Financial Accountability Throughout Award Life

- ▶ *NSF staff and consultants have expressed concerns and needs for:*
  - ▶ *More staff and resources to oversee awards;*
  - ▶ *More coordination between scientific and financial staff; and*
  - ▶ *More formal award monitoring training.*



# Scientific and Financial Accountability Throughout Award Life

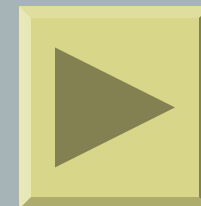
- ▶ *To address its workforce issues, NSF is:*
  - ▶ *Contracting with a consulting firm to evaluate its workforce gaps and to recommend opportunities for improvement;*
  - ▶ *Realigning its financial staff to focus more attention on its post award risk monitoring program activities; and*
  - ▶ *Planning to offer award monitoring training through its in-house training academy.*



# Scientific and Financial Accountability Throughout Award Life

- ▶ *OIG assesses adequacy of NSF staff and resources to perform award monitoring as high risk.*
- ▶ *Annual audit of NSF's financial statements identified the need for additional resources as a cause of NSF's post award monitoring issues and recommended NSF dedicate staff to this effort.*
- ▶ *Outside consultant also identified lack of resources as a challenge to effective monitoring.*

08/02/2005



# Conclusion

- ▶ *NSF faces increasing demands with limited resources.*
- ▶ *NSF must work smarter:*
  - ▶ *Continue focusing attention on high-risk institutions; and*
  - ▶ *Use other tools such as periodic telephone discussions and desk audits to monitor the majority of awards*



# Conclusion

- ▶ *Effective grant accountability takes a partnership!*
  - ▶ *Program Officers and Administrative Staff;*
  - ▶ *NSF staff and the OIG; and*
  - ▶ *NSF and Awardee Institutions.*





# Financial Framework in FP6

**Workshop on Accountability in Science Funding  
Bonn**

**June 1-2, 2005**

**Dr. Annette Doll-Sellen  
EC, Research Directorate General**





# Contract Structure

- **Core contract** (standard with specificities of project)
- **Annex I** (technical tasks - the “project”)
- **Annex II** General Conditions (applicable to every instrument)
- **Annex III** Instrument specific provisions (specific to instrument)



# Contract structure & instruments

	Core contract	Annex II	Annex III
IP	<i>Common</i>	<i>Common</i>	<i>Yes</i>
NOE			<i>Yes</i>
STREP			<i>None</i>
CA			
SSA			
SMEs			<i>Yes</i>



# Contractors

- **New** Every legal entity that contributes to the project (incl. Project Managers)
- **General Rule: Participant = contractor**  
Every legal entity contributing to a project must have a contractual link with the Community



# Coordinator

- A contractor amongst other contractors
- No leadership
- No additional rights

## **BUT**

- Additional obligations
- Administrative tasks: single entry point for communication, payments, reporting etc.



# Financing : what ?

## Community Financial Contribution

(Arts 5 and II.24)

Based on a calculation method

Based on activities: **Articles II.2 and II.25**

Based on costs: **Articles II.19, II.20 and II.21**

Based on costs reporting models: **Art II.22**

Confirmed by an audit certificate: **Art II.26**



# Financing: calculation method

	Grant for integration	Grant to the budget	Flat-rate
Networks of excellence	✓		
Integrated Projects		✓	
Specific targeted research projects		✓	
Specific research projects for SMEs		✓	
Integrated initiatives relating to infrastructure		✓	
Actions to promote human resources & mobility		✓	✓
Coordination actions		✓	
Specific support actions		✓	✓



# Financing: type of activity (a)

- Research and technological development (including innovation-related activities)
- Demonstration
- Training
- **New Consortium Management** : costs reimbursed up to 100% within the limit of 7% of Community contribution



# Financing: costs

## ✓ *New principles:*

1 - cost categories are replaced by conformity to contractors' own accounting rules and legal environment

2 - simplify the eligibility criteria

3 - focus resources on the reality and the necessity of the cost, rather than on formality (cost categories)

## ✓ Therefore, costs must be :

⇒ actual, economic and necessary for the project

⇒ incurred during the duration of the project (exception: costs of the final reports)

⇒ recorded in the accounts (or third parties)

## ✓ and must exclude indirect taxes, duties, interests, costs reimbursed with respect to another Community project, and not give rise to profit





# Financing: cost reporting models (a)

- ✓ **FC: actual direct and indirect costs (not available for Coordination Actions and Specific Support Actions)**
- ✓ **New FCF (variant of FC): actual direct costs + flat rate for indirect costs (20% of total actual direct costs, except costs of subcontracts - all instruments)**
- ✓ **AC: actual additional direct costs + flat rate for indirect costs (20% of total actual additional direct costs, except costs of subcontracts - all instruments)**



# Financing: cost reporting models (b)

- SMEs, non-commercial or non-profit organisations established either under public or private law, international organisations: **FC/FCF**
  - Physical persons/Individuals?: **AC mandatory**
  - Private companies (other than above): **FC**
  - **AC**: only for those non-commercial or non-profit organisations established either under public or private law or international organisations that do not have an accounting system that allows the share of their direct and indirect costs relating to the project to be distinguished.
- General Rule:** a legal entity applies the same cost model in ALL contracts established under FP6 except that it may move from AC to FCF/FC or from FCF to FC (“one way ticket”)



# Reporting periodicity

## Reports and deliverables

- The consortium will submit the following reports to the Commission:

**For each reporting period, 45 days after its end:**

- a periodical activity report
- a periodical management report
- a report on the distribution between contractors
- supplementary reports required by Annex to this contract
- an audit certificate when required



# Payment modalities

- ✓ Periodical pre-financing (based on the applicable reporting periodicity)
- ✓ Periodical “final” payments if costs are certified
- ✓ The Community financial contribution is paid to the coordinator on behalf of the contractors: the consortium decides on its allocation between the contractors (**consortium agreement**)



# What's new in FP 7?

## Main new elements compared to FP6:

- Annual budget doubled (EUR 5 billion ► 10 billion)
- Basic research (~ EUR 1.5 billion per year)
- Simplification of procedures
- Logistical and administrative tasks transferred to external structures



# Framework Programme 7: Objectives and activities

		FP7 EC (2004 prices)									
Themes		Health	Biotech, Food, Agriculture	Information Society	Nano, Materials, Production	Energy	Environment	Transport	Socio- economic Research	Space and Security	
<b>COOPERATION</b>	Collaborative Research	7.325	2.163	11.159	4.256	2.581	2.232	5.232	698	3.488	<b>39.134</b>
	<b>IDEAS</b>										<b>10.447</b>
<b>PEOPLE</b>		<b>Marie Curie Actions</b>									<b>6.279</b>
<b>CAPACITIES</b>	Research Infrastructures	Research for, and by, SMEs	Regions of Knowledge	Research Potential		Science in Society		International Co-operation		<b>6.594</b>	
	3.489	1.674	140	488		488		315			
<b>JRC (EC)</b>											<b>1.617</b>
<b>Total</b>										<b>64.071</b>	



**Thank you for your attention!**



# International Public Sector Accounting Standards (IPSAS)

WP/StB Dipl.-Ök. Andreas Dörschell,  
PwC Deutsche Revision AG,  
Düsseldorf



# IFAC

- **IFAC – 163 member bodies, 119 countries**
- **Operates through Technical Committees including:**
  - ➔ International Audit and Assurance Standards Board (IAASB)
  - ➔ Education Committee
  - ➔ Ethics Committee
  - ➔ Professional Accountants in Business (PAIB)
  - ➔ **International Public Sector Accounting Standards Board (IPSASB)**
  - ➔ Transnational Auditors Committee (TAC)



# International Public Sector Accounting Standards Board (IPSASB)

- **IPSASB Members 2005**

**France (Chair), UK (Deputy Chair), Australia, Argentina, Canada, Germany, India, Israel, Japan, Malaysia, Mexico, New Zealand, Norway, South Africa, USA**

- **IPSASB Observers**

**ADB, EU, IASB, IMF, INTOSAI, OECD, World Bank, UN, UNDP**



# Background

- **Public Sector Committee (PSC) established 1986**
- **Standards Program established late 1996**
- **Strengthen governance framework, accountability, transparency, complete and relevant financial reporting**
- **A “resource” for national standard-setters to use**
- **PSC becomes International Public Sector Accounting Standards Board (IPSASB) – Nov 04**
- **New mandate: standard-setting focus**



# Function and Objectives: IPSAS

- **Provision of information**
- **Improved financial management and accountability**
- **Information for management for efficient administration and utilisation of resources**
  - ➔ IPSAS form a basis for all other statements/attestations which make use of financial data
- **Transparency for citizens regarding effective use of their taxes**
- **Creditor protection not a primary objective**



# Transparent Process

- **Exposure Drafts – at least 4 months comment**
- **Open meetings, agenda materials on web**
- **Steering Committees (SC) – ITCs for comment**
- **Project Advisory Panels (PAP) – input to IPSASB**
- **Consultative Group (CG)**
- **Regional Seminars/round table discussions in conjunction with each IPSASB meeting**



# Status of Current Work Program

- **21 accrual Standards (based on IASs issued as at Aug 97 where appropriate)**
- **Comprehensive Cash Basis IPSAS**
- **Studies, Research Reports and Invitations to Comment (ITCs) on issue**
- **ED Revenue from Non-Exchange Transactions**
- **ED Accounting for Social Policies of Governments**
- **Budget Reporting**



# The IPSASB Web Site

- All IPSASs (including Spanish translation)
- All current Exposure Drafts and ITCs
- IPSASB Update – on most recent IPSASB meeting
- IPSASB meeting papers

**AVAILABLE FREE OF CHARGE AT:  
[WWW.IPSASB.ORG](http://WWW.IPSASB.ORG)**



# IPSAS 17

- **Recognition of an Asset**

- Future economic benefits or service potential and
- Cost/fair value measurable

- **Initial Measurement**

- At cost
- If acquired at no cost/nominal cost: fair value as at the date of acquisition

- **Measurement subsequent to initial recognition**

- Historical cost less depreciation/impairment loss or
- Revalued amount (fair value as at the date of revaluation)





# Intangible Assets

- **No IPSAS on intangibles**
  - ➔ Consider IPSAS 17 (related issue)
  - ➔ Consider IAS 38 “Intangible Assets”
- **Internally generated assets arising from research**
  - ➔ Future economic benefits generated?
  - ➔ No intangible asset generated
  - ➔ Recognition of expenses
- **Internally generated assets arising from development**
  - ➔ Recognition as an asset, if criteria are met
  - ➔ Technical feasibility
  - ➔ Ability to use or sell the asset
  - ➔ ...



# The Way Forward...

- **IPSAS have no binding effect on national level**
- **IPSASB is supporting governments/standard setters on national level**
- **Increased internationalisation of accounting methods in the private sector and in the public sector**
- **Supranational institutions are moving towards IPSAS**
- **IPSAS as guideline/quality filter for national standards**



# International Federation of Accountants



[www.ifac.org](http://www.ifac.org)



# ATTACHMENT

## **Accrual Basis IPSASs Issued/finalized**

- **IPSAS 1, “Presentation of Financial Statements”**
- **IPSAS 2, “Cash Flow Statements”**
- **IPSAS 3, “Net Surplus or Deficit for the Period, Fundamental Errors and Changes in Accounting Policies”**
- **IPSAS 4, “The Effects of Changes in Foreign Exchange Rates”**
- **IPSAS 5, “Borrowing Costs”**
- **IPSAS 6, “Consolidated Financial Statements and Accounting for Controlled Entities”**



# ATTACHMENT: Accrual IPSASs (cont.)

- **IPSAS 7, “Accounting for Investments in Associates”**
- **IPSAS 8, “Financial Reporting of Interests in Joint Ventures”**
- **IPSAS 9, “Revenue from Exchange Transactions”**
- **IPSAS 10, “Financial Reporting in Hyperinflationary Economies”**
- **IPSAS 11, “Construction Contracts”**
- **IPSAS 12, “Inventories”**
- **IPSAS 13, “Leases”**
- **IPSAS 14, “Events After the Reporting Date”**



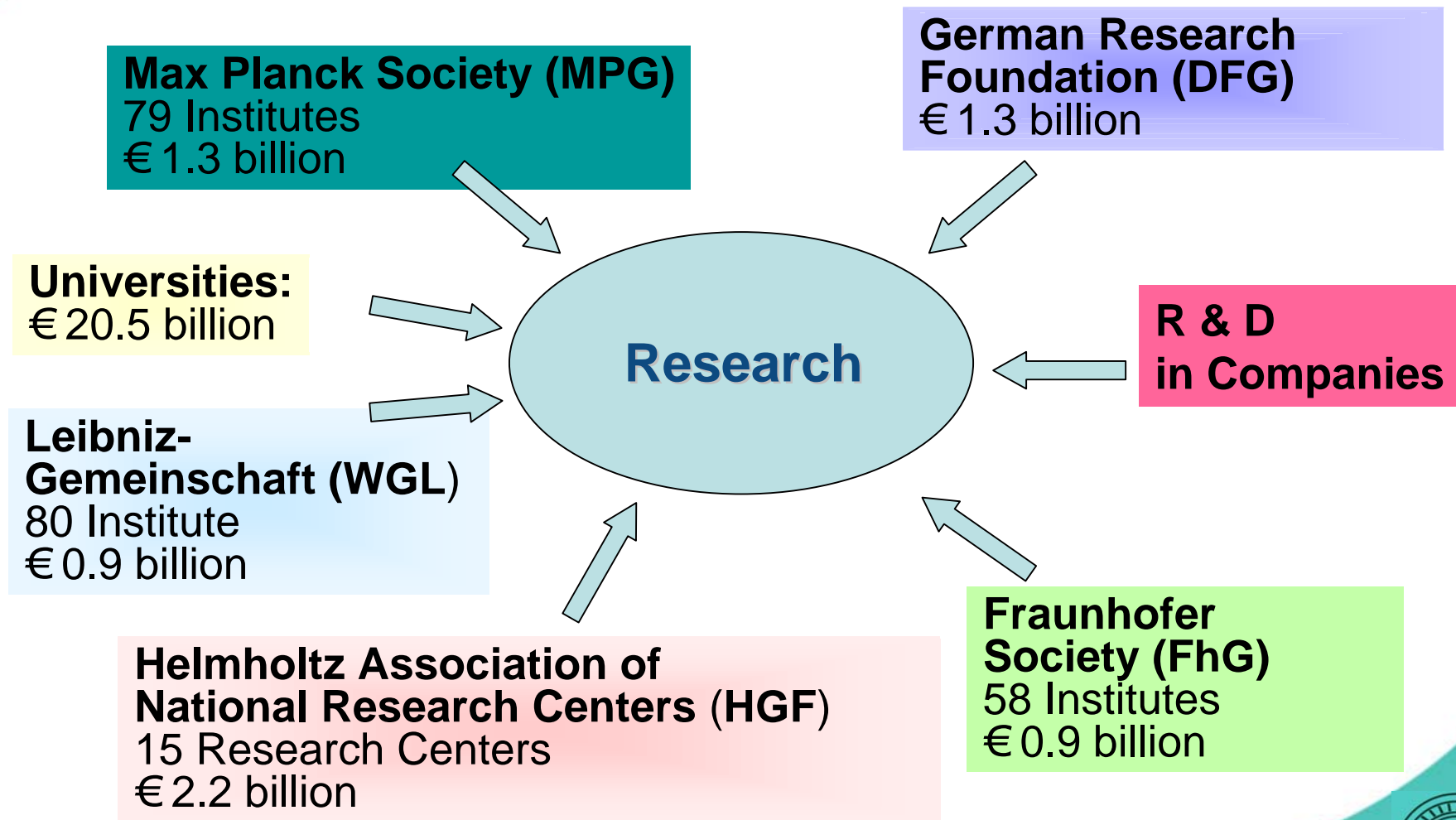
# ATTACHMENT: Accrual IPSASs (cont.)

- **IPSAS 15, “Financial Instruments: Disclosure and Presentation”**
- **IPSAS 16, “Investment Property”**
- **IPSAS 17, “Property, Plant and Equipment”**
- **IPSAS 18, “Segment Reporting”**
- **IPSAS 19, “Provisions, Contingent Liabilities and Contingent Assets”**
- **IPSAS 20, “Related Party Disclosures”**
- **IPSAS 21, “Impairment of Non-cash-generating Assets”**





# The German Research System





# Research at the Frontiers of Knowledge

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„Knowledge must precede application“ (Max Planck)

**The research activities of the Max Planck Society are**

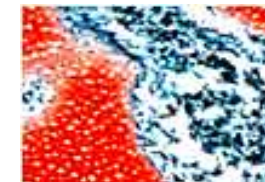
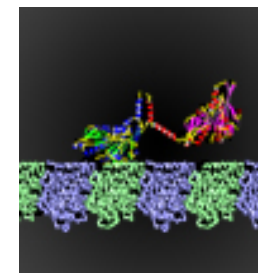
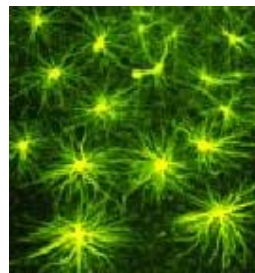
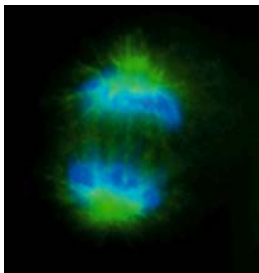
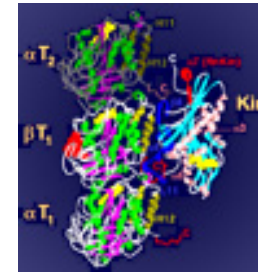
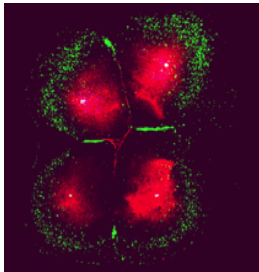
- knowledge-driven
- open to application
- oriented towards basic research

**The scientists at the Max Planck Society work**

- at the frontier of knowledge
- at an internationally recognized level
- in selected areas, whenever they
  - are new or
  - not (yet) represented at universities or
  - require special funding and/or must be set up on a long-term basis or
  - enable the training of specialized junior scientists



# The Biology and Medicine Section



Developmental  
Biology

Ecology and  
Environment

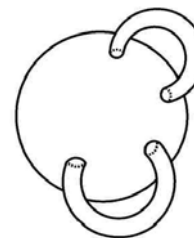
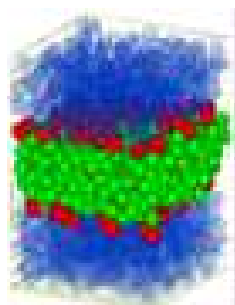
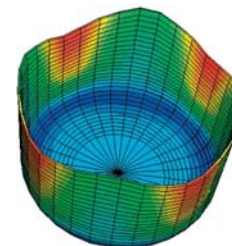
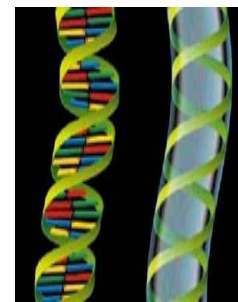
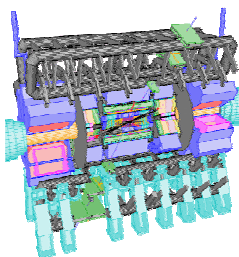
Neuroscience

Structural  
Biology

Genome  
Research



# The Chemistry Physics Technology Section



Astronomy

Chemistry

Physics

Geosciences

Mathematics

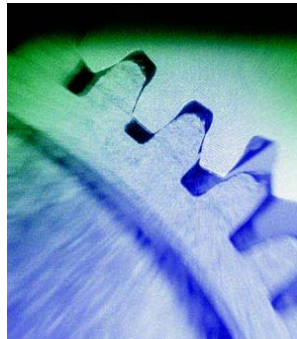
Material Sciences



# The Humanities Section



**Cultural Studies**



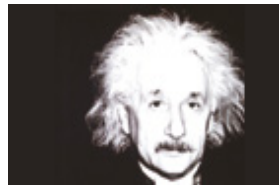
**Social and Behavioral Sciences**



**Jurisprudence**



**Human Sciences**



# Locations of Max Planck Institutes

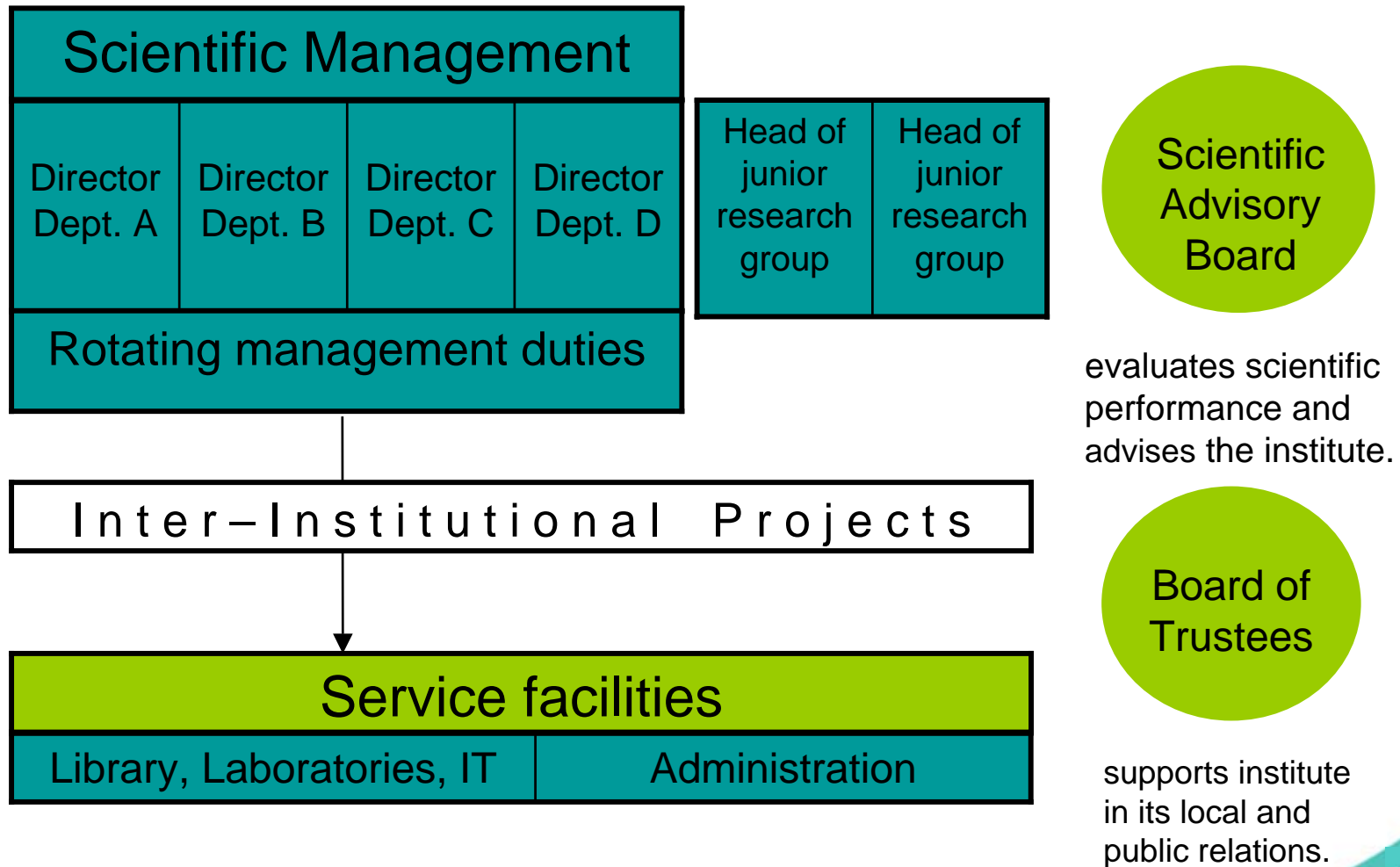
**President:**  
**Prof. Dr. Peter Gruss**

**Secretary General:**  
**Dr. Barbara Bludau**

- **78 Max Planck Institutes**
- **12.000 employees**  
**(3.500 scientists)**
- **9.100 junior scientists**  
**(> 50% foreigners)**
- **Annual budget: €1.3 billion**



# Structure of a Max Planck Institute



# Autonomy at Max Planck Institutes

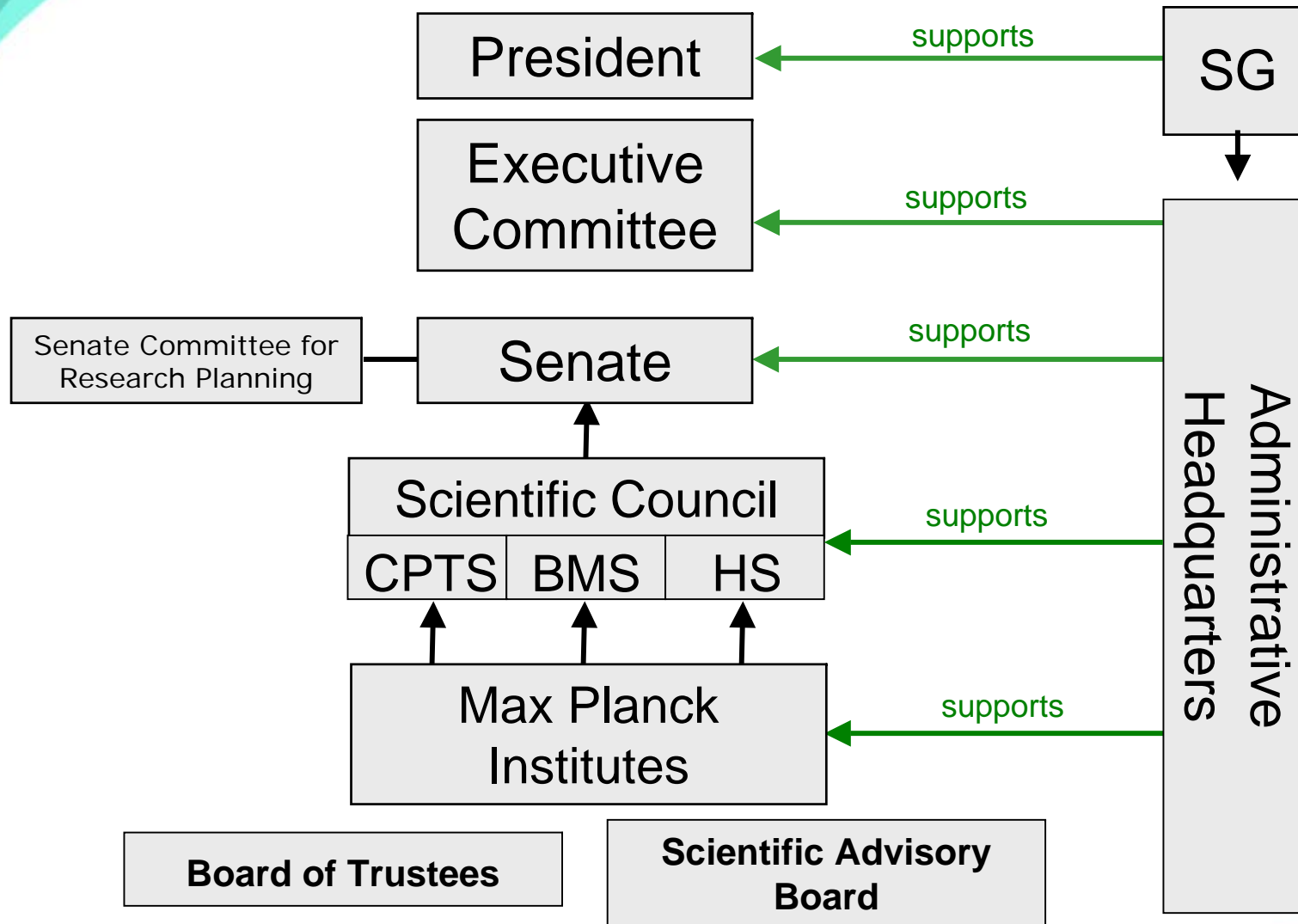
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## Max Planck Institutes are responsible for

- determining their research areas
- choosing their research structure (i.e., departments/projects)
- independently recruiting their own personnel
- managing the institute's budget
- acquiring third-party funds
- selecting their national and international cooperation partners, as well as the form of collaboration

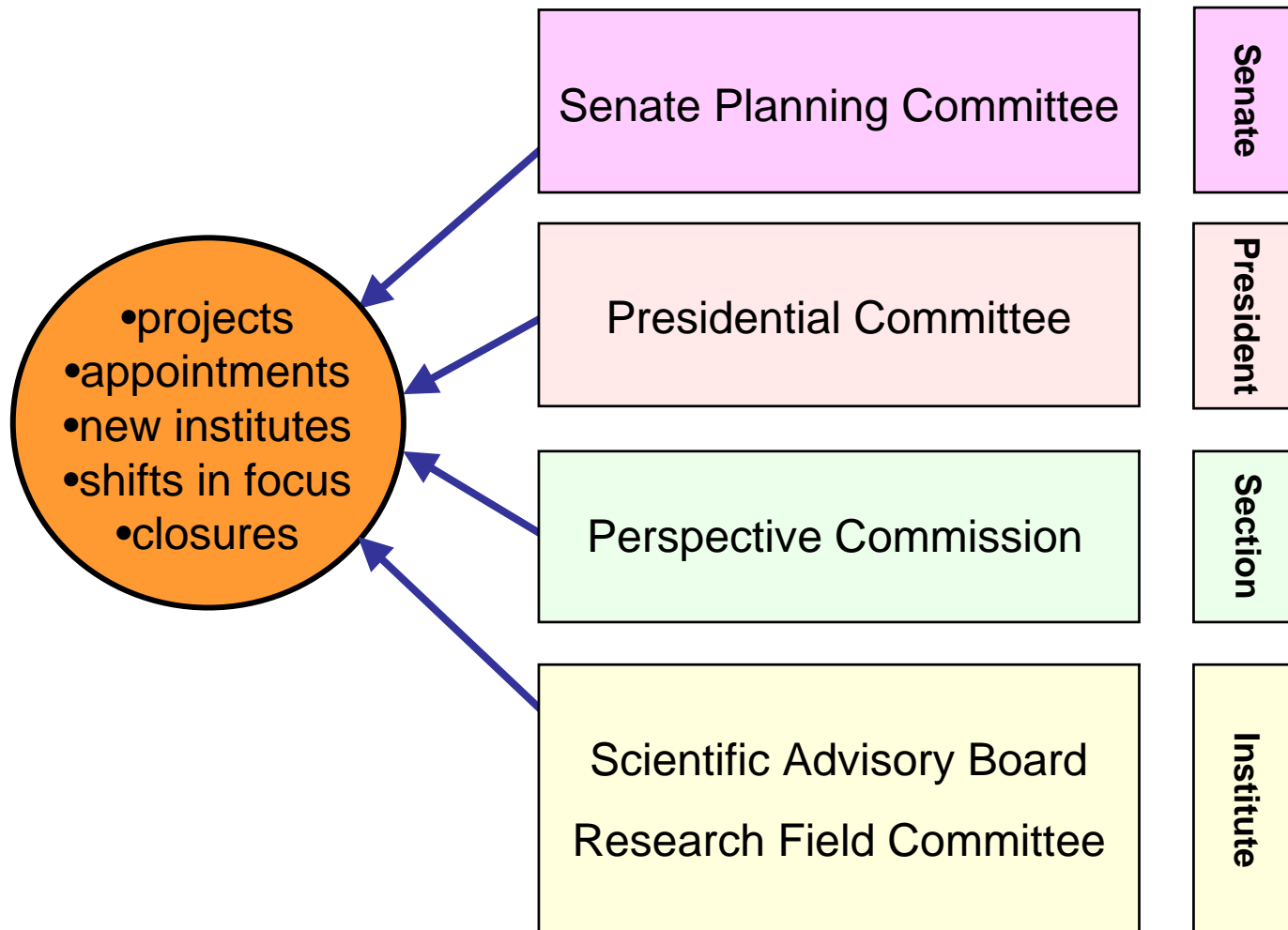


# Structure of the Max Planck Society





# Decision Making Bodies



# Types of Evaluation

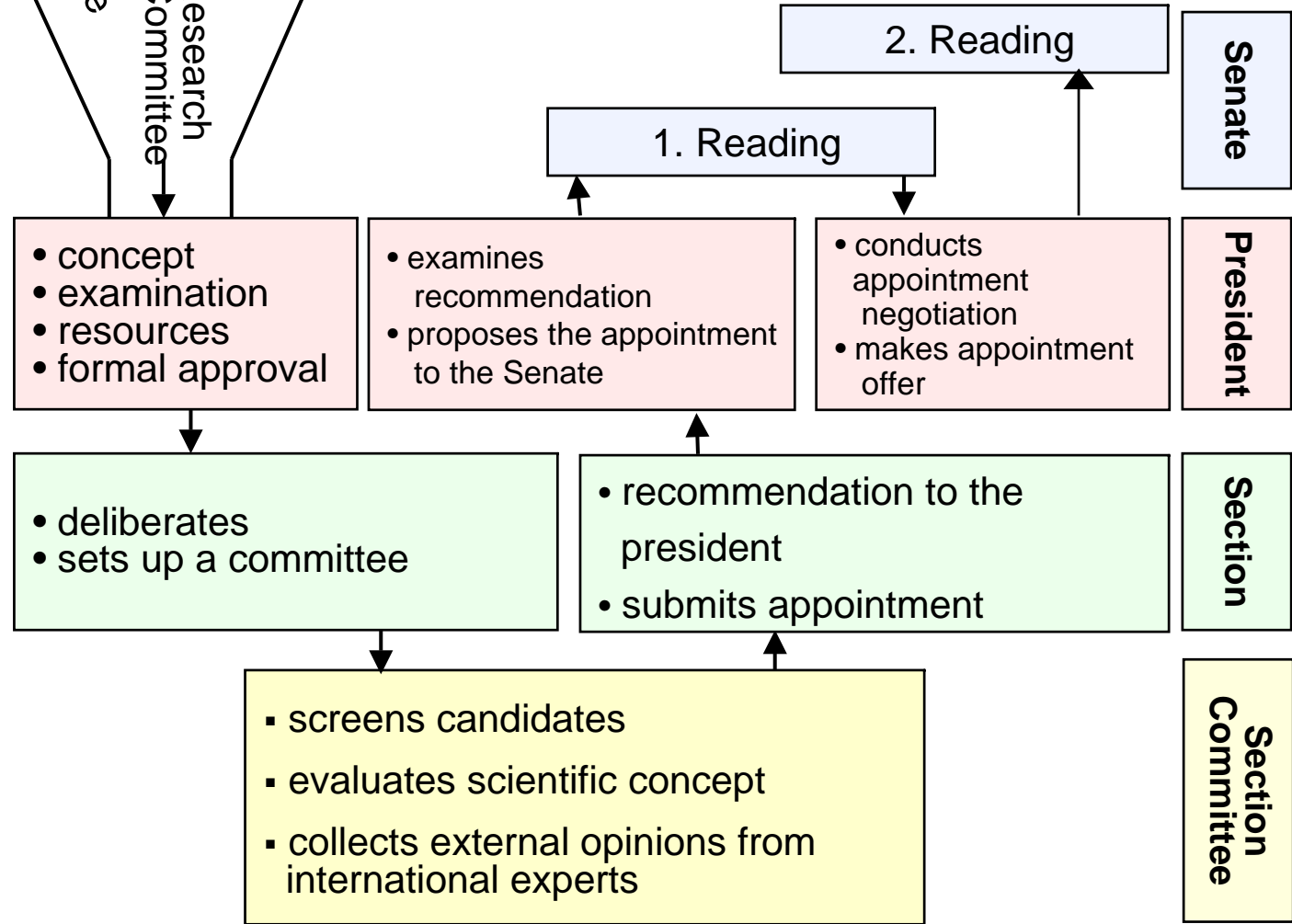
Ex Ante Evaluation	Ex Post Evaluation	Others
<ul style="list-style-type: none"> <li>• Establishing institutes</li> <li>• Appointments</li> <li>• Program concepts</li> <li>• Concepts for individual scientific proposals</li> </ul>	<ul style="list-style-type: none"> <li>• Regular Evaluation Performed every 2 yrs. by the scientific advisory boards of the institutes</li> <li>• Extended evaluation every 6 yrs.</li> <li>• IMPRS</li> </ul>	<ul style="list-style-type: none"> <li>• System Evaluations commissioned by donors and granting agencies</li> <li>• Structure oriented presidential committee</li> <li>• Internal analysis of the activities and the performance</li> </ul>
Peer Review		



## Proposals

# Ex Ante Evaluation

## Appointment of Scientific Members



# Ex Ante Evaluation

---

## Criteria for Peer Review based Evaluation

- originality of the candidate
- international ranking
- integration into the institute's research spectrum
- assessment of the potential contribution to institute's research concept
- standing compared to other scientists
- leadership qualities



# Types of Evaluation

<b>Ex Ante Evaluation</b>	<b>Ex Post Evaluation</b>	<b>Others</b>
<ul style="list-style-type: none"><li>• Establishing institutes</li><li>• Appointments</li><li>• Program concepts</li><li>• Concepts for individual scientific proposals</li></ul>	<ul style="list-style-type: none"><li>• Regular Evaluation Performed every 2 yrs. by the scientific advisory boards of the institutes</li><li>• Extended evaluation every 6 yrs.</li><li>• IMPRS</li></ul>	<ul style="list-style-type: none"><li>• System Evaluations commissioned by donors and granting agencies</li><li>• Structure oriented presidential committee</li><li>• Internal analysis of the activities and the performance</li></ul>
<b>Peer Review</b>		



# Ex Post Evaluation

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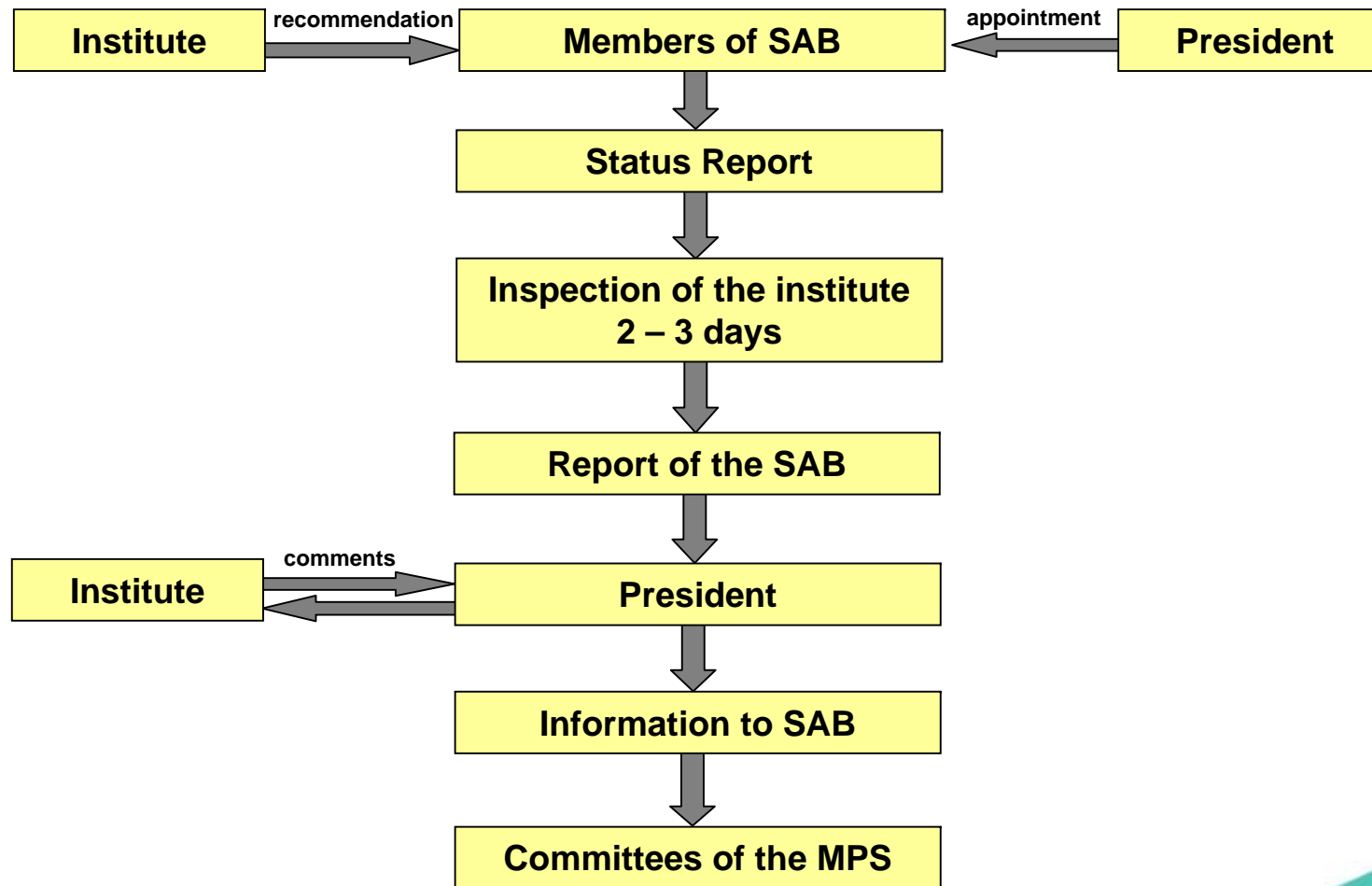
## Criteria of the Scientific Evaluation

---

- importance of the institute compared to national and international standards
- evaluation of the scientific work programs, personnel, and structure
- appropriate allocation of funding (incl. third-party funding)
- cooperation within the institute, with other Max Planck Institutes, and with partners in Germany and abroad
- promotion of junior researchers
- prospects for the research field
- awards, job offers (young) scientists receive

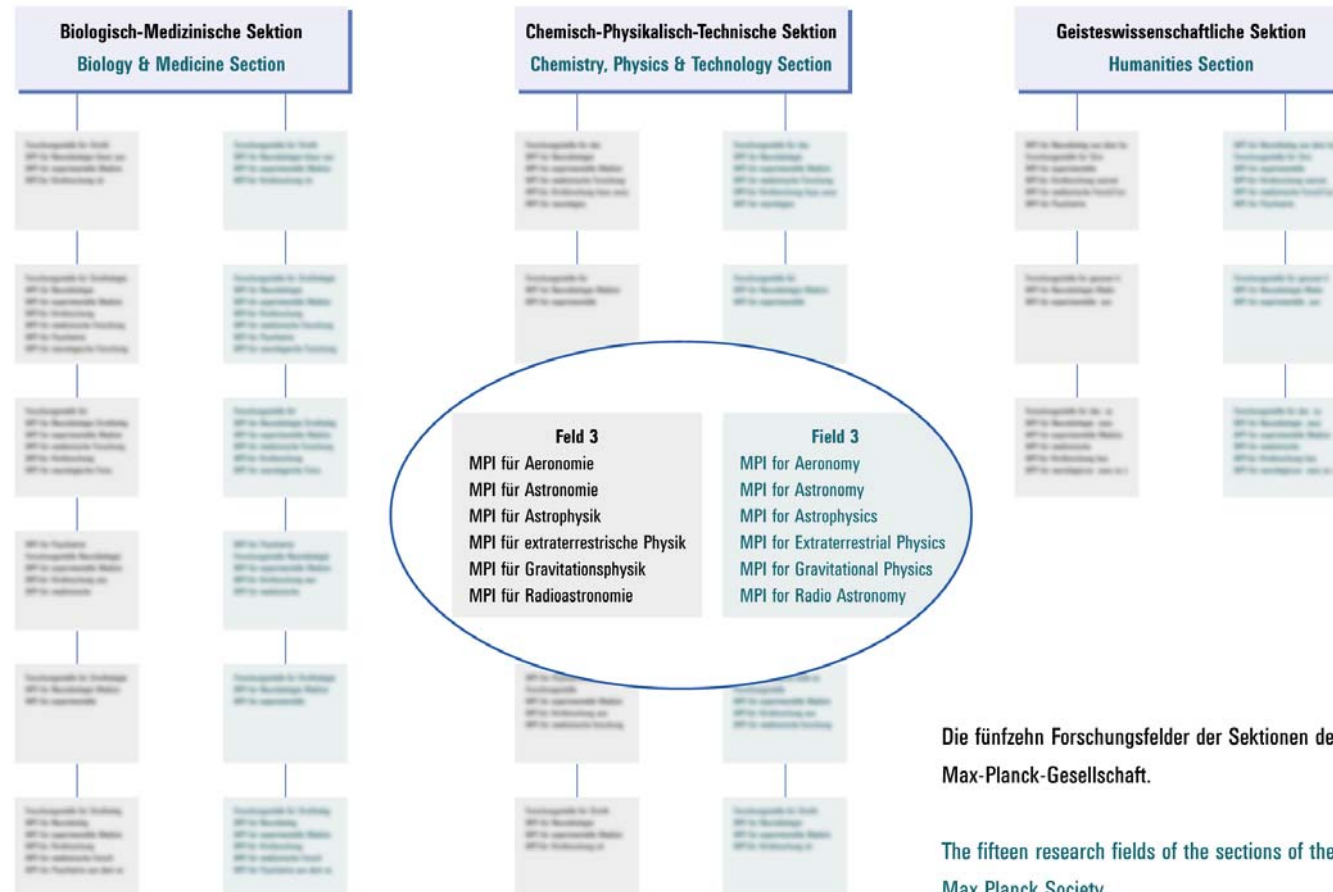


# Ex Post Evaluation



# Extended Evaluation

## Example of a Research Field:



Die fünfzehn Forschungsfelder der Sektionen der Max-Planck-Gesellschaft.

The fifteen research fields of the sections of the Max Planck Society.





## Extended Evaluation

---

- several thematically and structurally similar institutes are organized into research fields
- every 6 years, i.e.
- president appoints two internationally reputed rapporteurs per research field to take part in the evaluation procedure
- rapporteurs take part in all meetings of the scientific advisory boards of one research field



## Extended Evaluation

---

- attention given to inter-institutional comparative viewpoints within the research field
- thorough assessment of the institutes and the use of resources in the scope of the scientific importance of the research project
- a final discussion takes place in the research field committee and a written statement is drawn up



# Extended Evaluation

---

## Research Field Committee

### Members:

- responsible vice president (chairman)
- rapporteurs
- chairpersons of the scientific advisory boards
- responsible chairperson of the section

### Basis:

- reports of the scientific advisory boards
- summary report of the rapporteurs

### Report is drawn up on:

- future developments
- allocation of resources in the research field



# Consequences of Evaluation

---

- Recommendation on research portfolio of departments and institutes
- influence on financial endowment
- influence on personal salary

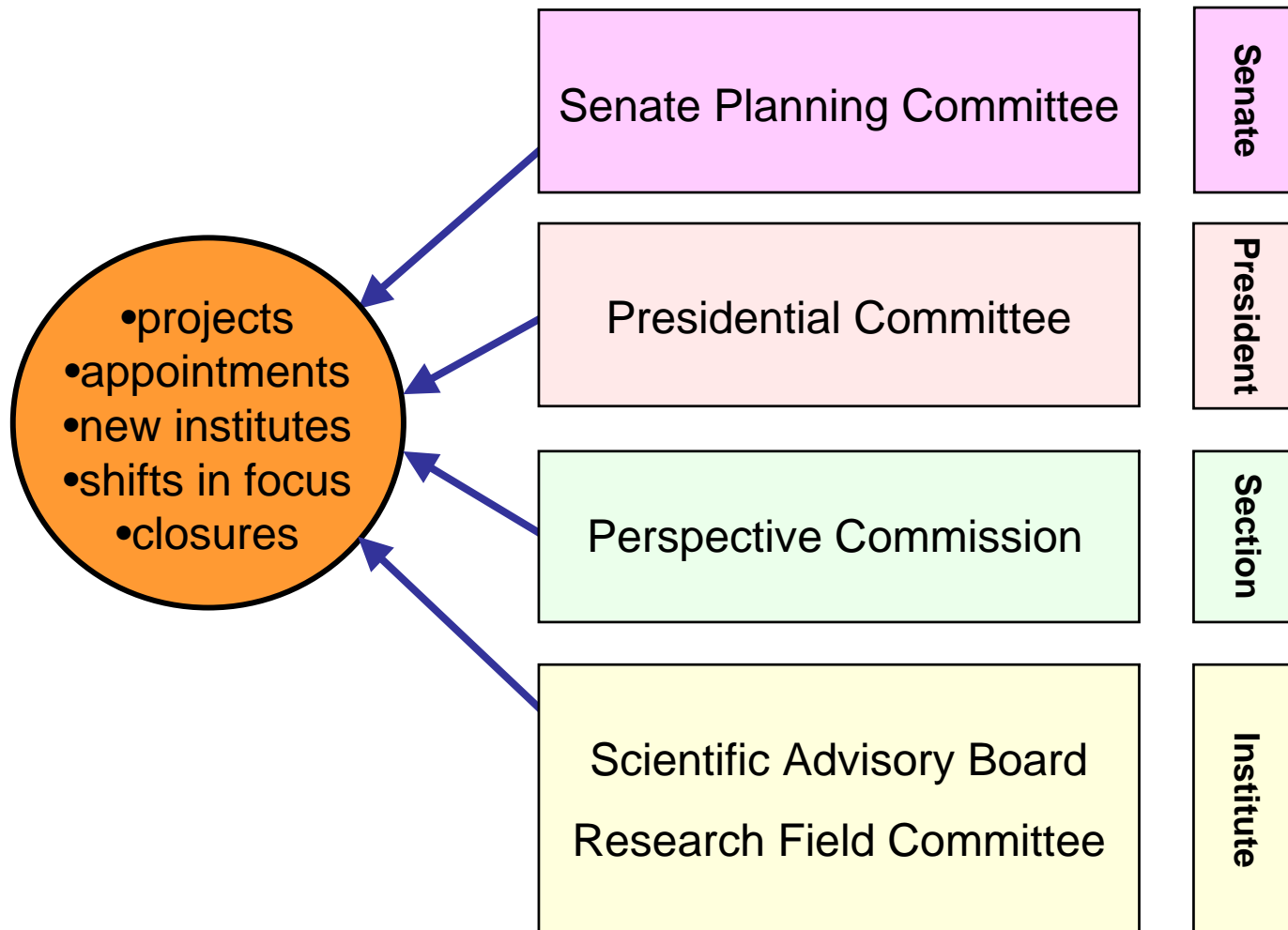


## Types of Evaluation

Ex Ante Evaluation	Ex Post Evaluation	Others
<ul style="list-style-type: none"> <li>• Establishing institutes</li> <li>• Appointments</li> <li>• Program concepts</li> <li>• Concepts for individual scientific proposals</li> </ul>	<ul style="list-style-type: none"> <li>• Regular Evaluation Performed every 2 yrs. by the scientific advisory boards of the institutes</li> <li>• Extended evaluation every 6 yrs.</li> <li>• IMPRS</li> </ul>	<ul style="list-style-type: none"> <li>• System Evaluations commissioned by donors and granting agencies</li> <li>• Structure oriented presidential committee</li> <li>• Internal analysis of the activities and the performance</li> </ul>
Peer Review		



# Decision Making Bodies



# Scientific Achievements

---

- 15 Nobel prize laureates since 1948
- More than 12.000 publications in 2003
- Percentage of Max Planck Society publications of German contributions in:
  - Nature: 42%
  - Science: 34%
  - Physical Review Letters (PRL): 27 %,
  - Cell: 34 %
  - Neuron: 44 %
- 54 Max Planck researchers rank among the most cited scientists worldwide
- Achievement rate of financial support by the EU: ca. 42% since 1998



## International Benchmarking

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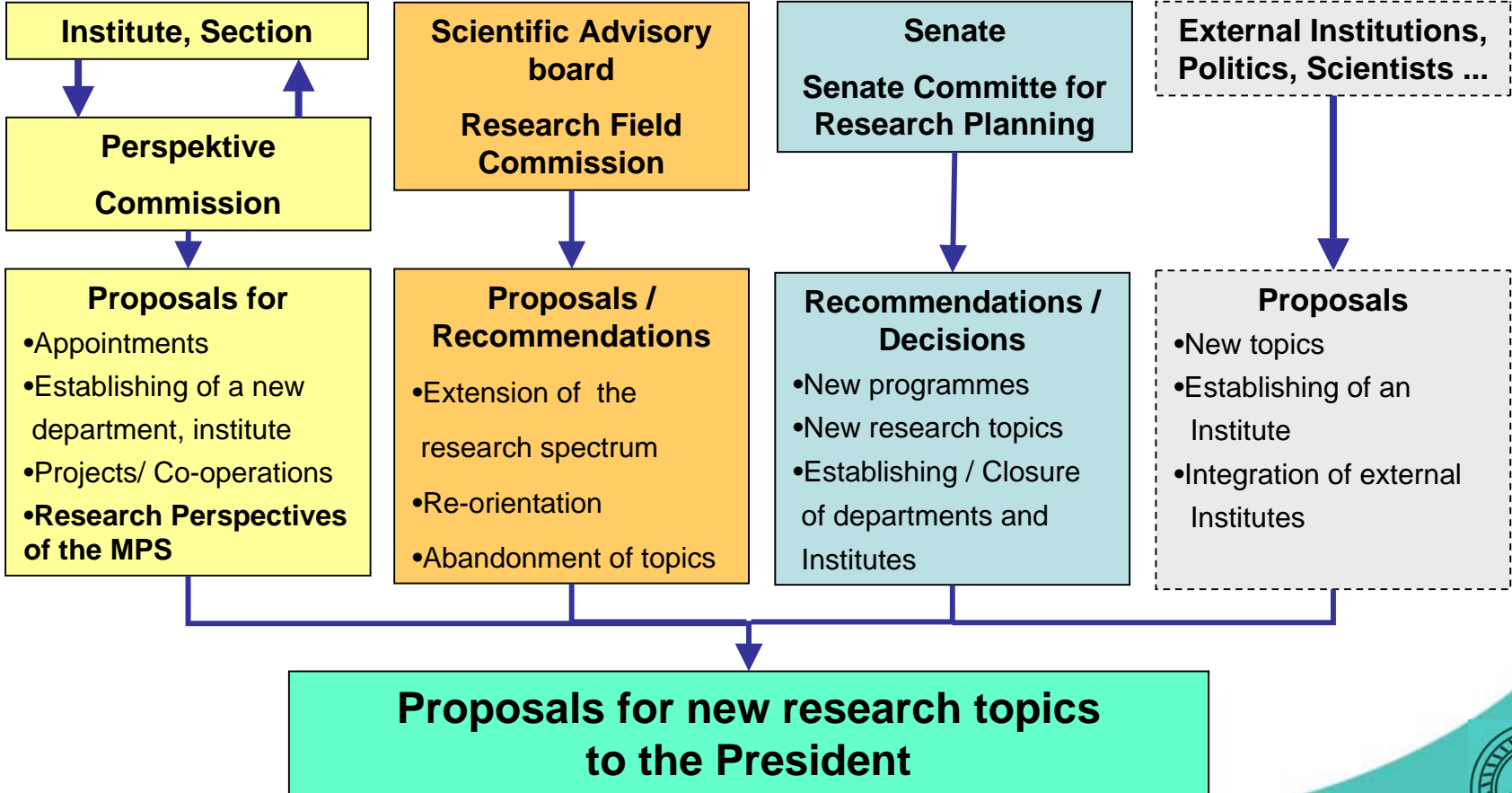
	<b>MPG</b>	<b>Stanford</b>
Budget (in million €)	1325	1792
Science Citation Index	7471	4128
Nobel prize laureates	15	17
Number of publications and reviews in 2003:		
● Science	31	30
● Nature	48	29
● Cell	8	12
● Physical Review Letters	166	63

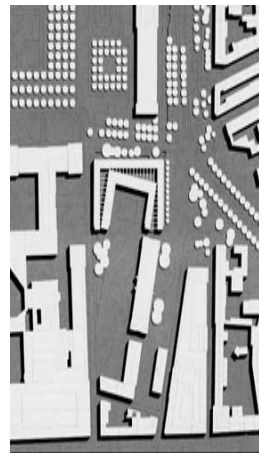




# Determination of research topics

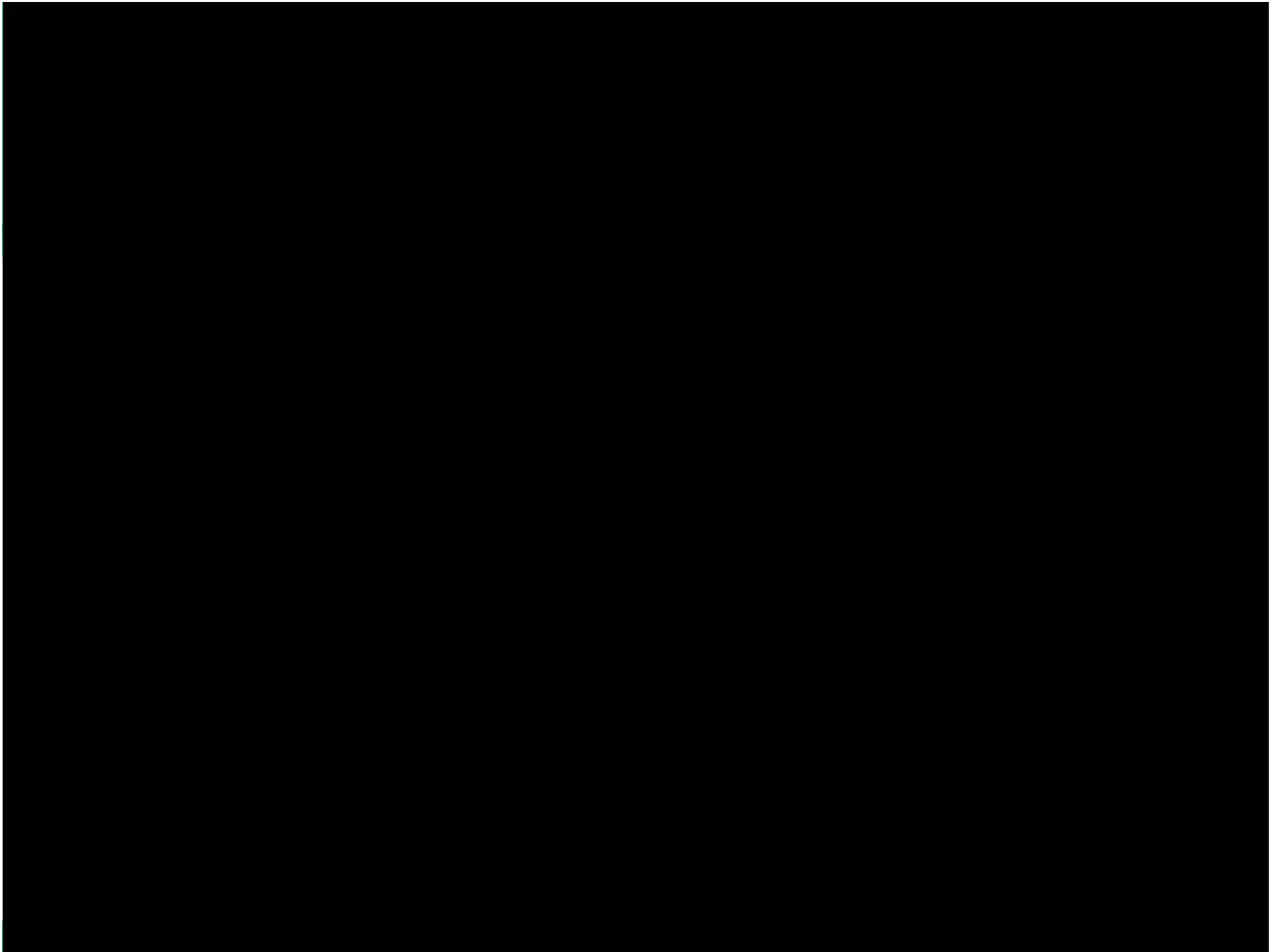
## Involved bodies





**Dr. Stefan Echinger**  
**Head of the Division Strategic Planning**  
**Max Planck Society - Administrative**  
**Headquarters**  
**Hofgartenstr. 8 - D-80084 Munich**  
**phone +49-(0)89-2108-1430**  
**fax +49-(0)89-2108-1243**  
**mail [echinger@gv.mpg.de](mailto:echinger@gv.mpg.de)**





# Ex Post Evaluation

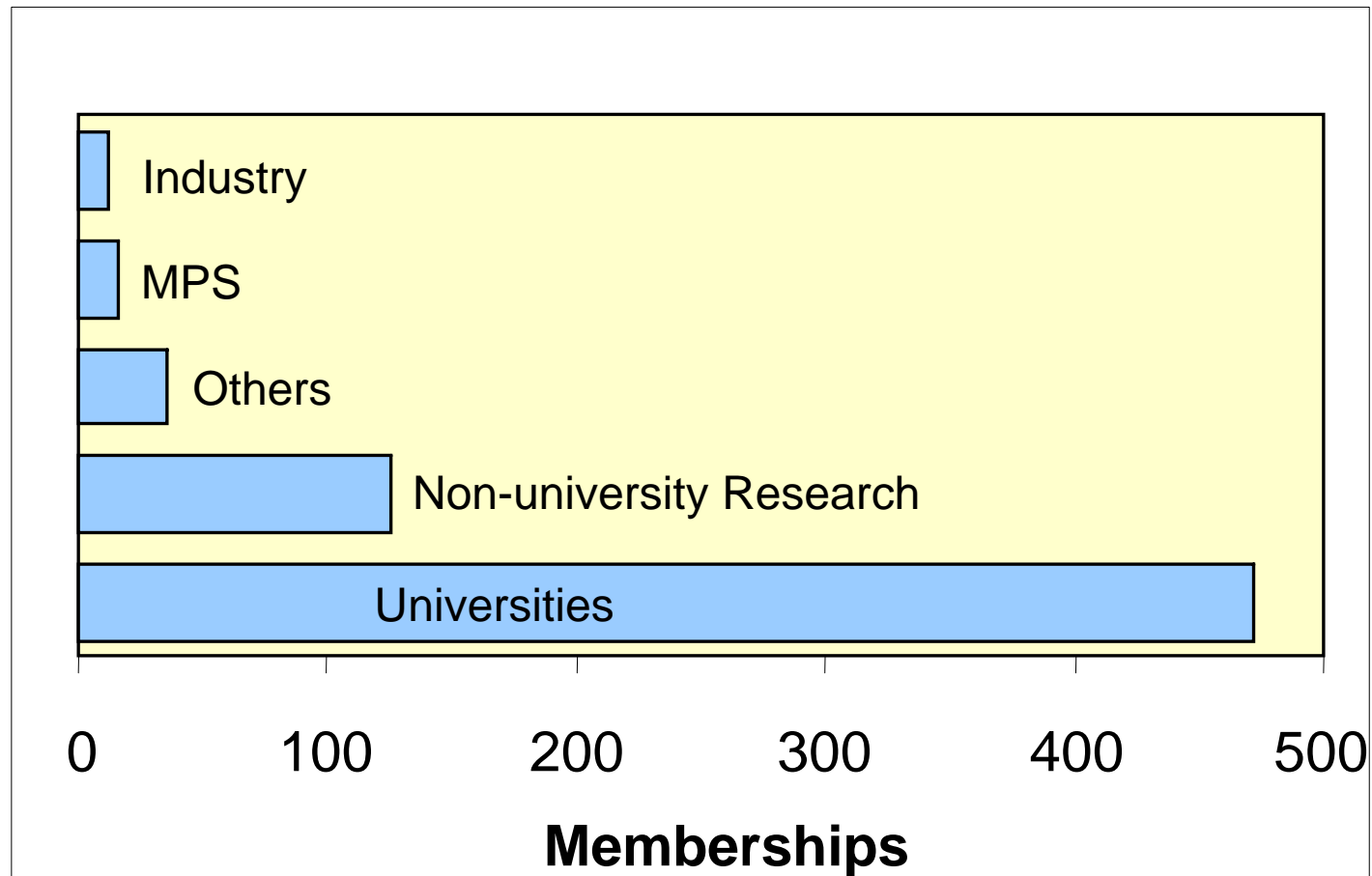
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## Members for the Scientific Advisory Board

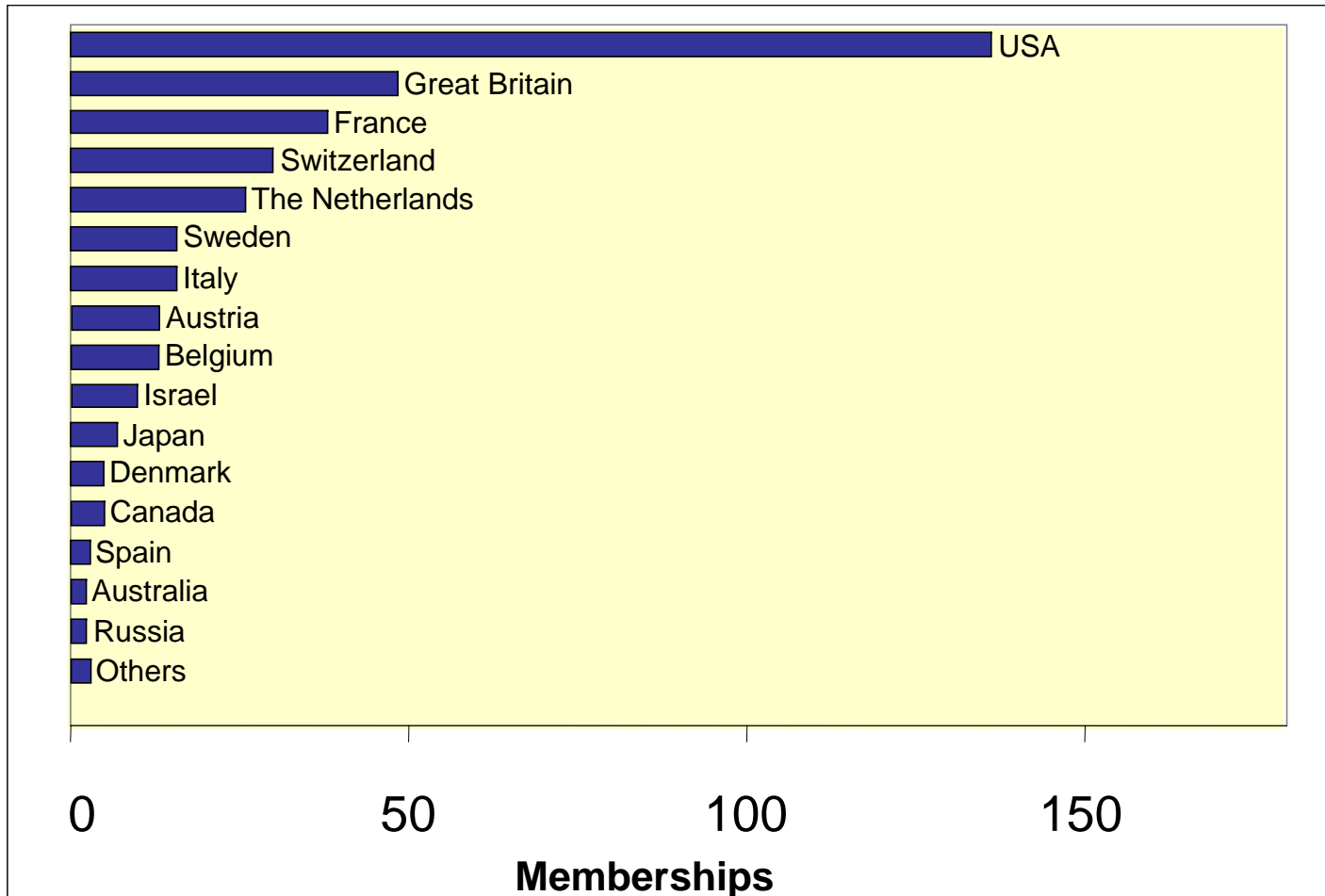
- proposed by the institute
- appointed by the president for 6 years (reappointment for 6 years is possible)
- usually half are replaced after 6 years
- total 677 members  
(over 98 % are external, over 73 % are from abroad)



## Affiliations of Advisory Boards Members



## Countries of Origin



# Ex Post Evaluation

## Contents of the Institute's Status Report

Research concept  
Highlights of the research  
Publications  
Junior scientists and guest scientists  
Cooperation with national and international research facilities

- Budget
- Third-party funds
- Personnel structure
- Equipment and spatial arrangements

- Teaching activities
- Appointments, scientific awards, and memberships
- Contacts to the business world, politics, and society
- Events
- Public relations work



# Ex Post Evaluation

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## Meeting of the Scientific Advisory Board

Day 1: Pre-Meeting + “closed session“

- vice president welcomes members of the scientific advisory board and introduces to the MPS system
- election of the chairman of the scientific advisory board
- report of the managing director

Day 2: - lectures from individual departments

- poster presentation
- discussion with scientists in individual departments

Day 3: - closed meeting of the scientific advisory board

- discussion with the president, vice president, and the directors
- most important results are disclosed to the president/ vice president and a written report is prepared for the president





# Ex Post Evaluation

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## Report of the Scientific Advisory Board

- chairman writes the report in coordination with the other members
- discussion of the institute's standing in a national and international context
- evaluation of the scientific results and research performance
- evaluation of the scientific importance in relation to the allocation of funds incl. third-party funds
- opinion on future endeavors and concentrations



# Ex Post Evaluation

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## Report of the Scientific Advisory Board

- assessment of the cooperation within the institute and with external colleagues
- contains proposals for changes and restructuring
- recommends continuing or closing a department
- in individual cases, a confidential letter to the president is included with the report
- report is passed on to the institute
- comments of the institute are passed on to the president





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# **ACCOUNTABILITY IN EC RESEARCH: THE DELICATE BALANCE BETWEEN TRUST AND THREAT**

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PRESENTATION TO THE THIRD ACCOUNTABILITY  
WORKSHOP IN SCIENCE FUNDING

MR R. HAUTMAN  
AUDITOR, RESEARCH DIRECTORATE GENERAL

WEDNESDAY 1 JUNE 2005

BONN, GERMANY



## THE PRESENT SPEAKER

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- A senior controller in the Research Directorate General (DG RTD)
- DG RTD audit unit evolution
  - From four to ten auditors and characteristics
  - From in-house to out-sourcing



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## **PART ONE**



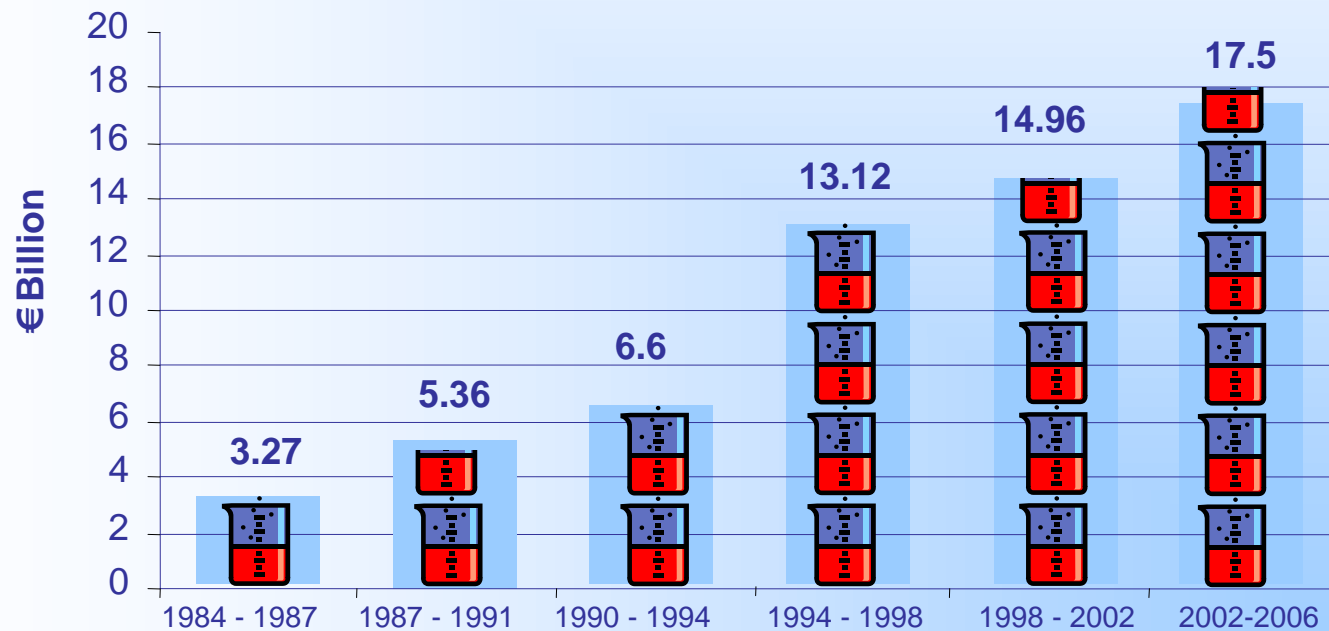
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# **THE COMMISSION'S RESEARCH ENVIRONMENT**



# BACKGROUND INFORMATION

- Budgets of the EU Framework Programmes





## HIGH BUT FRAGMENTED BUDGET

- High EU research budget, but...fragmented into bits and pieces
- FP6 = 1 MILLION CARS  
*(at EUR 17 500 per car)*



DG RTD running contracts: <i>(as at 31.12.2003)</i>	10 028
Payments made: <i>(centralised direct management)</i>	6 277
Paid in total:	€1 834 679 696
Average payment:	€ 292 286





## PROVISIONAL FP7 BUDGET 2007-2013

- FP7 = a budgetary quantum leap!
- Provisional budget      EUR Million
  - Cooperation      44 432
  - Ideas              11 862
  - People             7 129
  - Capacities        7 486
  - JRC                1 817
  - **Total EC**        **72 726**
  - Euratom           3 092







## RAISING AWARENESS

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- Accountability does not happen overnight
- Research is... like a game of football
- Criterion of the “bonus pater familias”
- Contractor is in the driving seat!
- Ripple effect





# CONTROL

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- The European Court of Auditors:  
Strengthen control!
- Lenin:  
Trust is good, control is better





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## **PART TWO**



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## **DG RTD'S FP6 AUDIT POLICY**



# THE NEW AUDIT CONCEPT

What has changed from FP5?

- Under FP6 all consortia have been given much more autonomy in the management of their projects and are accountable to the EC for:
  - Justifying their financial claims
  - Quality of output
  - Timeliness of its deliverables





# THE NEW AUDIT CONCEPT

What has changed from FP5? (cont.)

- This is particularly true for the new instruments in FP6, namely:
  - Integrated Projects
  - Networks of Excellence





## FP5 & FP6 – THE DIFFERENCE?

	<b>FP5:</b>	<b>FP6:</b>
<b>Control:</b>	- Accepted cost statements	- Audit certificate
<b>Performance:</b>	- EC Financial officer	- Qualified auditor
<b>Basis:</b>	- Cost statements & ad hoc info. requests	- Actual supporting documentation
<b>Timing:</b>	- Delayed	- Immediate





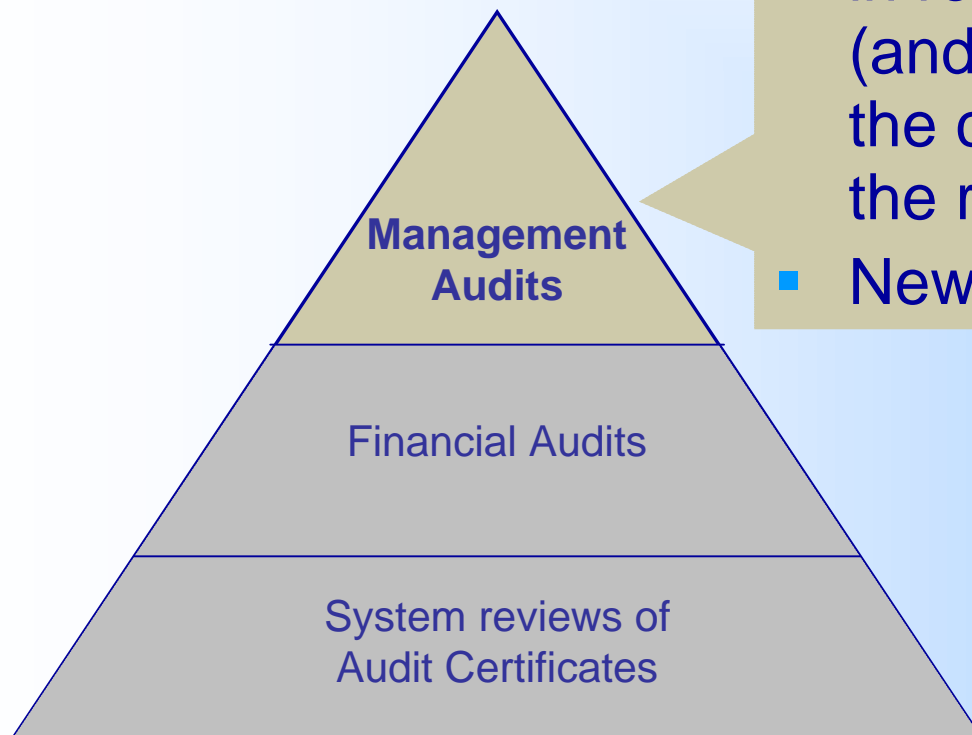
## A THREE TIERED PROCESS

- Reflecting these changes, the New Audit Concept for FP6 envisions a three tiered process
  - Management Audits
  - Financial Audits
  - System reviews of Audit Certificates





# MANAGEMENT AUDIT



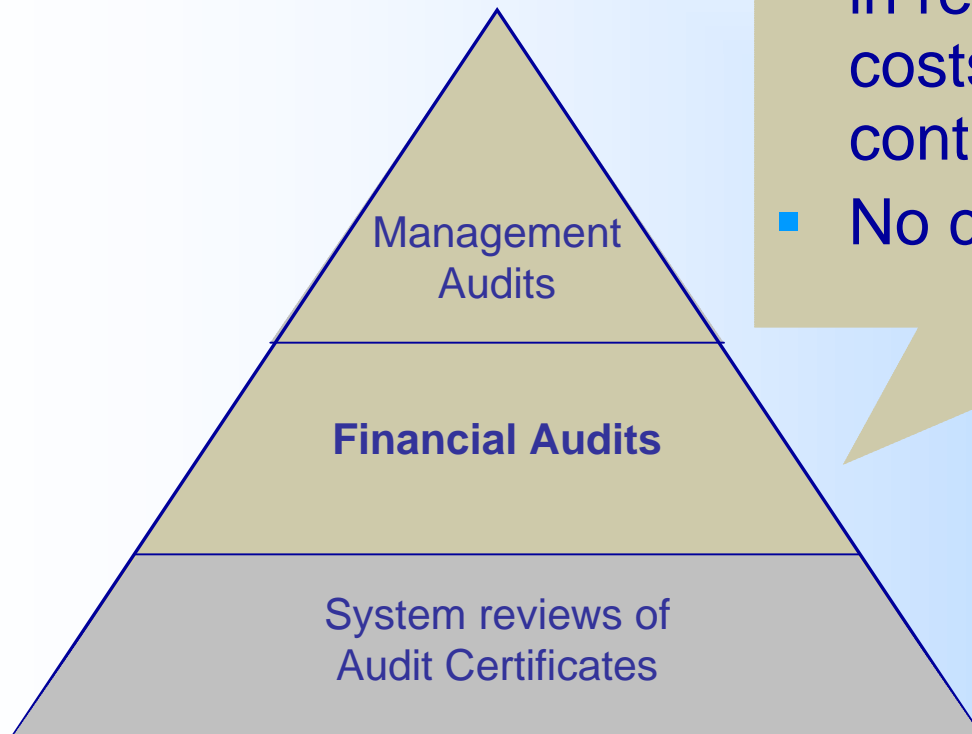
- An audit to provide assurance in relation to the management (and associated processes) of the contractor in carrying out the research project
- New in FP6







# FINANCIAL AUDIT

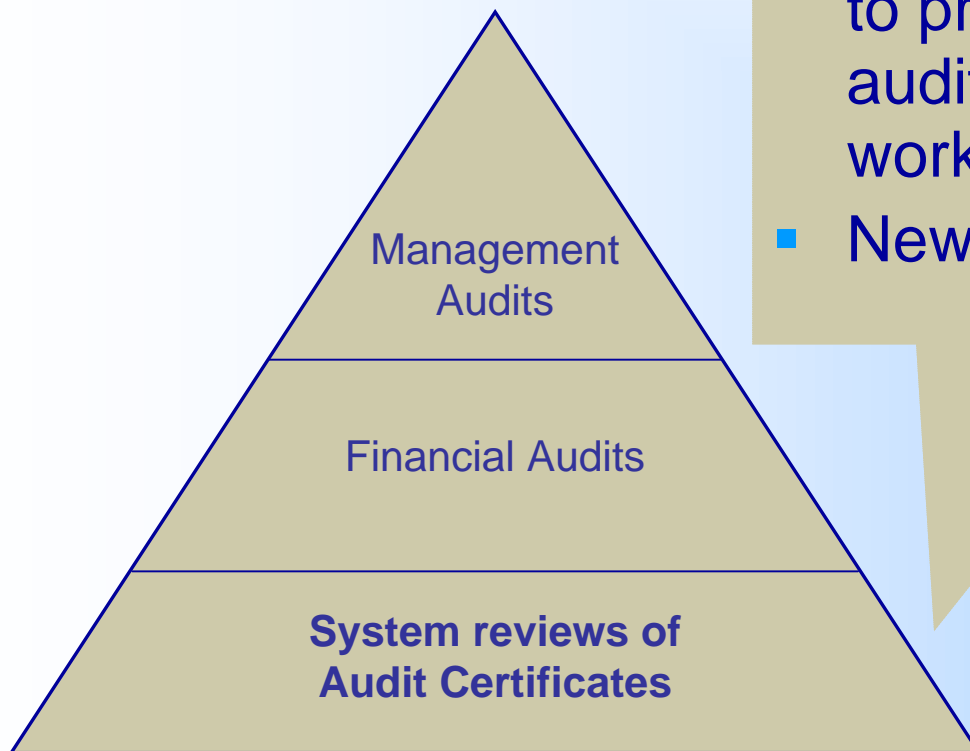


- An audit to provide assurance in relation to the eligibility of costs claimed by the contractor and paid by the EC
- No change from FP5





# REVIEW OF AUDIT CERTIFICATES



- A system review undertaken to provide assurance that the audit certificate system is working
- New in FP6





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## **PART THREE**

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# **ACCOUNTABILITY: TRUST**



# ACCOUNTABILITY

## Definition of accountability

- The obligations of persons or entities, including public enterprises and corporations, entrusted with public resources to be answerable for fiscal, managerial and programme responsibilities that have been conferred on them, and to report to those that have conferred these responsibilities on them (Source: Glossary of terms, Audit Manual European Court of Auditors)



# TRUST

- Is at the heart of EC research policy: the Ormala Panel and the issue of trust
- Use of contractor's own accounting system
- Large management autonomy of the consortium
- Cost sharing





# TRUST

- The five year assessment
- The Ormala panel
- Recommendation 8
- The FP should continue to address the issue of trust and legitimacy





## OWN ACCOUNTING

### Use of contractor's own accounting system

- Evolution from FP5 to FP6
- FP5 Commission as mother-in-law imposed own definitions
  - Strict cost categories
  - Calculation of durable equipment
- FP6
  - Commission dropped own definitions
  - Does not mean freedom to create specific rules



## MANAGEMENT AUTONOMY

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- Consortium agreement: Own decision making rules
- Entered into between the EC project's contractors
- The Commission is not a party to it and does not check the content
- Terms cannot contradict EC contract
- E.g., conflict settlement, distribution of the EC contribution





## COST SHARING

- 3 systems
- Additional cost model 100% reimbursement
- Full costs 50% reimbursement
  - Flat rate for overheads
  - Real overheads
- Auditors clear preference for full costs: contractor and Commission in 'same boat'



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## **PART FOUR**



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# **ACCOUNTABILITY: THREATS**



# THREAT

- Audit certificates
- FP6 financial collective responsibility amongst contractors
- Sanctions
  - Liquidated damages
  - Financial penalties
  - Exclusion irregularity
  - Other sanctions



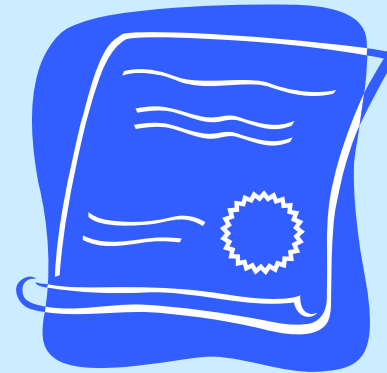


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# AUDIT CERTIFICATES





## DEFINITION

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- External auditors certify that the costs and receipts recorded during a specific period meet the contractual requirements
- Exception: public body
  - Provided by a competent public officer





## COMMISSION AUDIT

- Audit certificate is not to be confused with an audit which the Commission may still launch at any time and up to 5 years after the end of the project





## PURPOSE

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- Pre-financing becomes a settled payment
- Qualified and independent control on the spot of source documents





## ELIGIBLE AUDITORS

- For any legal entity:
  - An external auditor
- For public bodies:
  - An external auditor or a competent public officer







## COMPETENT PUBLIC OFFICER

- Has not been involved in processing Financial Statement per Activity
- In fact and / or in appearance not prima facie independent
- Independence should be established at a regional / national level





# EXTERNAL AUDITOR

- Must be independent from the contractor
- Must be qualified to carry out statutory financial audits (in accordance with the 8<sup>th</sup> Council Directive 84/253/EEC of 10 April 1984)





## SPECIAL CLAUSE 39

- Article 7.2 of the contract requires annual audit certificates for IPs and NoEs
- No need to submit certificate until requested contribution reaches EUR 150 000
- However, one certificate is always required at the end of the project





## COST OF A CERTIFICATE

- The professional judgement of the auditor
- Find the right balance between:
  - Providing a reasonable level of assurance; and
  - Audit work required (and the directly related price)





## REIMBURSEMENT

- The cost of the audit certificate is a direct eligible cost under the “Management of the consortium activities”
- 100% reimbursement





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# FINANCIAL COLLECTIVE RESPONSIBILITY





# COLLECTIVE RESPONSIBILITY

- Financial collective responsibility
- Who does it apply to?
  - Multi-contractor instruments in FP6
- Exceptions are:
  - Marie Curie actions
  - SME specific actions and
  - Certain specific support actions





## COLLECTIVE RESPONSIBILITY (2)

- Is not equal to full joint and several liability
- Because limited
  - in time,
  - In amount and
  - Certain contractors are not bound by its provisions (public bodies, international organisations and contractors guaranteed by a Member State)







## COLLECTIVE RESPONSIBILITY (3)

- When is it applied?
  - As a last resort and other approaches have been explored, hold the other contractors liable for the debt of that contractor under certain conditions
- The consortium then reimburses the amount due to the Commission





## COLLECTIVE RESPONSIBILITY (4)

- How it is applied?
- The amount due is allocated among all the remaining contractors
- Proportionally
- The consortium is not responsible for:
  - A. Any amount discovered after the final implementation date
  - B. Liquidated damages due by any contractor
  - C. Other financial penalties / other sanctions





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# SANCTIONS





## LIQUIDATED DAMAGES

- Calculation of the amount:
  - Unjustified financial contribution x (overstated expenditure / total claimed)
- Example:
  - 100 unjustified
  - 700 claimed
  - $100 \times (100/700) = 14.29$





## FINANICAL PENALTIES

- In addition to liquidated damages
- When: in grave breach of its contractual obligations or false declaration
  - First breach between 2 and 4% of the contribution received
  - Repeated breach: between 4 and 20% of the contribution received





## EXCLUSION

- Irregularity committed
- Broad definition of irregularity
  - Means any infringement of Community law or any contractual breach resulting from an act or omission which has, or would have, the effect of prejudicing the general budget of the EU through unjustified expenditure
  - Excluded from evaluation





## EXCLUSION (CONT.)

- The Commission may immediately terminate the participation of a contractor
- Where the contractor has deliberately or through negligence committed an irregularity
- Such a contractor can also be excluded from all other contracts in which it is involved with the Commission





## OTHER SANCTIONS

- Any administrative or financial sanctions that the Commission may impose on any defaulting contractor in accordance with the Financial Regulation or to any other civil remedy
- Furthermore, any criminal proceedings that may be initiated by the Member States' authorities







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# END OF PRESENTATION

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**Czech Science Foundation**

**Grantová agentura České republiky**

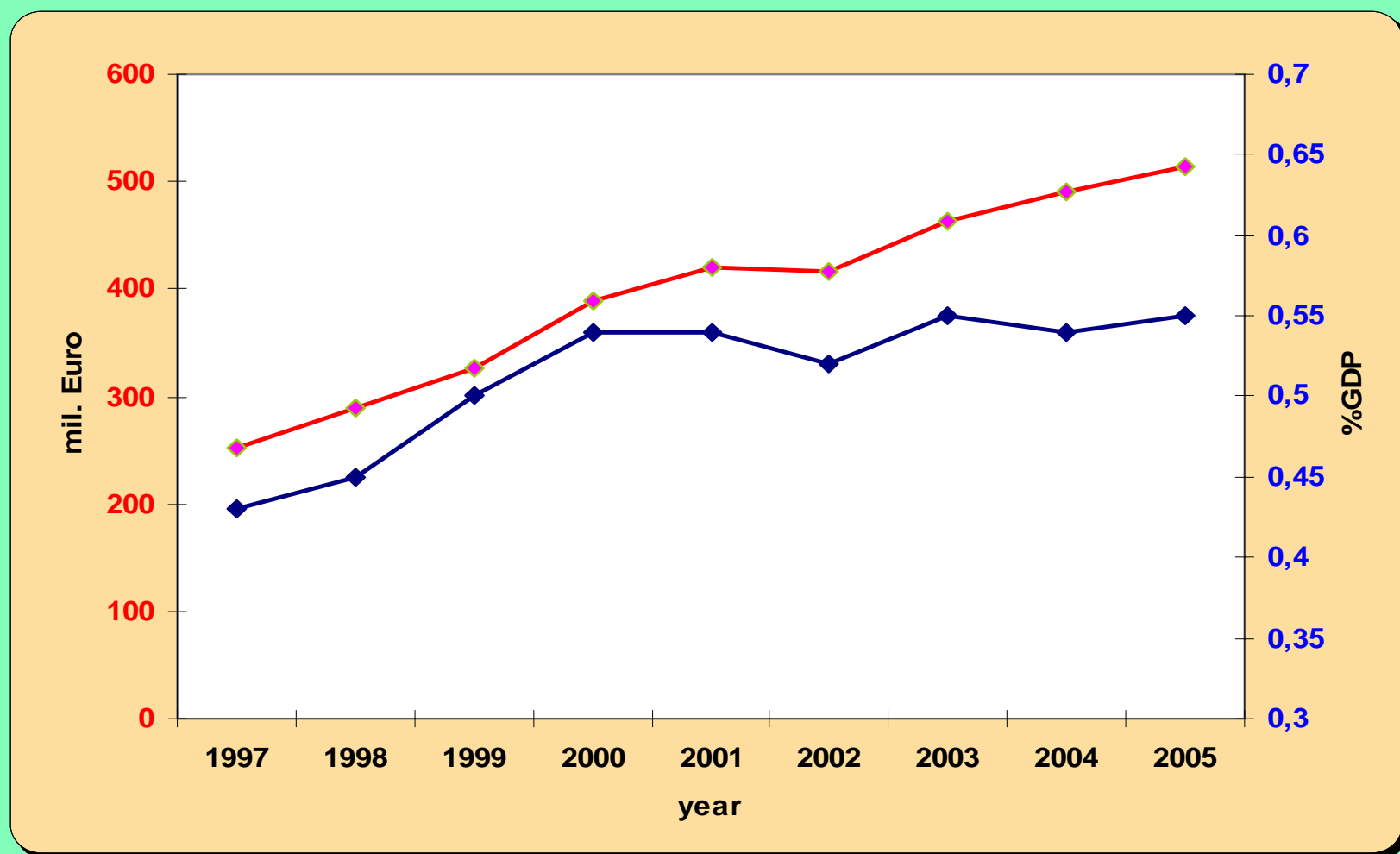
**[www.gacr.cz](http://www.gacr.cz)**

## **Basic information about R&D policy in the Czech Republic**

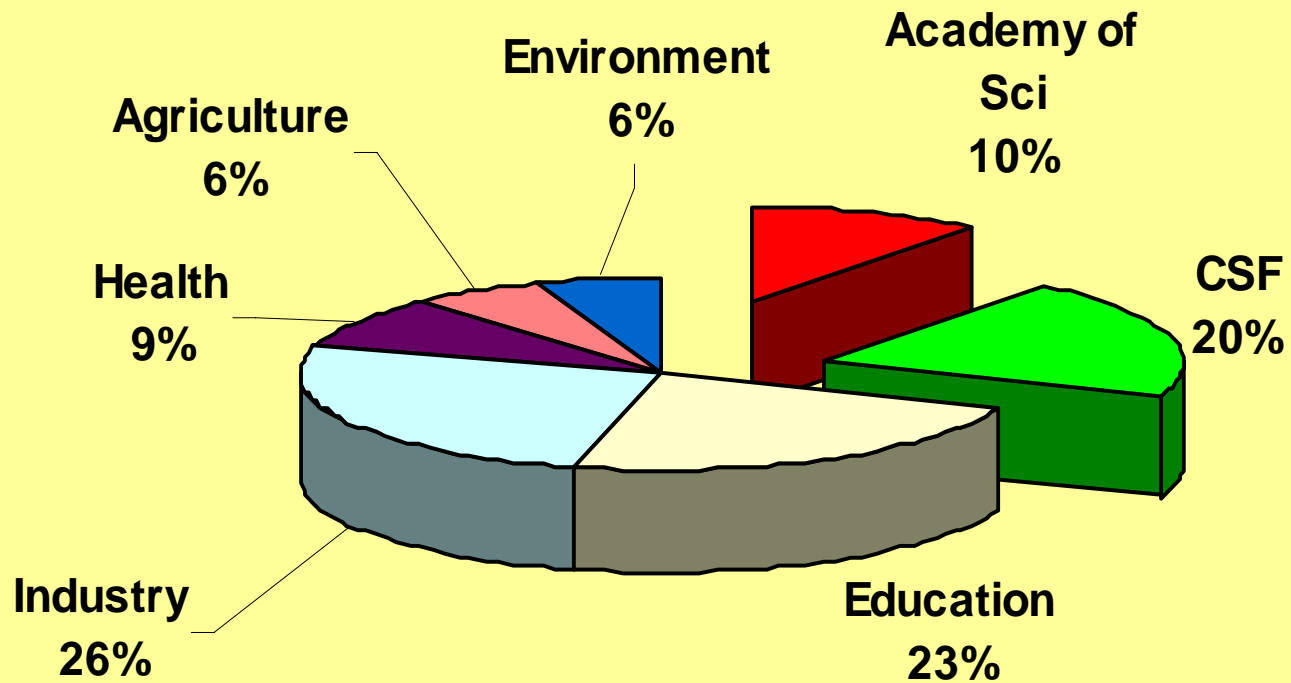
- **Absence of any central authority fully responsible for R & D**
- **Two „main players“ :**
  - **R & D Council of the Government**
  - **Ministry of Education, Youth and Sport**
- **State support about 0.55 % GNP**
- **Distribution of the support through ministries and central offices**



# State support of R&D in the Czech Republic



# Targeted support of R & D in CR



## Basic information about CSF - GACR

- **CSF is independent institution providing, on the basis of public competition, financial support for research and development**
- **Projects are submitted by individuals or organizations**
- **The basis of the funds available is provided by the state budget, but contribution from other sources are also possible**
- **Distribution of the funds :**
  - **universities – 54 %**
  - **Academy of Science – 38%**
- **The executive body of the CSF is the Presidium – 5 members**
- **The statutory head of the CSF is the President**
- **The President and the other four members of the Presidium are appointed by the Government of the Czech Republic for four-year term**

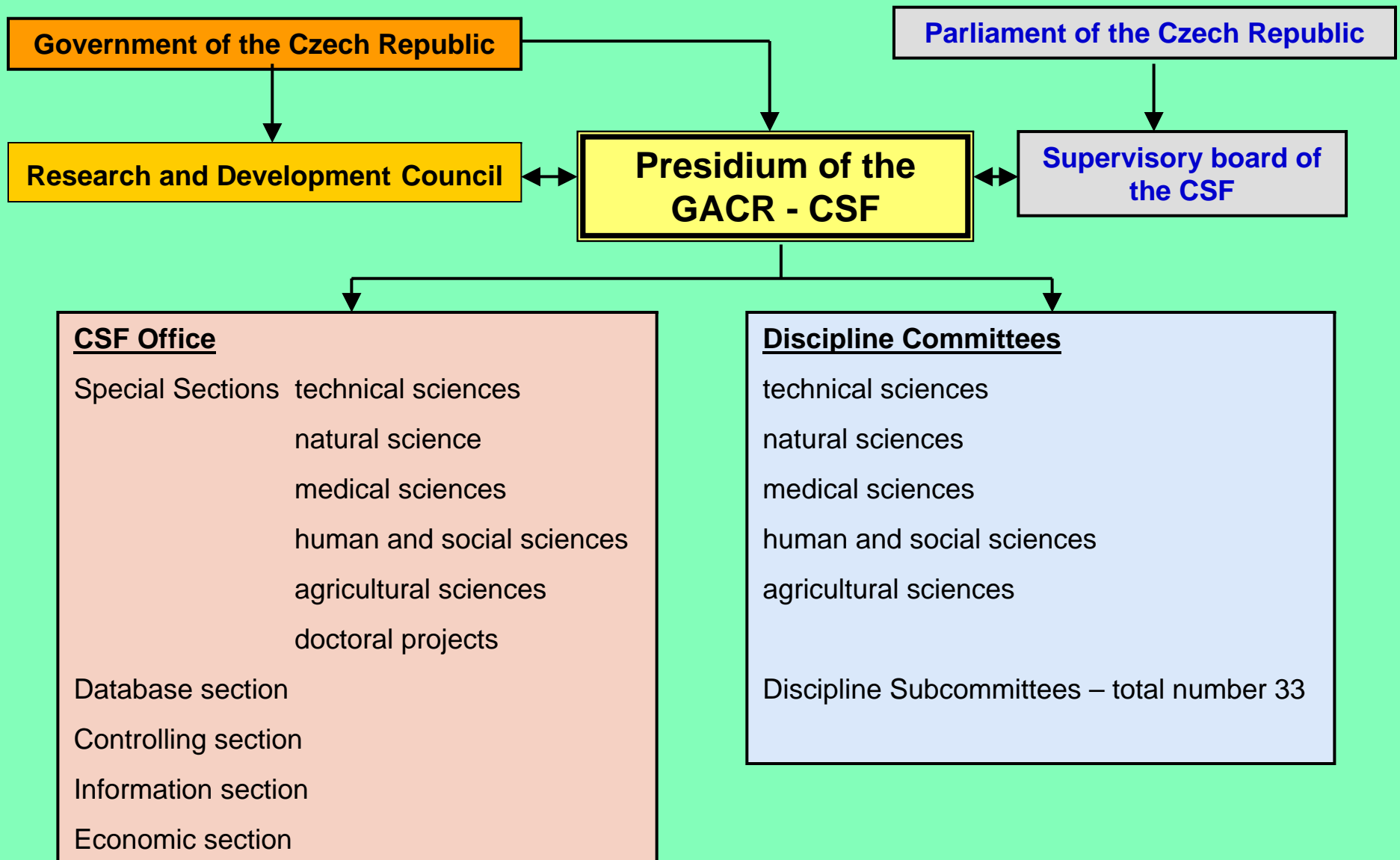


## **Basic information - cont.**

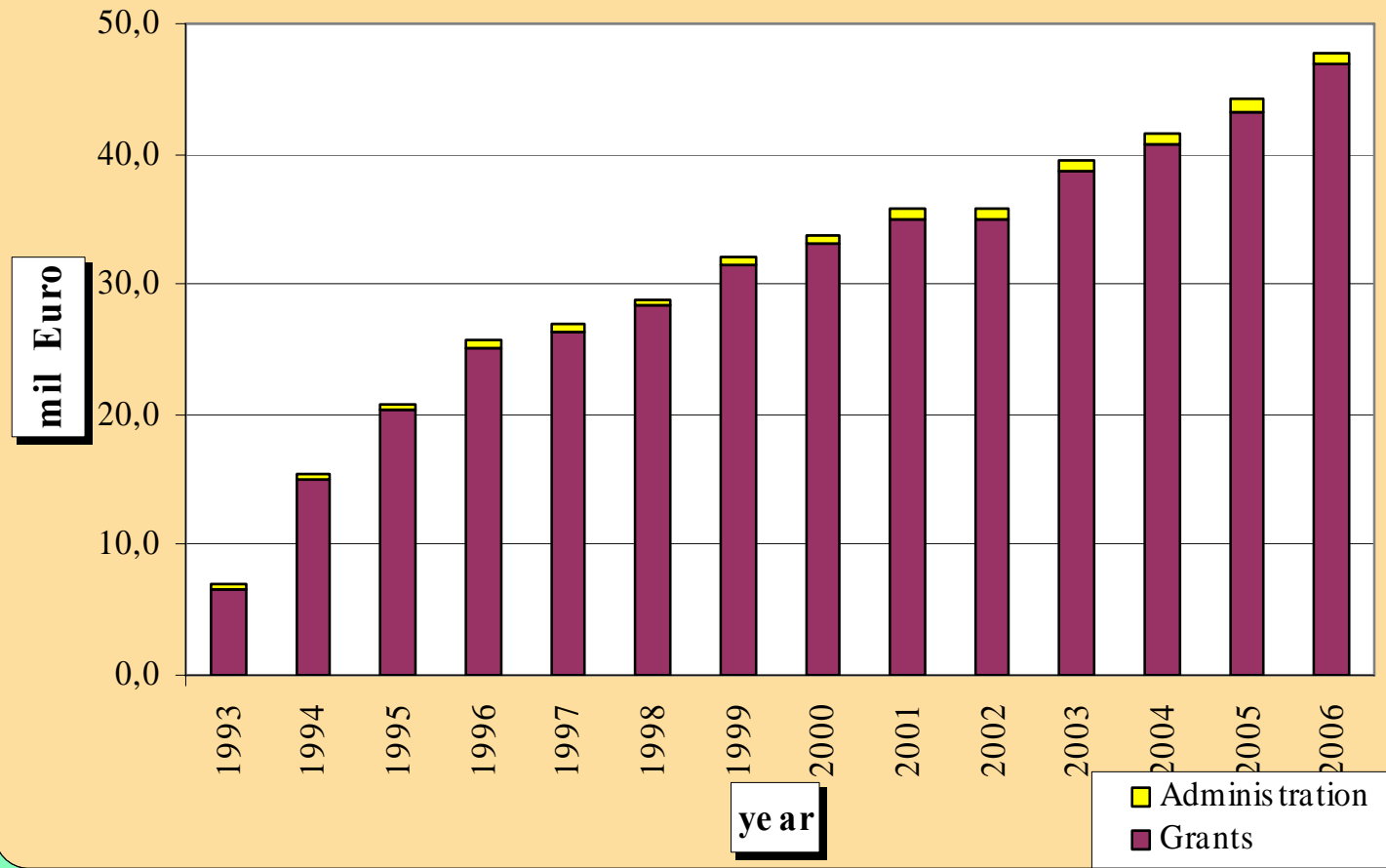
- **3 basic programs :**
  - **Standard grants - thematically unrestricted basic research projects**
    - **average cost : 22 000 Euro**
    - **duration : max 3 years**
  - **Post-doc grants**
  - **Doctoral grants**



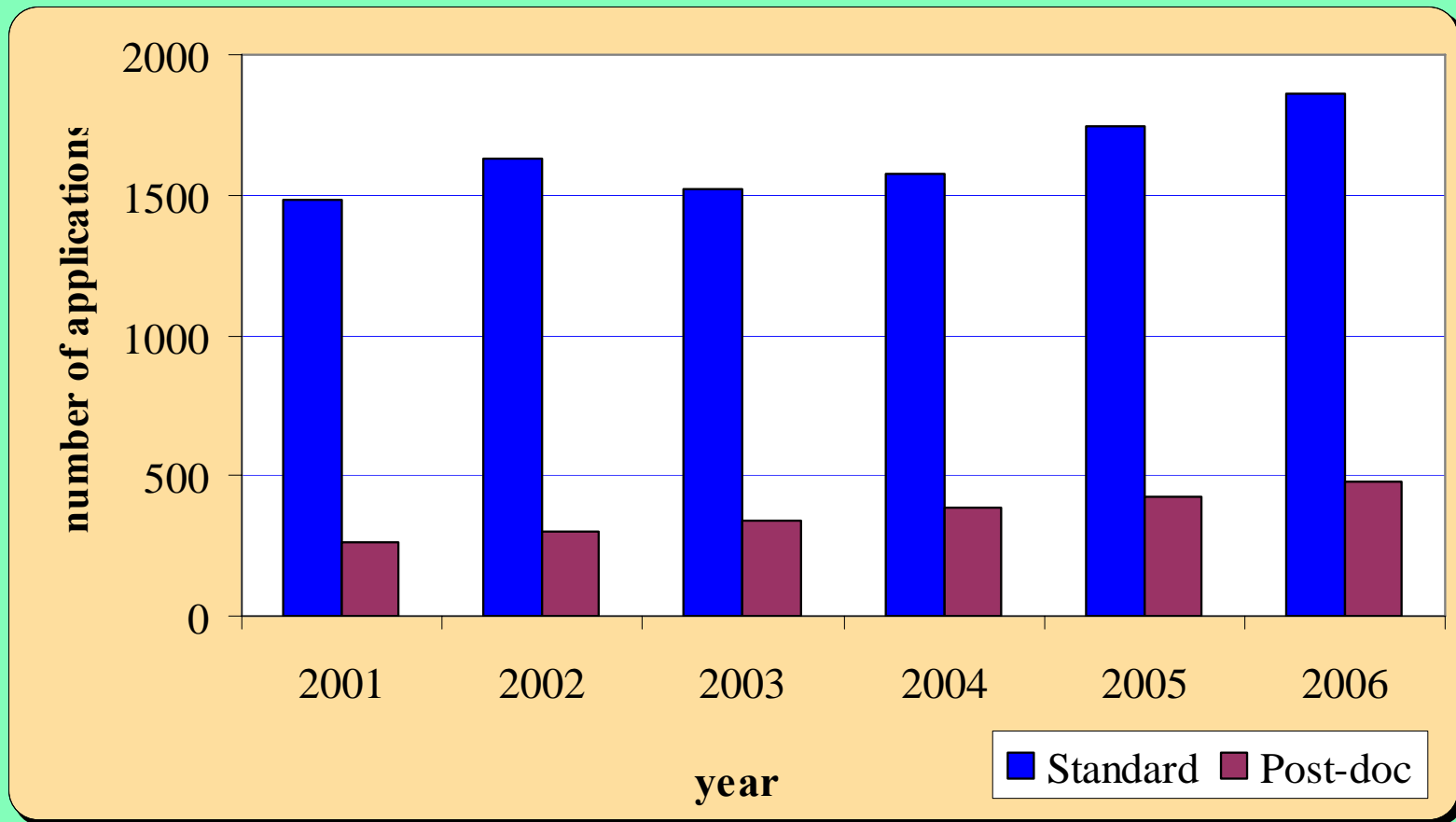




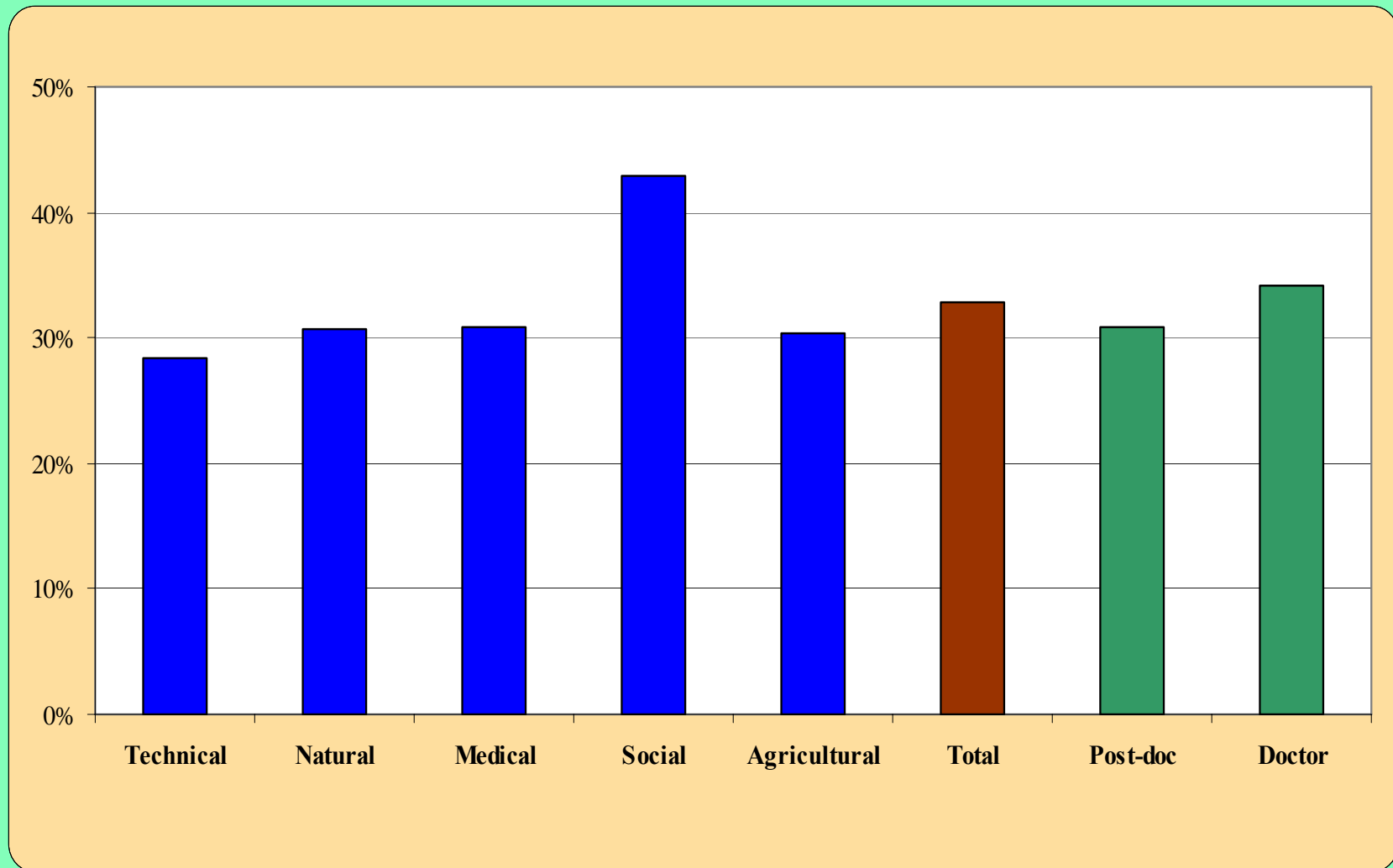
### Total budget of the CSF in 1993 - 2005



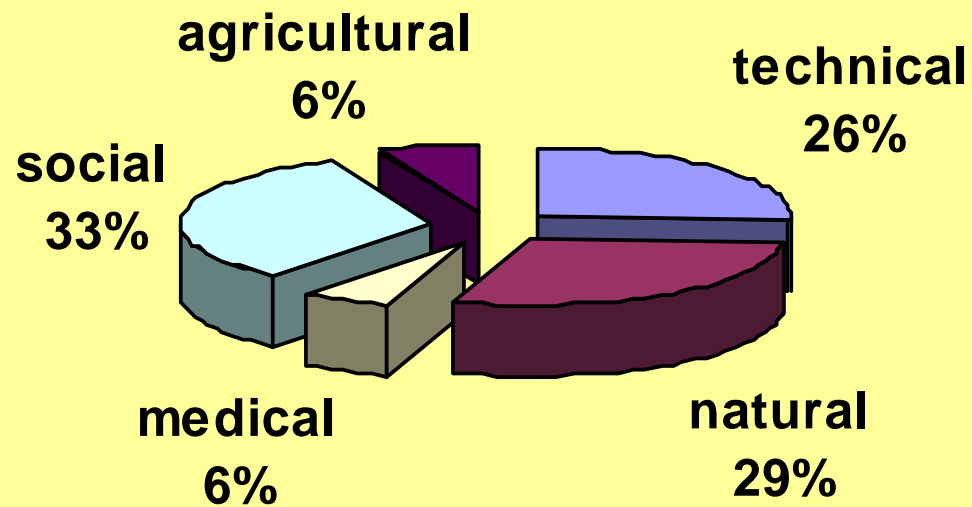
# Annual Number of Applications in GACR - CSF



# Applicants success rate – 2005 in CSF - GACR



## Disciplines structure of the projects



# A Flow Diagram of the Grant Application Processing

**Call for proposals**

Public competition

**Grant Application**

on-line electronic system

**Administrative and Formal Control of the Proposal**

**Choice of the Peer Reviewers**

**Discipline Committees and Subcommittees**

**1st Reviewer**

**2nd Reviewer**

**3rd Reviewer**

# A Flow Diagram of the Grant Application Processing

*Continuation*

## Discipline Committees

Panel discussion recommendation of the projects to be granted

For each project:

- **Reporter** gives the report on the external reviews
- **Reporter** presents his own standpoint to the project
- **Discipline subcommittee** propose an order of the projects; they prepare their own numerical and verbal evaluation.
- **Discipline committee** discusses the recommendation of the subcommittee. The order can be changed. The final DC orders are supplied to the Presidium.

**The Presidium decides on grant awards.**



## Reviewers selection

- Committee appoints a reporter for each project
- Reporter suggests the external reviewers
- Committee approves the external reviewers
- The CSF office sends requests for reviews – electronically in PDF form

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### Difficulties

- Limited size of the scientific community in any given field.
- 24% of Czech and 43% of foreign reviewers refuse to write a review

Czech reviewers		Foreign reviewers	
sent	not reviewed	sent	not reviewed
3585	24 %	3673	43 %





## Reasons ?

- .... I am sorry ....
  - ..... lack of time
  - ..... I do not feel competent
  - .... quality of the project is too bad
  - .... it is not paid ... and ....



## **Solution: payment of review ?** **Why ? How Much?**

- **Financial balance :**  
total budget for projects : 43 mil. €  
administration : 0,9 mil € i.e. 2%
- Number of review : 4000 Czech + 4000 abroad  
„award“ for a review : 50 €- in CZ – OK.  
abroad ??
- Total :  $8000 * 50 = 400\ 000$  €, i.e., 1% of budget for projects,  
50% increase of administration budget
- **YES or NO ?**



- **Interim Review and Controlling in Austrian Special Research Programs (SFB) and *Kplus* Competence Centers**

**R.Novak**

**novak@fwf.ac.at**

## **Special Research Programs (SFB) and National Research Networks (NFN)**

### **common goals:**

- **formation of Centers of Excellence with high international visibility**
- **mid- to longterm timeframes, complex topics**
- **generation of added value through combination into a network**

### **National Research Networks:**

- **Austrian wide- network, lesser requirement for coherence,**
- **6 years funding (0,7 mEUR p.a.)**

### **Special Research Programs:**

- **building up local centers, impact on the „scientific profile“ of a university (or a group of universities at one location)**
- **10 years funding (1 mEUR p.a.)**

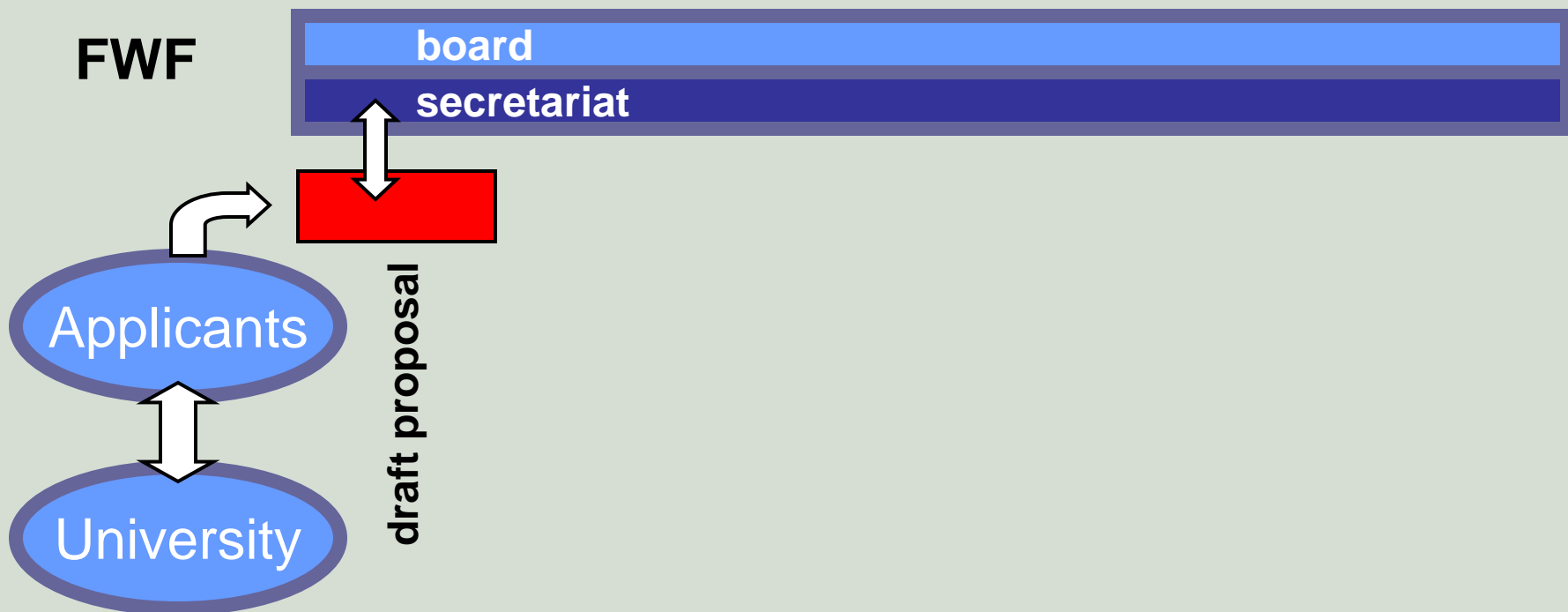
- *Kplus* promotes co-operation between science and industry within the framework of joint research centres
- *Kplus* supports pre-competitive research on an international level
- *Kplus* was set up in 1998; three selection rounds so far led to the establishment of 18 Centres in various fields
- *Kplus* are open for international collaborations (scientific and company partners)
- *Kplus* supports „Real“ centres with a strong core; established by a number of scientific and industrial partners

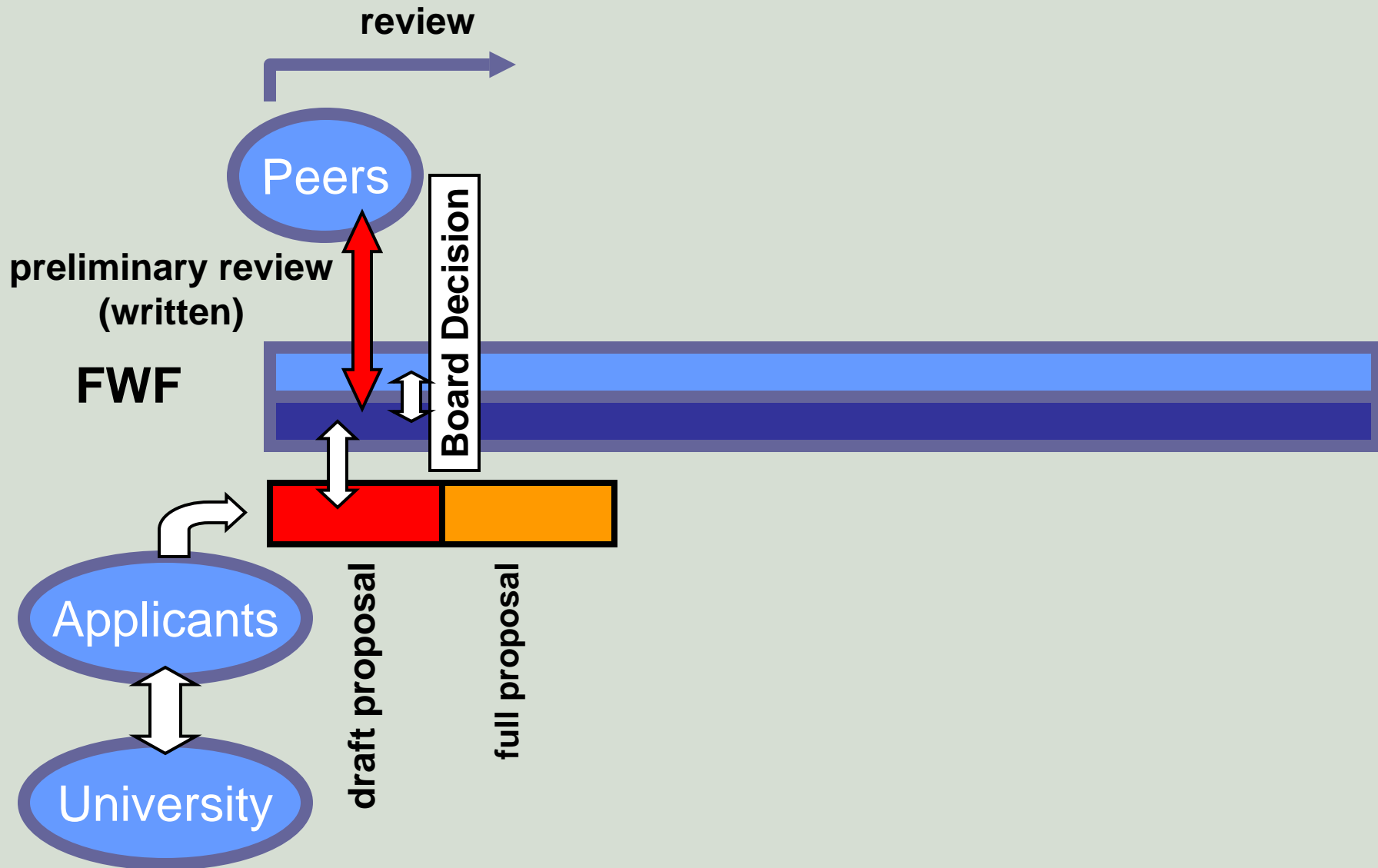
- **18 Centres in operation**
- **Annual budget 2,5 to 5 Mio. EURO per centre, 20 - 60 staff, on average 15 partner companies (25% SMEs)**
- **About 800 researchers and support staff**
- **Total research volume for 7 years: 400 Mio. Euro**
- **Public funding 240 Mio Euro (140 Mio Euro from FFG)**
- **About 300 participating companies**
- **150 research partners**
- **Currently 800 scientific publications, 30 patents**
- **11 Centres have undergone their mid-term evaluation**

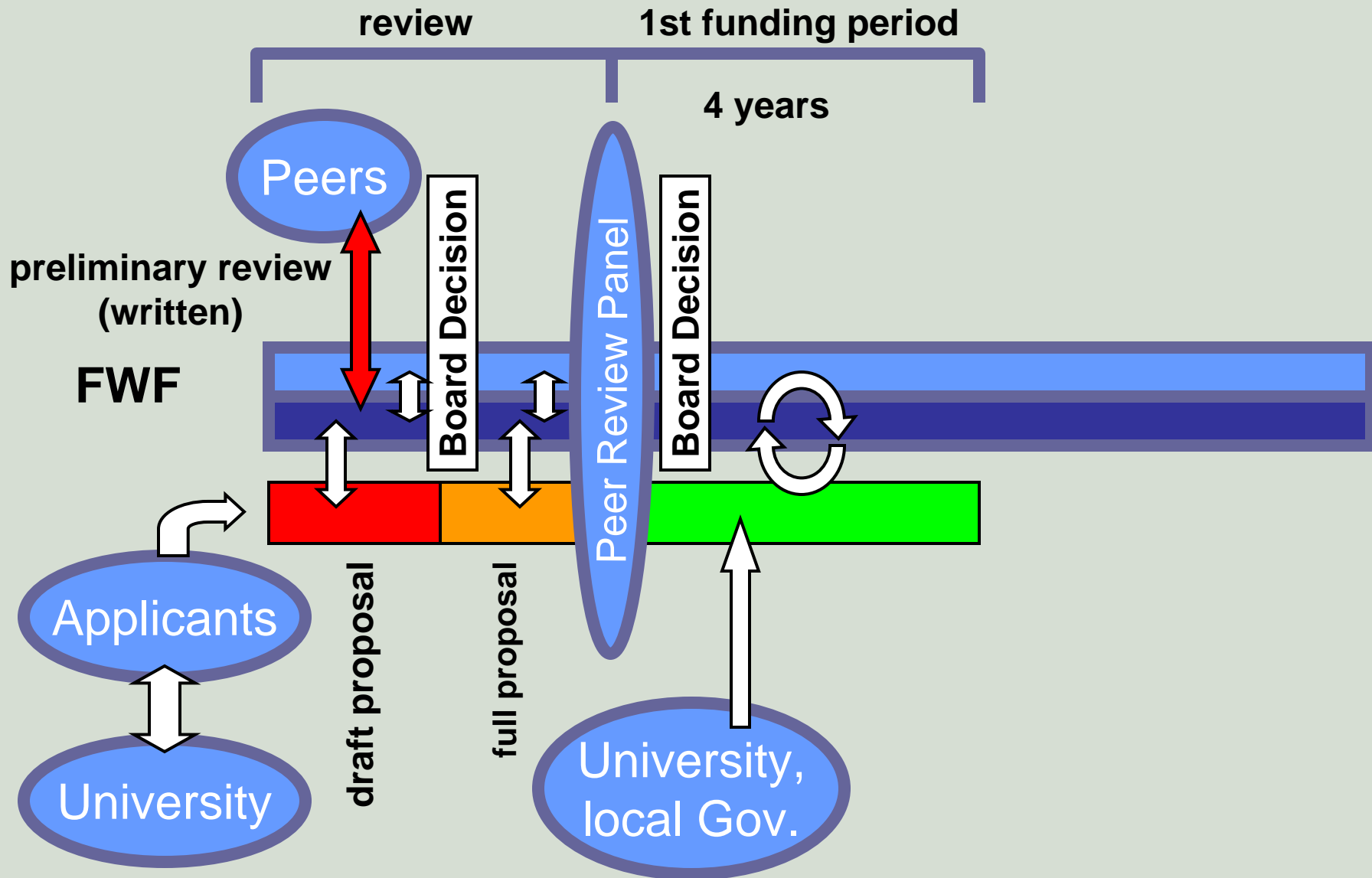
**SFB**  
**Monitoring and Evaluation**

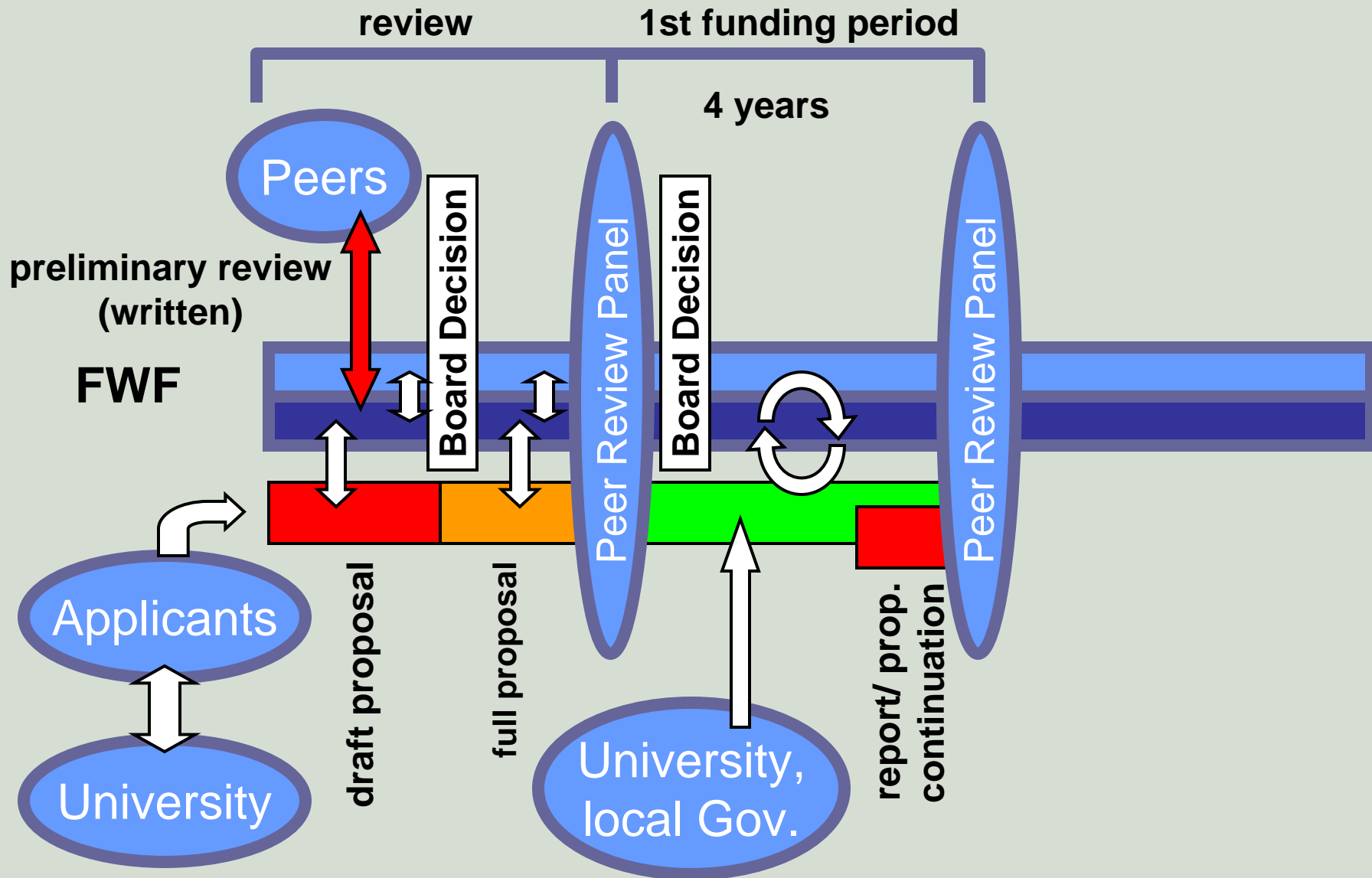
- **ex ante Evaluation**
  - international peer review (exclusively non-Austrian peers!) in an elaborate, two-stage process:
    - 1) written review of draft proposal
    - 2) on-site visit and panel review of full proposal
- **Two Year Audit**
  - For some SFBs at mid-term of a funding period (Monitoring)
- **Interim Evaluation**
  - Extensive scientific evaluation after 4 (3) years, crucial for continuation of funding
- **ex post Evaluation**
  - of SFB after ten years
- **Financial reporting** (annual accounting only)
- **Internal mechanisms**
  - Assembly of members, executive board; scientific advisory board, scientific meetings

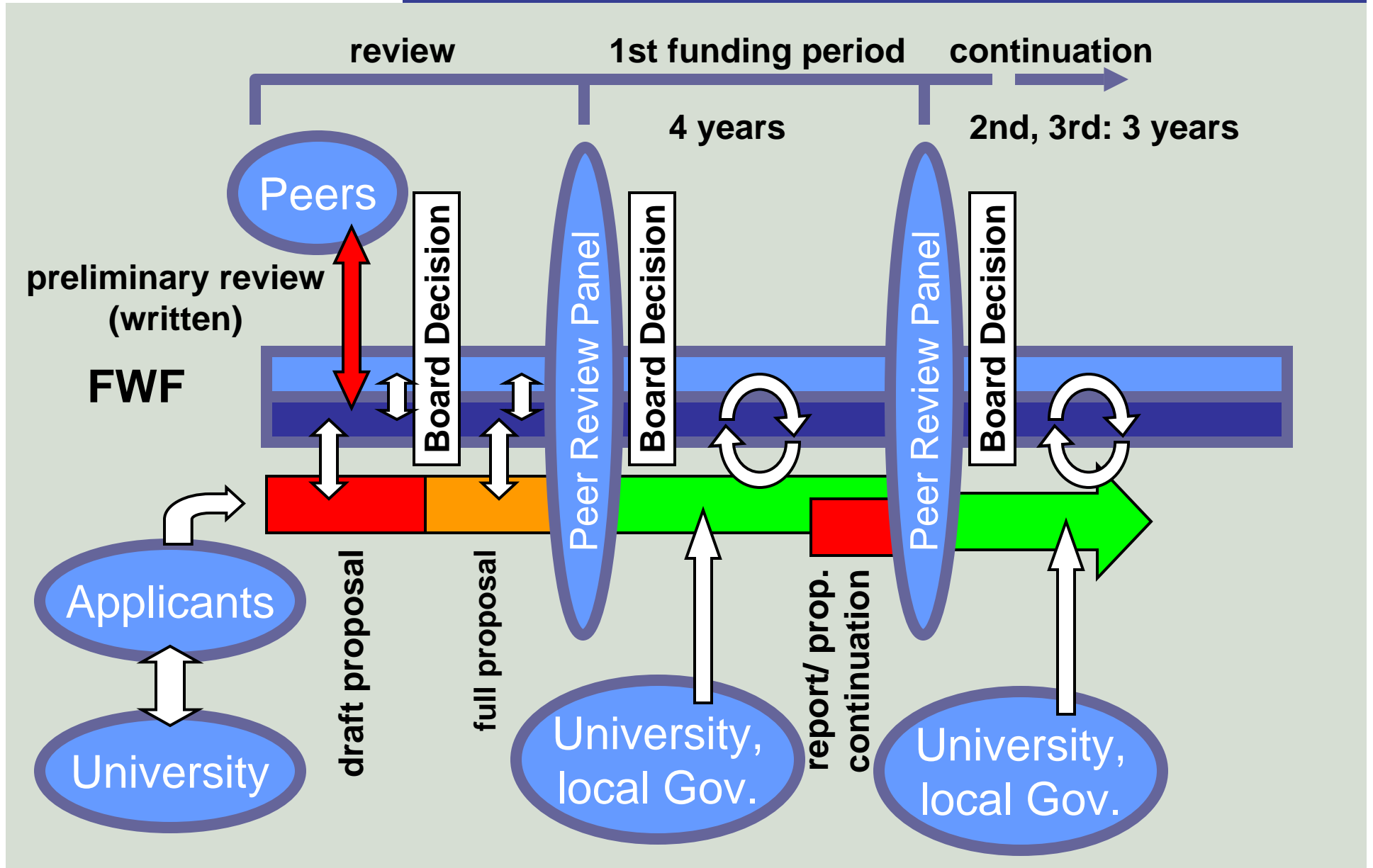


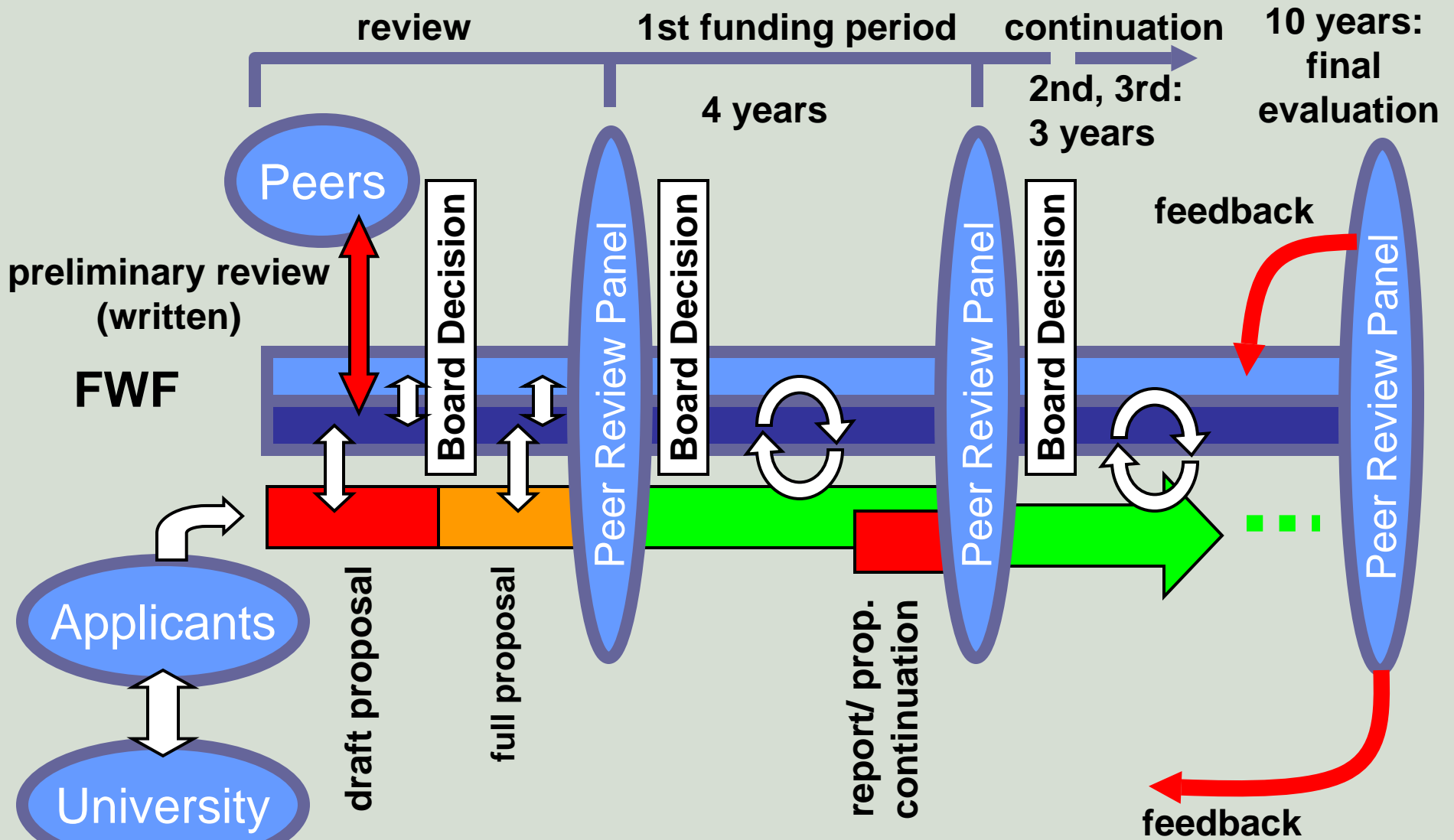












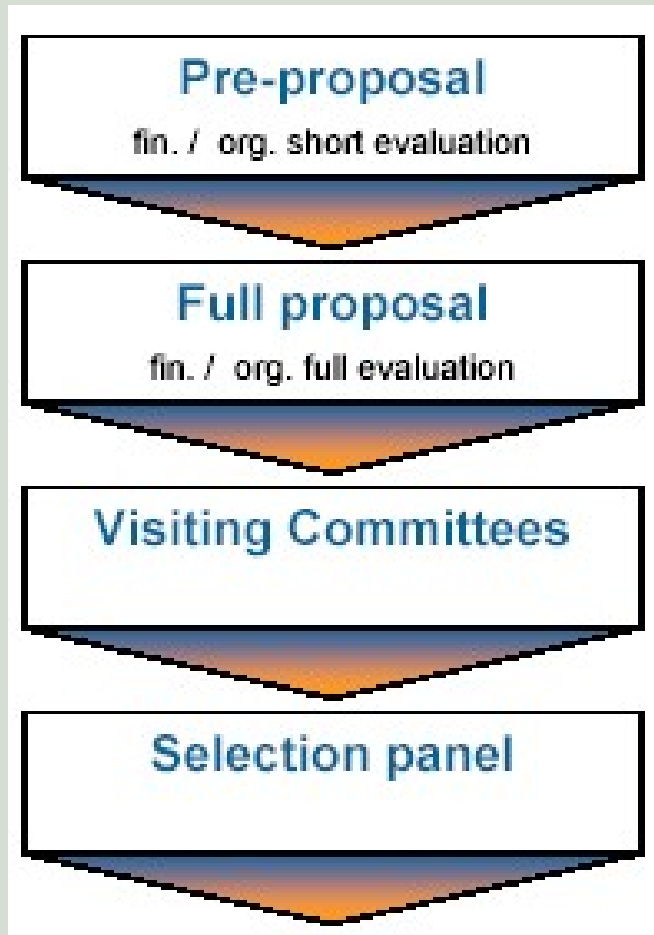
- **Philosophy**
  - Maximum autonomy for the SFB in conducting research and using funds between interim evaluations
- **SFB internal regulations**
  - SFB internal statutes regulate rights and duties of members
  - Regular scientific and organizational meetings
- **SFB internal bodies**
  - Speaker
  - Assembly of SFB Members
  - Optional: Executive Committee (Speaker and Deputy Speakers)
  - Optional: Scientific Advisory Board

# **Kplus**

## **Monitoring and Evaluation**



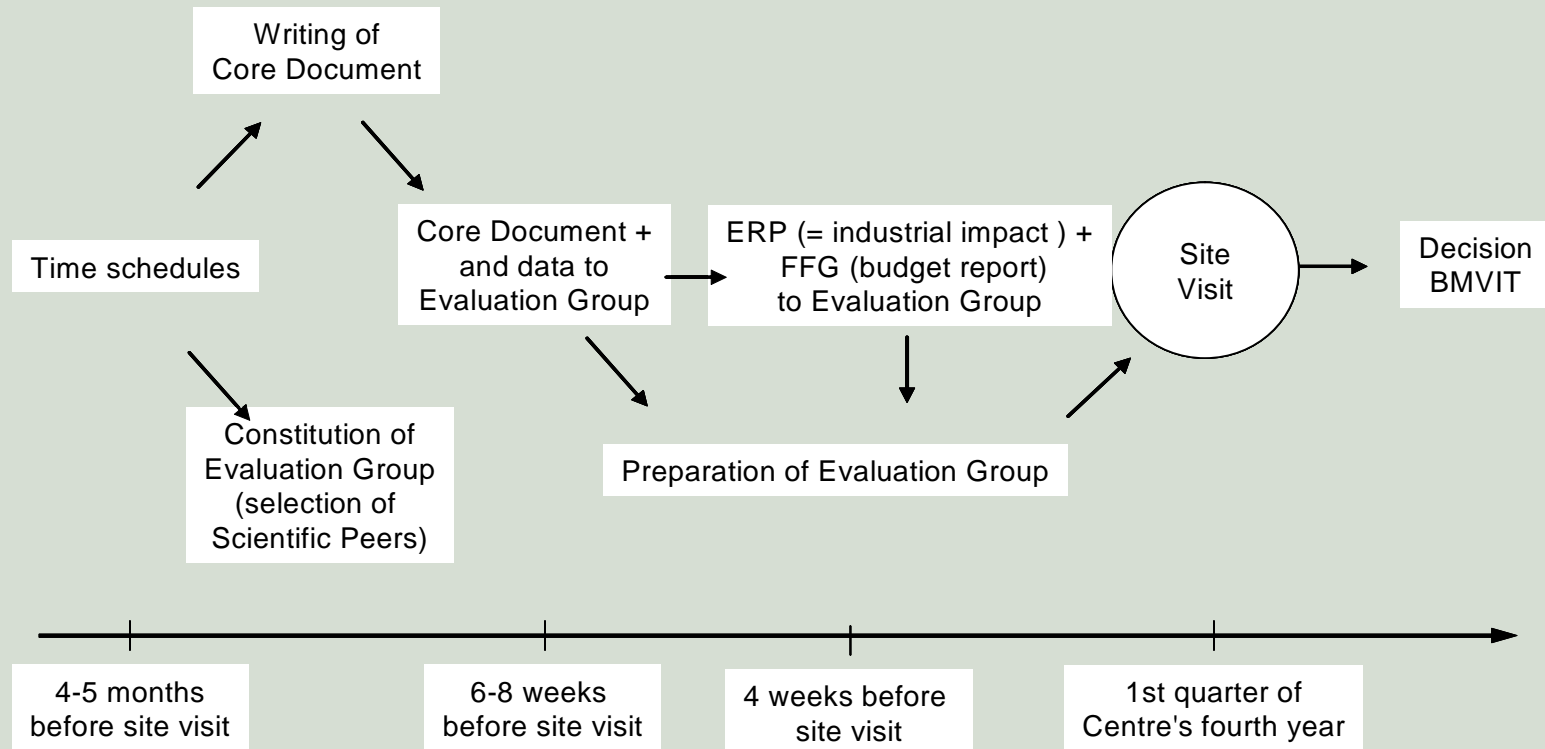
- **Ex ante center Evaluations**
  - six foreign peers each and economic evaluators in an elaborate, two-stage process
- **Two Year Review**
  - in selected centers after two years (Monitoring)
- **Four Year Evaluation**
  - Extensive evaluation, crucial for granting of second funding period
- **Ex post Evaluation**
  - of centers after seven years
- **Financial reporting** (Monitoring)
- **Internal mechanisms**
  - Boards, expert groups, dialogue with funding authorities (Monitoring)



- **FWF** organises Evaluation with international Experts
- **ERP-Fund** tests financial and organisational quality
- Visiting Committees discuss critical points and clarify open questions
- Statement of the Visiting Committees (Recommendations)
- Jury decides on Basis of the Recommendations

- **Takes place after two years in some centers (to „watch“ critical issues stated in the ex ante process)**
- **Review with small group**
  - **two scientists, industrial funding specialist, ...**
  - **document analysis and a one day visiting committee**
- **Set of questions on scientific-technological progress, results; organizational and human resource matters**
- **Learning experience - no immediate consequences but feedback**
- **Preparation and training ground for evaluation in the fourth year**

# Four Year Evaluation

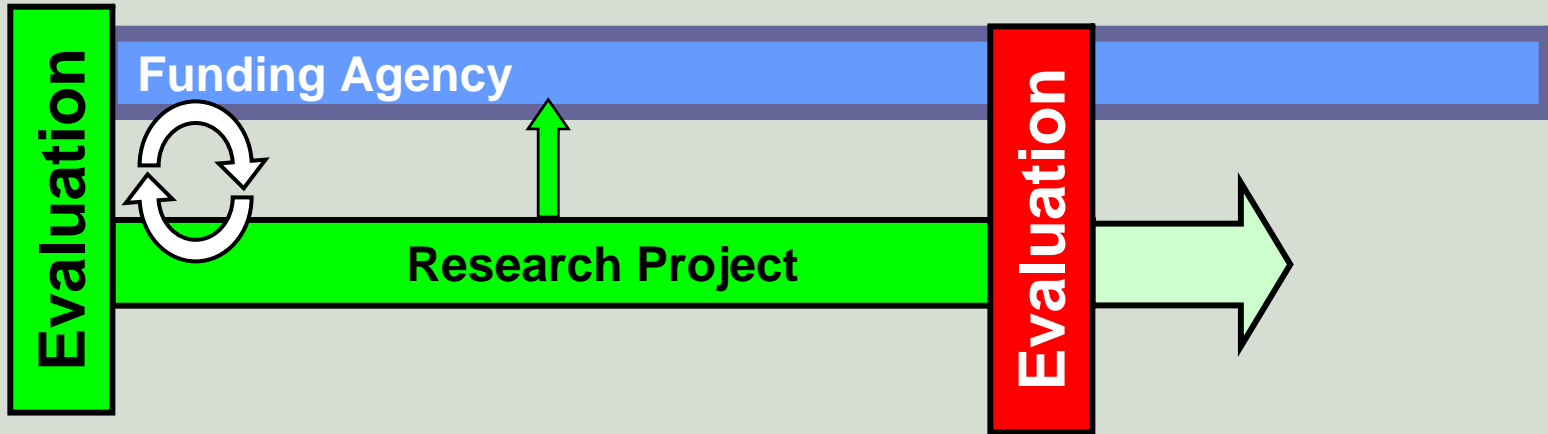


- **Takes place in the 1st Quarter of the 4th Year**
- **Decision over next funding period**
- **Looks at performance years 1-3 and plan for years 5-7**
- **Evaluated by:**
  - 3 non-Austrian scientific peers
  - Standing Committee (same for all centres)
- **Evaluation Basis**
  - Core Document
  - Site Visit

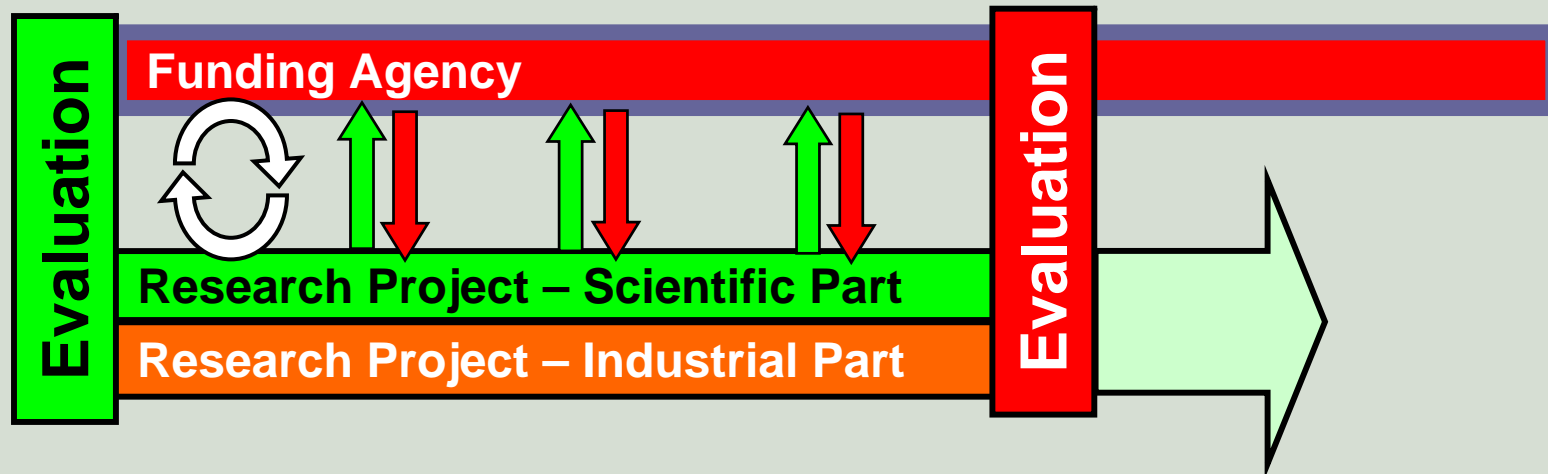
- **Quartely reports**
  - Public and private funding; use of funds; results
  - Human Resource Development
  - Comparison between planned activities and results
  - Strong feedback:  
Funding is linked to acceptance of report
- **Yearly Reports to the public**
- **Periodical audits by FFG center is visited by our financial officer**

- **Philosophy**
  - All that can be regulated by organized procedures within Centers shall be regulated on this level
- **Boards**
  - include all (all major) scientific and industrial partners, no matter whether they have shares or not
  - meet four times a year; most important steering and strategy body for Center
  - FFG and other funding institutions are board members without a vote
- **Other bodies**
  - Programme committees
  - Steering Committees
  - Executive Committees
  - Etc...

**SFB (Basic Science)**



**Kplus (Science – Industry)**







**Practical Experience in Management and  
Audit of EU Grants**

*by David Weber/Carmen Paolone*

**International Workshop on Accountability in Science Funding “Meeting the Challenge”,  
Bonn, Germany, 1-2 June 2005**

# Outline



## Presentation of ESF

## ESF – Recent developments with EC Contracts

## Initiation and Negotiation of project

Learnings – Organisation

Learnings – Budget

Learnings – CPF

## Management of the Contract

EC guidelines and related constraints

Experience and Learnings

## Audit

Learnings

# ESF – Presentation



## Mission

*ESF promotes the identification and advancement of cutting edge science in Europe, by bringing together leading scientists and scholars, research organisations and funding agencies to explore new directions in research and to plan and implement European level science-driven research collaboration in a global context*

⇒ **Networking, collaboration, coordination of research in all disciplines, at European level**

# ESF – Presentation



- ⇒ **Association of 77 Member Organisations (funding agencies) from 30 countries**
- ⇒ **Represents all scientific disciplines:**
  - **Physical and Engineering Sciences**
  - **Life and Environmental Sciences**
  - **Medical Sciences**
  - **Humanities**
  - **Social Sciences**

# ESF – Presentation



## Main Instruments and Activities:

- **EUROCORES**
- **Scientific Forward Looks**
- **Exploratory Workshops**
- **European Research Conferences**
- **A la carte Scientific Programmes and Expert Committees**
- **Science Policy Studies**
- **EURYI Awards**
- **COST Actions**

# ESF - Presentation



<b>Key Figures</b>	<b>2004</b>	<b>2005</b>
<b>Staff (FTE):</b>		
Strasbourg:	69	85
Brussels:	27	32

## **Budgets – income (2004 - in M€):**

<b>Consolidated</b>	<b>39,7</b>
General Budget	11,2
A la carte activities	5,9
ESF Research Conferences	1,4
EC Contracts	20,3
Other	0,9

# ESF - Recent development with EC Contracts



- **One special case: COST – administrative and scientific management of a complete networking scheme**
- **3 contracts as only coordinator in support of the coordination of ESF instruments**
- **9 contracts as participant, in force or still to be signed**
- **Important note: as ESF's core mission is the coordination of research at a European level, projects do not include direct research funding**

# Table of contracts



Contract Name	Type	N°	Role	Start date	End date	ESF Budget
COST	SSA	980008	Coordinator	01/07/2003	Until 31/12/06	51Mio€
EUROCORES	SSA	980409	Coordinator	01/10/2003	Until 30/09/06	10.2Mio€
EURYI	CA	510191	Coordinator	01/09/2003	Until 28/02/08	1.7Mio€
MarinERA	CA	515871	Participant	01/11/2004	Until 30/10/08	1 041K€
EUROPOLAR	CA	517842	Participant	01/03/2005	Until 28/02/09	692K€
HERA	CA	506065	Participant	01/03/2005	Until 28/02/09	443K€
EUFAR	I3	506514	Participant	01/01/2005	Until 31/12/2008	20K€
EURONS	CA	505065	Participant	01/04/2005	Until 31/03/2009	60K€
AmpERA	CA	016165	Participant	To be signed		43K€
EuroBiodivERsA	CA	517836	Participant	To be signed		60K€
SerERA	CA		Participant	Negociation		
NOAH	CA	010305	Participant	Negociation		69K€
EUROBIOFUND	SSA		Coordinator	Submitted Nov. 2004	outcome April 2005	1.4Mio€



# Initiation & Negotiation of project



- ⇒ **COST: development through political initiative**
- ⇒ **ERA Nets: initiative in science teams involved in the different domains**
- ⇒ **Support of ESF Core instruments: EC collaboration**

# Initiation & Negotiation of project Learnings - organisation



- **Retro plan according to deadline for proposal deposit**
- **Include Administration and Finance (A&F) team as soon as possible in the process**
- **There must be time for internal negotiation after A&F has produced the figures**
- **Insist on necessity to build a coherent budget:**
  - ⇒ As every deviation will have to be justified and explained
  - ⇒ As it reinforces the negotiation position (since project is fully costed)
  - ⇒ As it provides the means to deliver

# Initiation & Negotiation of project Learnings – organisation



## EUROCORES

<b>WP1</b>
Direct Employment costs
<i>of which subcontracting</i>
Direct Travel costs
Equipment
Scheme review meetings
Dissemination
Audit Costs
<i>of which subcontracting</i>
<b>Direct Costs - Management</b>
<i>of which subcontracting</i>
<b>20% flat rate covering indirect costs</b>
<b>TOTAL Management Costs - WP1</b>
<b>WP2</b>
Direct Employment costs
<i>of which subcontracting</i>
Direct Travel costs
Equipment
Networking
Management Committee meetings
Review Panel
Dissemination
Preparatory Meetings
<b>Direct Costs - Science</b>
<i>of which subcontracting</i>
<b>20% flat rate covering indirect costs</b>
<b>TOTAL Science Costs - WP2</b>

# Initiation & Negotiation of project Learnings – organisation



## EURYI

Dissemination / Scheme publicity
Coordination Meetings
<i>Selection Panels</i>
Honoraria Panel members
T&S per panel member
Candidates T&S for interviews
<a href="#">EURYI Awardees Club</a>
<a href="#">Evaluation costs</a>
<i>Meeting costs</i>
Attendance of Panel Chairs at Ranking meeting
Meeting accommodation - Programme Committee
<i>ESF Operational costs: Employment costs</i>
Scientific secretary
Administrative assistant
Staff travel costs
Setting up costs
<b>Direct Science Costs</b>
<i>Of which subcontracting</i>
<i>ESF Operational costs: Employment costs</i>
Accountant
Audit certificates
<b>Direct Management costs:</b>
<i>of which subcontracting</i>



# Initiation & Negotiation of project Learnings – organisation



## COST

### Direct Science employment costs

- Staff travel
- Office rental and charges
- Equipment & Maintenance Work
- Depreciation
- Other running expenses

### Direct Science running expenses

- TC support
- Strategic priorities, incl. strat.TC & synergy
- COST Actions support
- STSMs
- Domain reviews
- Dissemination
- Possible decommissioning costs*

### Direct Science Activities

---

### TOTAL Direct Science costs

*\* of which sub-contracting*

---

### Direct Management employment costs

- Staff travel
- Office rental and charges
- Equipment & Maintenance Work
- Depreciation
- Other running expenses
- External services
- Bank Guarantee
- Possible decommissioning costs*

### Direct Management running expenses

# Initiation & Negotiation of project Learnings – organisation



**Types of participation (coordinator, participant, etc...) influence the time required to prepare the budget, determine the resources needed to follow the activity and manage the project**

# Initiation & Negotiation of project Learnings – budget



- **Create templates/standards that users can fill in terms of needs.**
- **Templates can be completed by A&F in terms of figures:**
  - ⇒ **Define standards for employment costs**
  - ⇒ **Define standards for science activities (meeting costs, dissemination, etc...)**
  - ⇒ **Develop model for direct running expenses**

# Initiation & Negotiation of project Learnings – budget



- **Audit costs** (and other possible external services) are important: direct cost but subcontracting – they must be costed in a realistic way
- There should be a disclaimer in the contract stating that figures can evolve in amounts and between budget lines to allow for appropriate management of the project



# Initiation & Negotiation of project Learnings – CPFs



- **Contract Preparation Forms (CPF)** are an administrative yet important part of the negotiation
- Always have usual details on hand and a list of possible signatories (CEO, COO, CFO...)
- Be as precise as possible and always fill in all boxes

# Management of the Contract

## EC Guidelines and related constraints



EUROPEAN SCIENCE FOUNDATION

Reference documents are available on  
the CORDIS web site

<http://www.cordis.lu/coordination/home.html>

# Management of the Contract

## EC Guidelines and related constraints



### Guidelines - Justification of expenditure

#### Costs must be:

- Actual
- Economic
- Necessary
- Recorded in the organisation's accounts
- Follow the principle of non-profit

# Management of the Contract

## EC Guidelines and related constraints



### Constraints

- **Accounting:**

- ◇ eligible/non eligible costs
- ◇ direct/indirect costs (flat rate overhead)
- ◇ Science/management costs (7% limit)
- ◇ 5 % penalty if expenditure < 100% for SSA
- ◇ Use of Usual Accounting Rules

- **Subcontracting**

- **Reporting and contract amendments**

- **Bank guarantee**

- **Cash Flows**

# Management of the Contract Experience & Learnings



- **Control on justification of expenditure** -> Set up light administrative procedures  
**Illustration: nb of hotel nights reimbursed according to duration of the meeting**
- **Accounting: set up chart of accounts respecting the local regulations and the contract needs**  
**Necessity to combine two accounting approaches: cash basis and accruals**
- **Set up analytical accounts that will facilitate the reporting:**
  - ⇒ **By type of costs (eligible / non eligible / direct / indirect)**
  - ⇒ **By domain (science/management)**
  - ⇒ **By Budget Line**

# Management of the Contract Experience & Learnings



- **Set up time keeping instrument to support the allocation of direct employment costs and other indirect costs**


# ESF Time keeping tool



Timesheet - Data entry - Microsoft Internet Explorer provided by ESF

File Edit View Favorites Tools Help

Address <http://172.16.1.110/timesheet/saisie.aspx?ddate=19/05/2005>



## Time sheet

Home Data entry Time off Procedure Faq Stats perso Contact Exit

**mai 2005**

l	m	m	j	v	s	d
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

10/05/2005 \* DAF

ESF Support Services \*

Office  Ext. Mission  Home

Time : 1 hour

ID	date	activity	Sub-activity	Unit	hours		Edit
13500	10/05/2005	ESF Statutory Bodies		DAF	4	EXT.	
13504	10/05/2005	ESF Support Services		DAF	3		

Local intranet

# Management of the Contract Experience & Learnings



## Indirect costs

- ESF uses the FCF model (Full Cost Flat rate – 20%)
- Flat rate of 20% covers all indirect costs carried by ESF and not directly charged to the contracts – as well as possible contingencies linked to these contracts (decommissioning costs, etc..)
- Use of flat rate does not need to be justified to the EC, but should be followed internally



# Management of the Contract Experience & Learnings



## Indirect costs

- Indirect costs should be defined in the Usual Accounting Rules
- Residual funds would be invested back into science networking

*Reference to a letter of 13 July 2004 to EC*

# Management of the Contract Experience & Learnings



## Usual Accounting Rules

- **Used as a basis for:**
  - ⇒ **Financial management of the contract**
  - ⇒ **Reporting**
  - ⇒ **Audit**
- **A transcription of applicable rules at the organisation's level (private or public accounting, statutory requirements...)**
- **Need to be available in writing**
- **Is an evolving document**



# ESF Usual Accounting Rules – General Principles –



I.	Legal frame .....	2
II.	Accounting .....	2
	<i>Direct and Indirect costs</i>	
III.	Map of accounts .....	2
IV.	Fixed Assets .....	3
V.	Value Added Tax.....	3
VI.	Delegated Authority .....	4
VII.	Reimbursement rules for participants .....	4
VIII.	Staff reimbursement rules.....	4
IX.	General principles included in the COST reports.....	4
X.	Time Keeping .....	5

# Management of the Contract Experience & Learnings



## Subcontracting

- Agree with the EC on the content of subcontracted tasks (if possible within the contract)
- General interpretation: external services
- Direct cost
- Attracts no overhead

# Management of the Contract Experience & Learnings



- Must be submitted to a call for tender (3 min.)
- Formalize specific file justifying commitments and expenditure of that nature

**Illustration: at ESF, this mainly concerns: legal and tax advice, human resources consulting, web site development, staff training, COST Day event preparation, ...**

# Management of the Contract Experience & Learnings



## Reporting

- **Different reporting deadlines:**
  - Quarterly for COST
  - Yearly for EUROCORES
  - 18 months for EURYI and other contracts
- **Need to propose amendments for contracts and budgets when appropriate:**
  - Budget revisions
  - Work plan adaptations
  - New prefinancing for big contracts, like COST

# Management of the Contract Experience & Learnings



## Reporting

- Under FP6 rules, reporting is done on a cash basis

Only the costs incurred (= cashed out) can be reported. The EC reimburses these costs through their financial contribution

- Additional receipts must be reported as well. They are deducted from EC contributions

# Management of the Contract Experience & Learnings



## Reporting

- **Calculation of 7% management cost limit must:**
  - **Be followed on a periodical basis (by reporting period)**
  - **Stay within the limit in each contractual frame although it will be measured at the very end of the contract**
- **Adjustments of direct costs are possible to achieve the 7% target**



# Management of the Contract Experience & Learnings



## Reporting

- **Set up a retro planning according to the deadline: usually 45 days (can be 30)**
- **Need for a close interaction between science and management teams in the drafting of reports**
- **Include:**
  - ⇒ **Preparation time (reports)/reconciliation time (accounts)**
  - ⇒ **Audit Time / preparation of management report**
  - ⇒ **Formatting time / checking time**
- **Deadlines are strict: always ask for agreement and confirm if delays in submission are to be expected on your side**

# Management of the Contract Experience & Learnings



## Reporting

- EC has 45+45 (or 30+30) days to reply -> be aware of possible cash flow problems
- When questions arise, the 45 days delay is stopped: it is in the interest of the participants to reply ASAP and secure further funding

# Management of the Contract Experience & Learnings



## Reporting

- All figures must tie exactly – roundings must be avoided
- All parts must be coherent and cannot contradict each other -> define one final contact point who will double check everything
- Management report includes analysis and justification of deviations of expenditure vs budget

# Management of the Contract Experience & Learnings



## Reporting

- Issue clear « reporting guidelines » to the non-finance audience. This can help the accounting by providing the right information from the start (WP #, Task #, activity type, meeting...)
- Make the non-financial audience aware of cost rules: reasonable and justified

# Management of the Contract Experience & Learnings



## Bank Guarantee

- Applicable to the main contract of ESF with the EC: COST
- Value of 17.6Mio €
- Related management costs directly charged to the contract but penalizing the science activities and the 7% management limit
- Extremely difficult negotiation

# Management of the Contract Experience & Learnings



## Cash Flows

- **Specific experience with the COST contract**
- **Significant cash flow problems between quarterly periods and contract extensions were resolved through a very close collaboration with the EC Services**
- **Remaining problem is a delay in delivery of funds, even if agreement is in principle obtained**

# Management of the Contract Experience & Learnings



## Budget Control

### Need to organise:

- ⇒ An appropriate budget control process, especially in the case of COST ( size of the contract and remote location of operations)
- ⇒ An expenditure commitment and control system within the frame of a clear delegated authority

# Audit



- **3 types of audit can be expected**
  - ⇒ **EC Services**
  - ⇒ **European Court of Auditors**
  - ⇒ **Office de Lutte Anti-Fraude (OLAF)**
- **Focus is different according to the auditing body**



# **Audit**

## **Learnings**



**Preparation is paramount to facilitate the auditors' intervention:**

- ◇ **Procedures/internal control**
- ◇ **Usual Accounting Rules**
- ◇ **Detailed book keeping fully reconciled with reports**
- ◇ **Clear filing of justification documents (bank statements, invoices, etc...)**
- ◇ **Clear and well documented sub contracting file**
- ◇ **Justification of personnel costs (contracts and time keeping proofs)**
- ◇ **Availability of staff**

# Audit Learnings



## Required supporting documents during the audit

<u>Personnel costs</u>	<ul style="list-style-type: none"><li>- Employment contracts,</li><li>- Ledgers / accounts, payroll records,</li><li>- Time sheets.</li></ul>
<u>Overheads costs</u>	Full documentation concerning the calculation of the overhead costs and the back-up documentation hereto.
<u>Equipment / Consumables</u>	<ul style="list-style-type: none"><li>- Invoices,</li><li>- Proof of payment,</li><li>- In case of <u>rented</u> equipment: Rental contract, inventory list of the rented equipment; proof of the investment values of the rented equipment.</li><li>- Records concerning computer usage, if applicable.</li></ul>
<u>Third Party Assistance</u>	<ul style="list-style-type: none"><li>- Sub-contracts,</li><li>- Invoices,</li><li>- Proof of payment,</li><li>- Original deliverables from the sub-contractors.</li></ul>
<u>Travel expenses</u>	<ul style="list-style-type: none"><li>- Invoices,</li><li>- Mission approval forms,</li><li>- A report, records, minutes etc. indicating purpose and participants of the meetings / events.</li></ul>
<u>Bank Statements</u>	In case you are co-ordinator of the contract(s), bank statements relating to the payments of EC contribution, and the distribution to the contract partners.

# Audit Learnings



## REPORT

EUROPEAN SCIENCE FOUNDATION

*Reference to Report on COST Audit*

## ESF Website



EUROPEAN SCIENCE FOUNDATION

**More information is available at**

**<http://www.esf.org>**

***Thank you for your attention***



Deutsche  
Forschungsgemeinschaft

## **Overhead à l'Allemande**

Legal and practical conundrums in German universities

**Dr. Christoph Schneider**  
**DFG, 1 June 2005**

## Overview

- The division of labour and of responsibilities
- Ground rules for the DFG
- The art of interpretation
- Performance oriented funding
- Joseph and his brothers
- Futures

## Federalism

Germany is divided into 16 states (Länder)

They differ from each other, e.g. in

- size
- population
- social structure
- proportion of tax revenue
- political orientation

The constitution assigns responsibilities to the Länder and the Federal government

The Federal government and the Länder compete for tax income

## Penniless Humboldt

Education, including higher education, is a core responsibility of the Länder

The Länder and the Federal government share responsibility for research

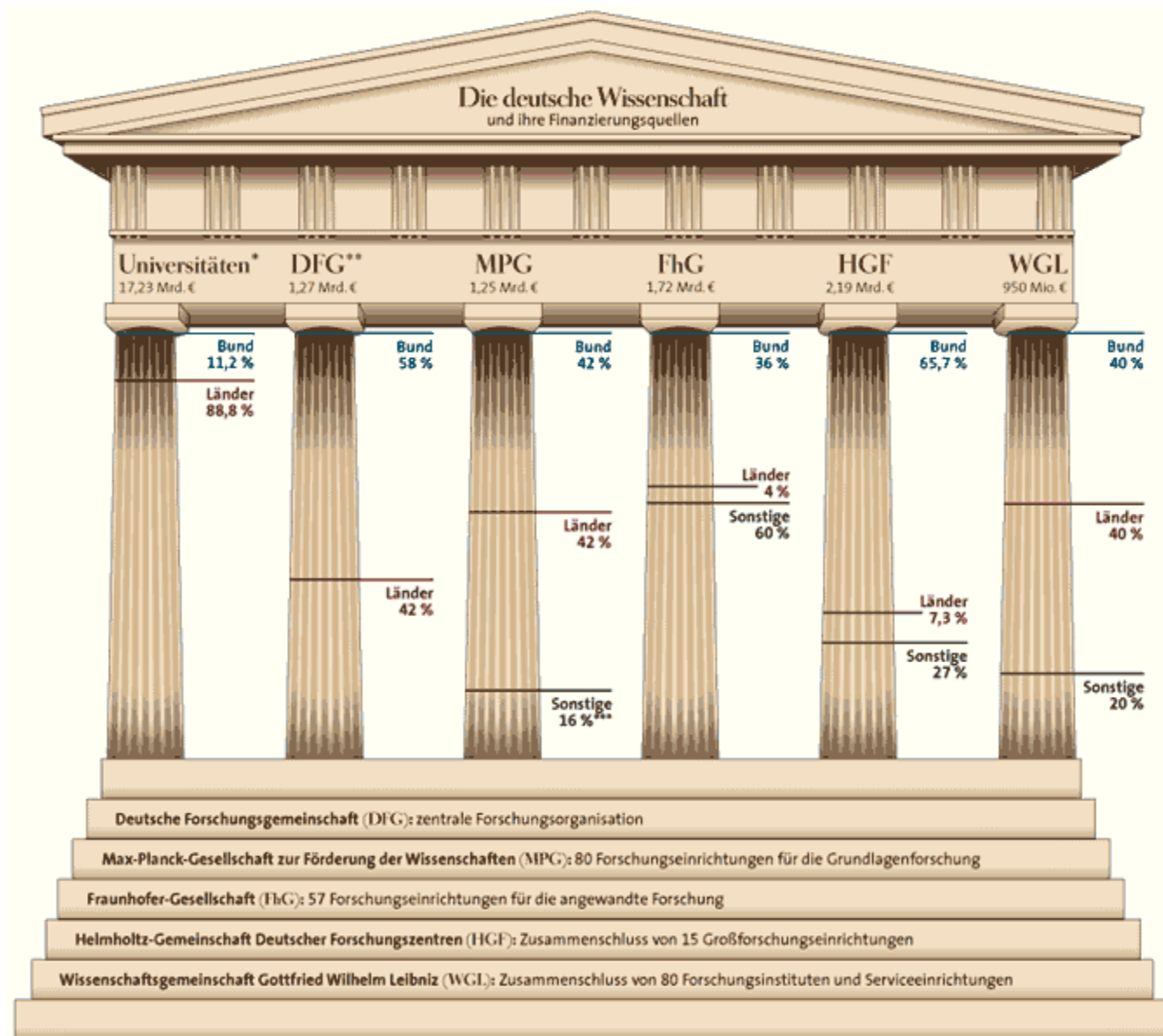
Universities in Germany perform teaching and research functions and regard them as inseparable

The Federal government, all the Länder, and the universities are all squeezed for funds



## Overview

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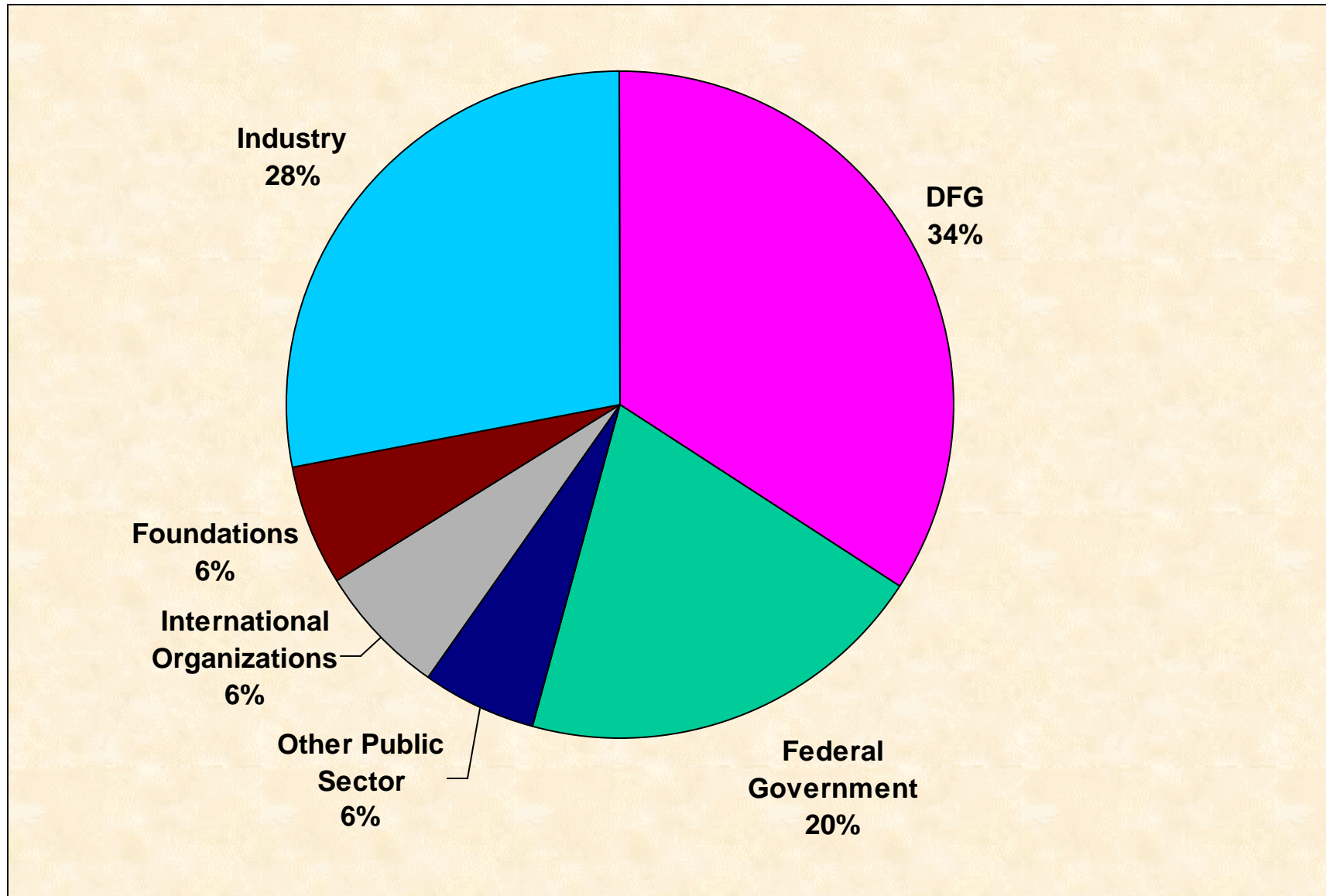
\*Angaben für das Jahr 2000, ohne Berücksichtigung von Drittmitteln; Fördermittel des Bundes sind an Bauvorhaben gebunden

\*\*Alle übrigen Euro-Beträge beziehen sich auf das jeweilige Gesamtbudget 2002

\*\*\*„Sonstige“ umfasst z. B. Wirtschaftserträge, EU-Mittel, Mitgliedschaftsbeiträge, Projektförderung, Spenden etc.

ZEIT-Grafik: Kirsten Dieckerhoff/  
Quelle: BMBF, Angaben der Forschungseinrichtungen

## Third Party Income of Universities 1999 and 2000 by Source



Source: DFG Funding Ranking 2003, p. 34



Universities live on

- core funding
- research income

(University hospitals also have an income from patient care; often this does not cover their costs.)

DFG provides approx. 35-40 % of universities' research income

DFG is funded by the Federal government (58 %) and the 16 Länder (42 %)

These funds must not be used to pay for „basic equipment“

## Overview


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## § 3 Nr. 1 Ausführungsvereinbarung DFG/SFB zur Rahmenvereinbarung Forschungsförderung

[Agreement between Federal & Länder governments = „the parties“]

Financial support is provided [to the DFG] by the parties to cover the expenses eligible for funding. As a matter of principle, expenses eligible for funding especially does not include expenses disbursed by the DFG to its beneficiaries to cover the basic equipment [Grundausstattung] for research. The basic equipment comprises

1. the necessary buildings
2. the initial equipment of the buildings as well as their equipment with personnel and materials inasmuch as they usually belong to the individual research institution in the discipline in question



Within the dual funding system, DFG is committed to providing direct costs only.

But what are direct costs?

DFG appropriations 2004:

- personnel 78.6 %
- consumables 18.3 %
- investment 3.1 %

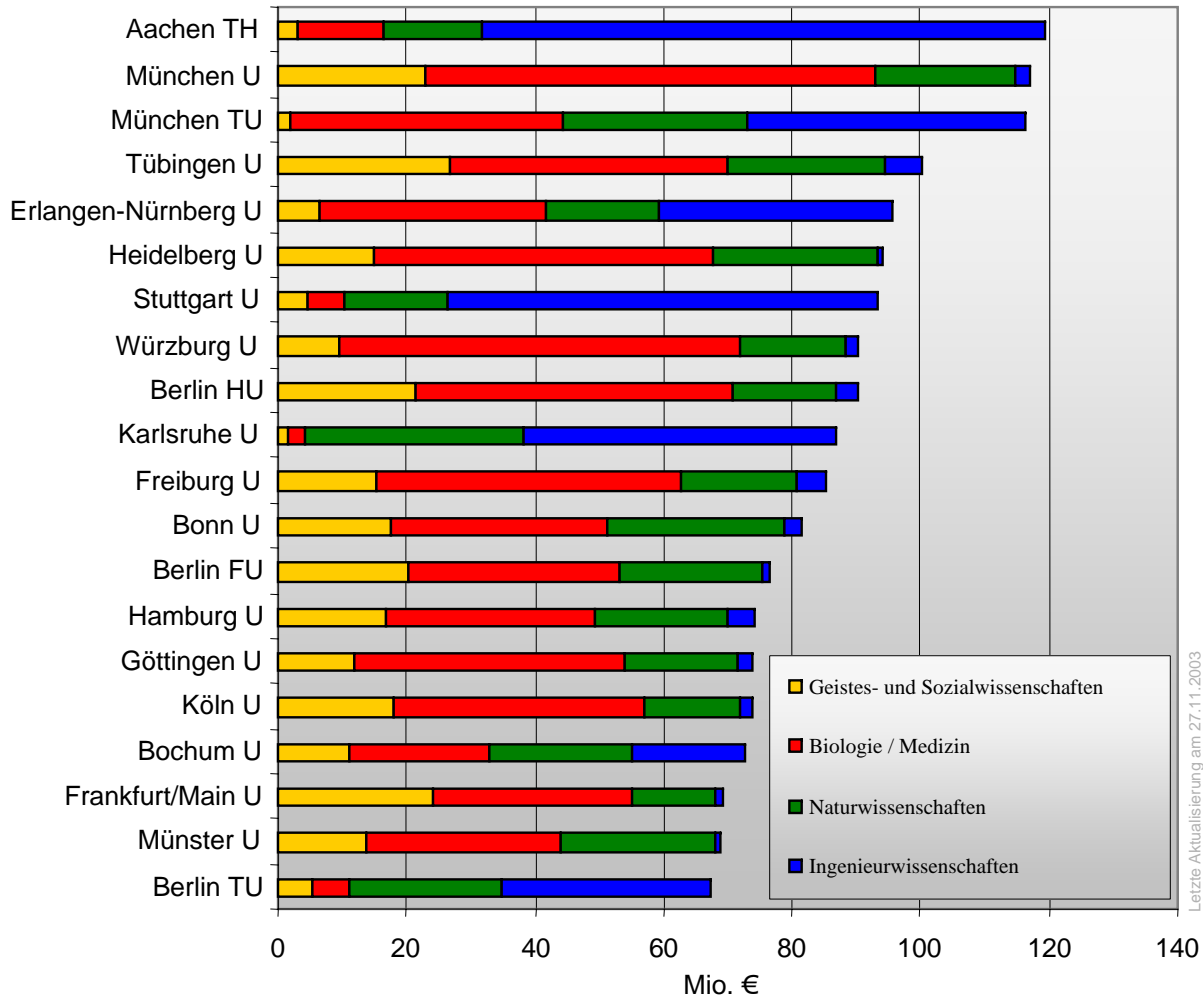
Investment is the most densely regulated area of support. DFG often induces universities and research institutes to invest in favour of groups supported by grants.

## Overview


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# DFG-Appropriations 1999-2001 by universities and areas of science (in Mio. Euro) – the top 20 with > 67 Million € DFG money over the period



Letzte Aktualisierung am 27.11.2003



More and more universities allocate part of their core funding using performance criteria

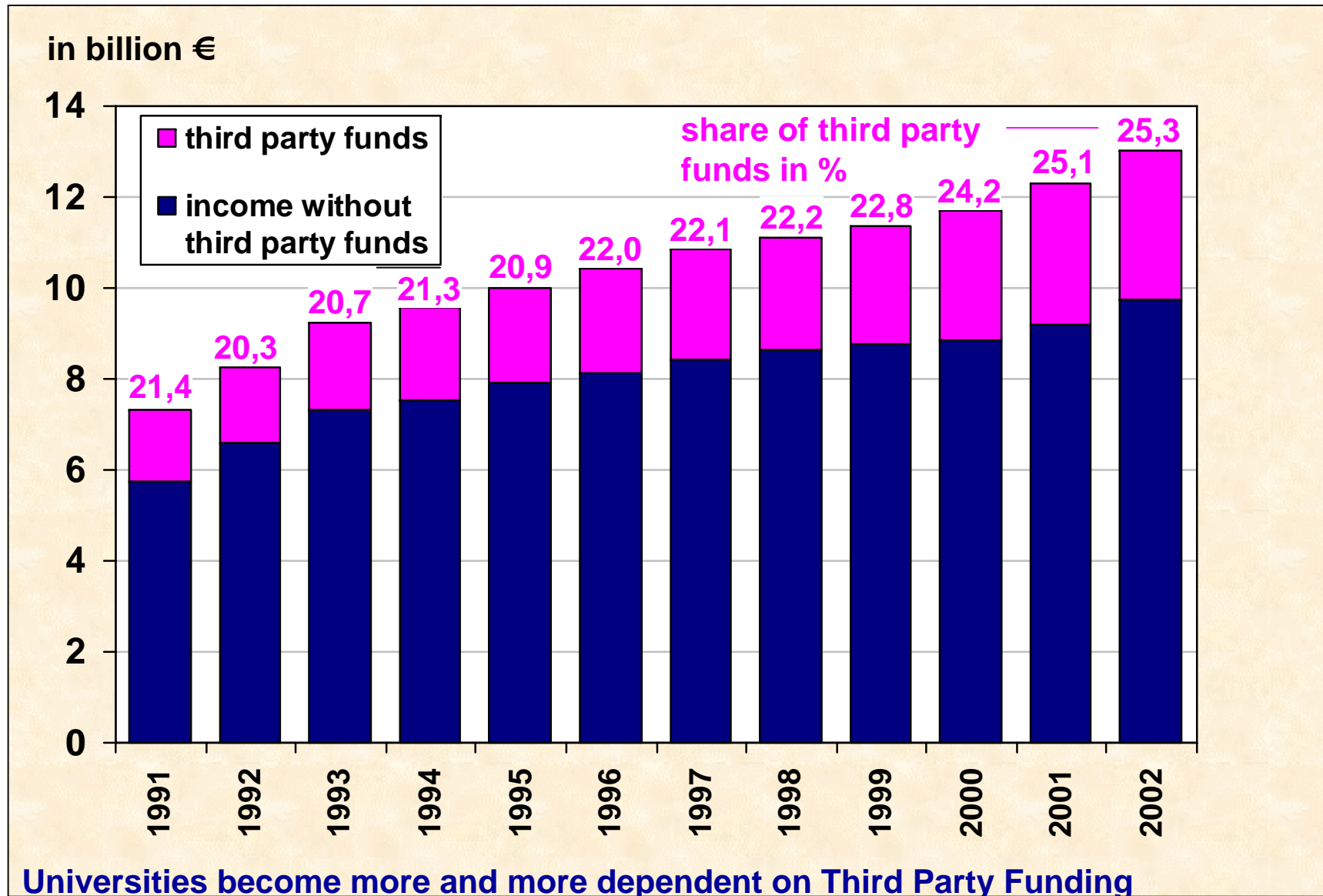
Typical performance criteria in research

- grant income
- publications

However, the squeeze on university core funding has been aggravated in recent years.

The dual funding system becomes more and more asymmetrical.

# University Income and Third Party Funds



Source: German Federal Statistical Office (Statistisches Bundesamt)

## Overview

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Successful researchers are in a socially ambivalent position:

They increase their reputation by their success

The increase in their institution's reputation is without consequences to their local peers because core funding for the institution as a whole is not explicitly performance based

Their success draws directly on their institution's resources  
(complementary funding for direct costs in their grants)

And their local peers lose part of their core funding to them through performance based internal funding mechanisms

Specific example for Medical Faculties

Clinical research units of DFG

Improving structural basis of patient oriented clinical research

Seed money for research oriented professorships

Good for the Medical School

**but**

requirement to guarantee long-term establishment of new professorship and  
requirement to provide matching funds for direct costs which are only  
provided up to 50 %

## Overview

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## External factors

- US example
- UK example
- EU/ERC funding rules?

## Internal factors

- Excellence factor in research policy
- International ranking exercises
- „Excellence initiative“ of the Federal government in the balance

Providing full economic cost of research as a policy goal in Germany?



Deutsche  
Forschungsgemeinschaft

**Thank you for your attention!**

Dr. Christoph Schneider  
[christoph.schneider@dfg.de](mailto:christoph.schneider@dfg.de)

▶ Infos unter [www.dfg.de](http://www.dfg.de)

**DFG**



Deutsche  
Forschungsgemeinschaft

**International Workshop on Accountability in Science  
Funding**  
“Meeting the Challenge”

**WELCOME**

**Dr. Christoph Schneider**  
1 June 2005

**DFG**



## Overview of Deutsche Forschungsgemeinschaft (German Research Foundation)

DFG ... „serves all branches of science and the humanities by funding research projects and facilitating cooperation among researchers. It [...] fosters relations ...between scientists and academics at home and abroad”.

(Article I, Statutes of the DFG)

# Overview of DFG Head Office





*Internalizing External  
Evaluations  
(A Case Study at CNRS)*

**International Workshop  
Accountability in Science Funding  
*"Meeting the Challenge"*  
Bonn, June 1-2, 2005**

- A. The CNRS, in short
- B. *Comité National*
- C. Evaluation of *CN*
- D. Main Results
- E. Lessons

# A. The CNRS, in short

A.1 Position

A.2 Organization

A.3 Personnel

[www.cnrs.fr](http://www.cnrs.fr)

# A.1 Position

- ◆ Focus on fundamental research
- ◆ Direct operator
- ◆ Mission Agency
- ◆ Funding Agency



## A.2 Organization

- ◆ 1,300 units (*laboratoires*)
  - 90% shared (*labos mixtes, associés*)
    - universities
    - private companies
    - other agencies
  - 10% fully owned (*labos propres*)

## A.3 Personnel

- ◆ A staff of 26,000 civil servants
  - 12,000 researchers
  - 14,000 engineers, technical and administrative staff
- ◆ 60,000 people working in CNRS units
  - 15,000 temporary status

## **B. *Comité National***

B.1 Basics

B.2 Other features

B.3 Operations

## B.1 Basics

- ◆ Peer Review
- ◆ Created together with the CNRS
- ◆ 40 sections of 21 members
- ◆ 2/3 elected, 1/3 nominated
- ◆ 4 years mandate

## B.2 Other features

- ◆ Scientific Council
- ◆ Eight Department Scientific Councils
- ◆ Six Interdisciplinary Commissions
- ◆ Conference of Presidents

## B.3 Operations

- ◆ Two sessions per year
  - promoting individual researchers
  - evaluating units
- ◆ Role in recruitments of researchers
  - annual nationwide contests
  - civil servants

# C. Evaluation of *CN*

C.1 Context

C.2 Problematic Approach

C.3 Terms of Reference

C.4 Preparation

C.5 Progress

C.6 Elements of Methodology

# C.1 Context

- ◆ Absolute Centre of CNRS's life
- ◆ Very sensitive
- ◆ Complex System
- ◆ Numerous Interfaces
- ◆ Many ambiguities



## C.2 Problematic Approach

- ◆ *Evaluation of Evaluators*
- ◆ Importance of the Methodology
- ◆ Systemic Questions
- ◆ Sociological Component
- ◆ Historical Study

## C.3 Terms of Reference

- ◆ Role and Performance
- ◆ Position
- ◆ Functions
- ◆ Procedures
- ◆ Recommendations

## C.4 Preparation

- ◆ Supervision of Consultative Committee
- ◆ Selection of Monitoring Committee
- ◆ Choice of Three Teams of Evaluators
  - *Quadrant*
  - *CGS*
  - *IHTP*

# C.5 Progress

- ◆ Phase One
  - Establishing Facts
- ◆ Intermediary Operation
  - Checking Findings
  - Appropriation by Evaluated Persons
- ◆ Phase Two
  - Analysing
  - Recommending

## C.6 Elements of Methodology

- ◆ Permanent Monitoring
  - Specific Report
- ◆ Contradictory Procedure
  - Written Reaction from Evaluated Body
- ◆ Leading to Action
  - Decision of Governance

## C.6 cont'd

- ◆ Control of Methodology
  - Specific Document
- ◆ Largely Public
  - Announced
  - Witness Function
  - Reports Available

# D. Main Results

D.1 Facts

D.2 Analysis

D.3 Reaction

D.4 Opinion of Monitoring Group

D.5 Statement of Consultative Cttee

D.6 Decisions by Governance

## D.1 Main Facts

- ◆ CN is much more than books say
- ◆ Forum for negotiations
- ◆ Labs Directors formally Absent
- ◆ Works well for mainstreams, less on margins
- ◆ Members are Motivated Professionals, prone to caution and affective tones.



## D.2 Main Analysis

- ◆ Judges more activity dynamics than instant quality
- ◆ Triple Function: Information, Advice, Watch
- ◆ Place where Policies gear
- ◆ Three Patterns:
  - Scientific Jury
  - Mediator
  - Dyarchy

## D.3 Main Reactions

- ◆ Self-training function
- ◆ Need of follow-up device
- ◆ Develop Cross-fertilization
- ◆ Improve Methods:
  - Dispatching of Reports
  - Training
  - Keep Memory
  - Remunerate Members

## D.4 Monitoring Group

- ◆ Appreciate the Quality of the Work
- ◆ Regret Scope Limitations
  - Include other Structures
- ◆ Support Recommendations

## D.5 Consultative Committee

- ◆ Recall the Whole Process
- ◆ Certify its Respect of Methodology
- ◆ Recognizes the Quality
- ◆ Insists on Need to Enhance Support for Risk-taking and Innovation

## D.6 Decisions by Governance

- ◆ Create a Coordination Committee
- ◆ Organize Relay between Four-year Terms
- ◆ Improve Information Tools
- ◆ Develop Criteria Favouring Interdisciplinarity

# E.1 Basic Requirements

- ◆ Versatility
- ◆ Efficiency
  - squeezing the best out of evaluators
  - facilitating appropriation by constituencies
- ◆ Even at the Expense of
  - simplicity
  - lightness
  - swiftness

## E.2 Rudiment of a Theory

- ◆ An Evaluating System Has To Be :
  - Adjusted to the Evaluated System
  - Legitimate for the Evaluated People
  - Action Oriented
- ◆ There Is No Universal Model

Dr. Jean-Marie Schwartz

CNRS

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International Workshop on Accountability in Science  
Funding 2005  
“Meeting the Challenge”

# Cost-Performance Auditing in Norway

Trine Tengbom

Director, Leader of Internal Audit

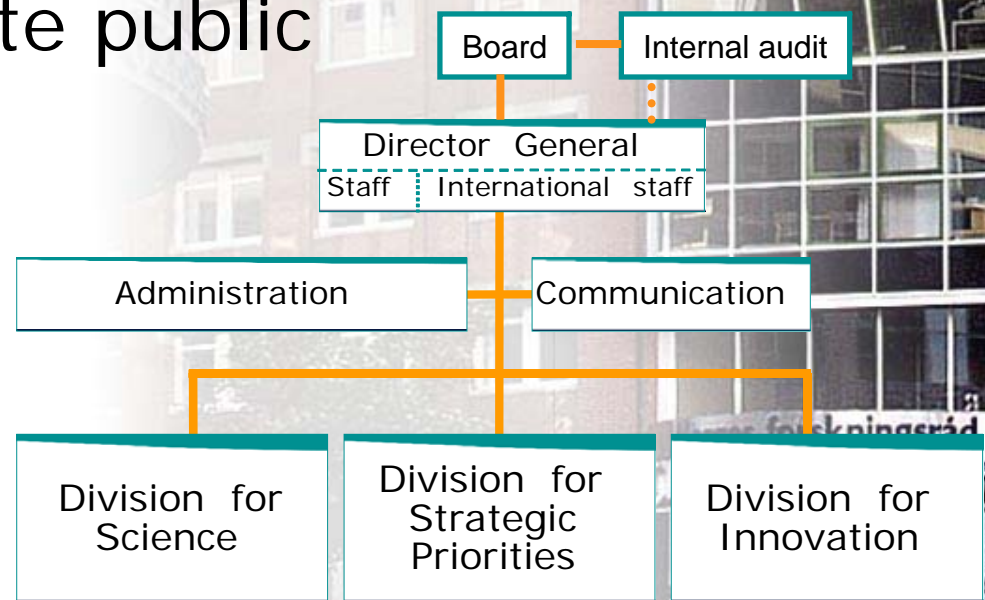


# What to talk about?

- The Research Council of Norway
- Audit system RCN - Norway
- Relationship with Internal Control
- Selected audits
- Exsamples
- Cost -  
performance auditing

# The Research Council of Norway

- Adviser to the government on research-policy issues
- Create arenas for cooperation and knowledge distribution
- Finance and stimulate public and private R&D



# Audit system RCN - Norway

Office of the Auditor General



Parliament



External  
audit

Ministries

2  
persons

Established  
10 oct 2004

Internal  
audit

RCN - executive  
board

Deloitte  
KPMG

IIA standards

# Relationship with Internal Control

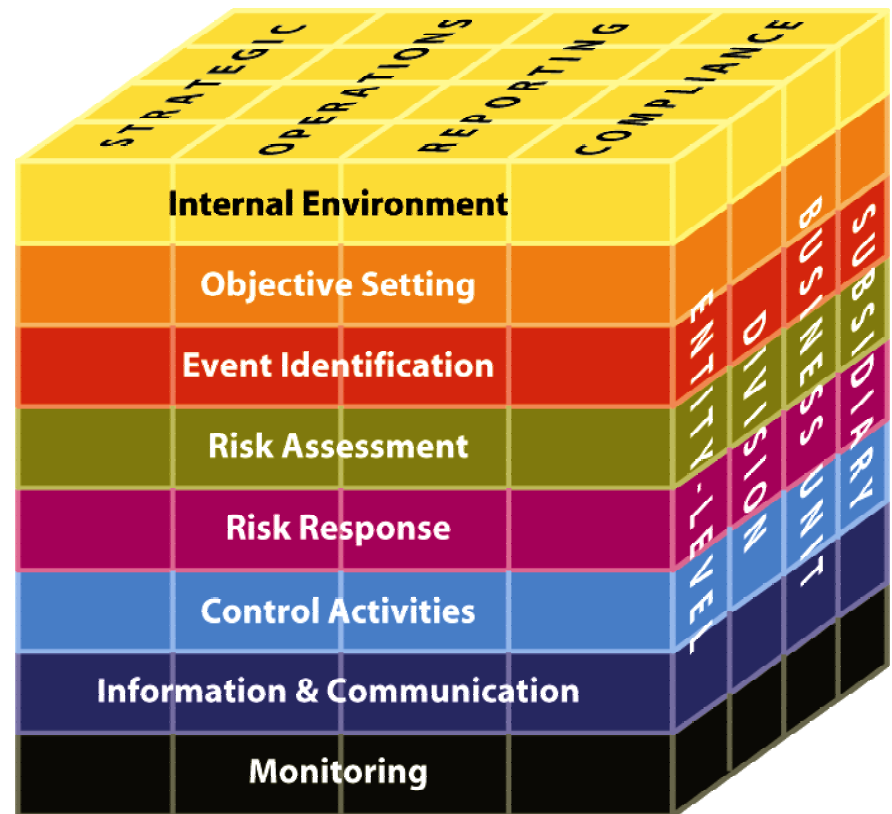
## Ministry of Finance

- framework of COSO ERM

## Main objective

internal audit department

- Improve management of risks
- Identify control activities



# Selected audits

## ■ 2005

- Improve management of risks and identify control activities
- ERA-NET
- Consulting services – directors request
  - Including ordinary R&D project audits and Skattefunn

## ■ 2006?

- Risk-based plans to determine the priorities of the internal audit activity, consistent with RCN's goals
- Tests: Does the internal control system work?
- ERA-NET

# Excmamples

## 3 different types of audits

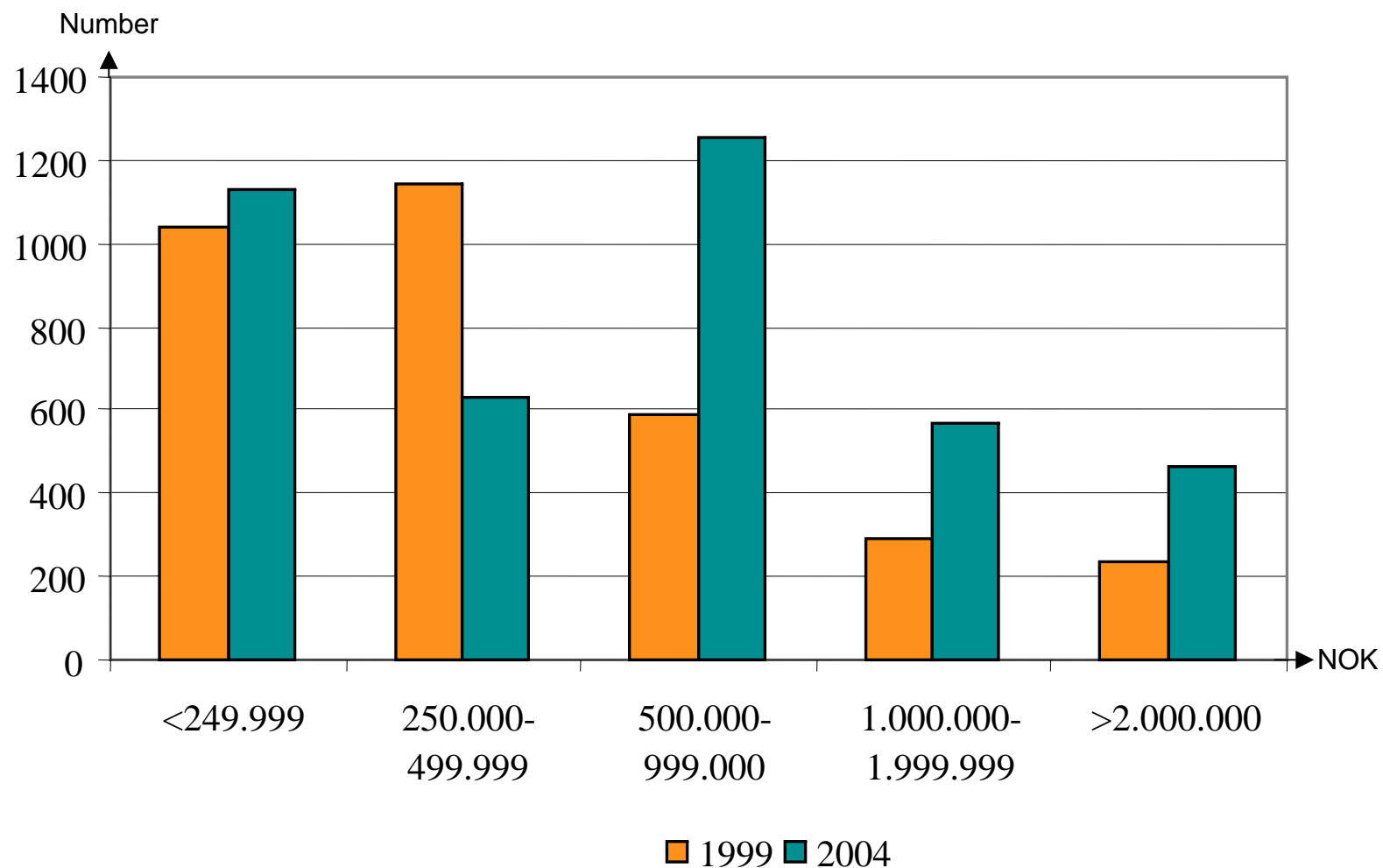
1. Ordinary R&D projects
2. ERA-NET
3. Skattefunn

# Ordinary R&D projects

- Such as
  - Independent projects
  - Research programs (COE, Large scale ....)
  - Infrastructure programs
  - Innovation projects



# R&D projects: Volume



# Ordinary R&D projects

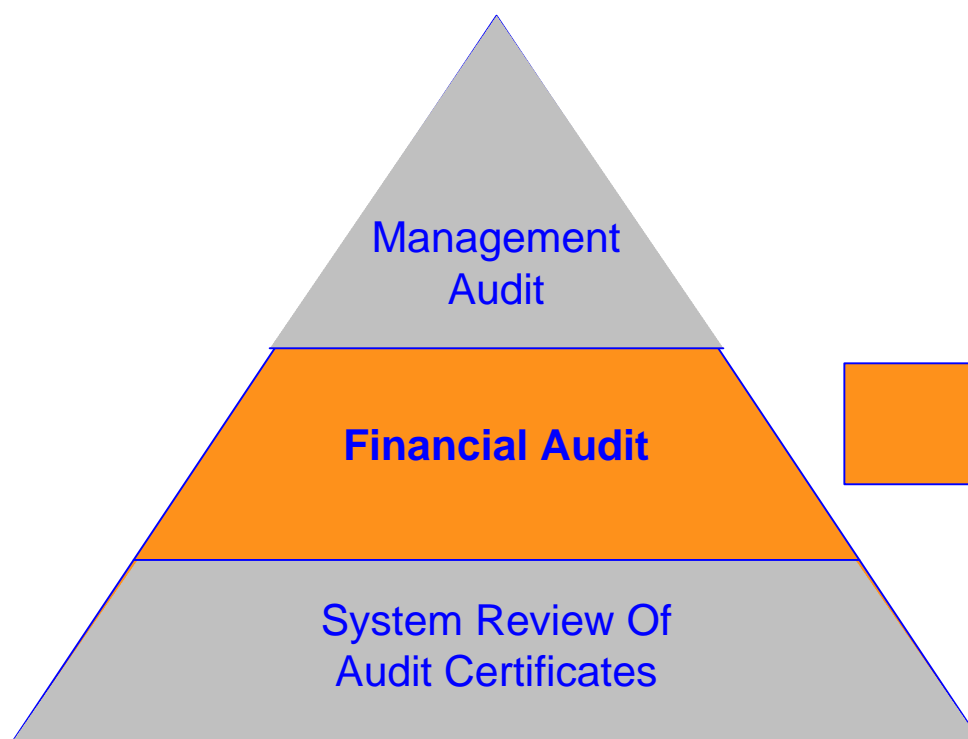
## ■ What do we have:

- Standard formulated contract - signed
- Report routines are specified
  - Deviations from planned schedule during the project
    - Costs
    - Income
    - Milestones
    - Post.docs and PhD-students

# How to audit

1. Does the internal control work?
  - Intervjues, databases, project documentation
2. Select where to make tests
3. Field work - visists

# ERA-NET



## Management Audit

An audit undertaken to provide assurance in relation to the management (and associated processes) of the contractor in carrying out the research project

## Financial Audit

An audit undertaken to provide assurance in relation to the eligibility of costs claimed by the RCN and paid by the EC

## System review

A review undertaken to provide assurance that the audit certificate system is working

# ERA-NET: Volume

- **ETRANET** (CA) ICT in traditional manufacturing industries
- **MNTERA-NET** (CA) From Micro- and Nanoscale Science To New Technologies for Europe
- **NORFACE** (CA) Social sciences
- **WOODWISDOM-NET** (CA) Wood material science and engineering
- **ECORD** (CA) European Consortium for Ocean Research Drilling
- **ERA-AGE** (CA) European Research Area in Ageing Research
- **ERA-PG** (CA) Plant genomics
- **Hy-co** (hydrogen) (CA)
- **EraSME** – Era-Net on National and Regional Programmes to Promote Innovation Networking and Co-operation between SMEs and Research Organisations (CA)
- **Work-in Net**
- **MarinERA** Marine science (CA)
- **CORE Organic** Økologisk landbruk (CA)
- **FORSOCIETY** (foresight)
- **SAFEFOODERA** (CA) Processing for Food Safety
- **ERA-NET HERA** (CA) humaniora
- **BiodivERsA** (CA)
- **AMPERA** "European Concerted Action to foster prevention and best response to Accidental Marine Pollution"
- **CORNET** (CA) Collective Research / bransjerettet forskning
- **VISION** (CA) "Shared Knowledge Base for sustainable Innovation Policies"
- **EUROPOLAREuropean Polar Consortium** (CA) Polarforskning
- **SKEP - ERA-NET** for Research Directors to support environmental policy (CA) Miljø
- **COMPERA – Competence Centres** (CA)
- **ERA-SAGE** (SSA) Etikk i bioteknologi
- **INNER** (CA) Innovative energy research
- **FENCO-ERA** (CA) Fossil energy coalition incl. CO2-management
- **CO-REACH** (CA) Co-ordination of Research between Europe and China
- **MATERA** (CA) ERA-NET Materials

# ERA-NET



## ■ Audit program

- Contract
- Talk with the program coordinator in Norway
  - Project system
  - Hours
  - Travel costs
  - Other costs
  - VAT
- Tests –
  - adequate testing of compliance requirements
  - to make sure the information received is correct

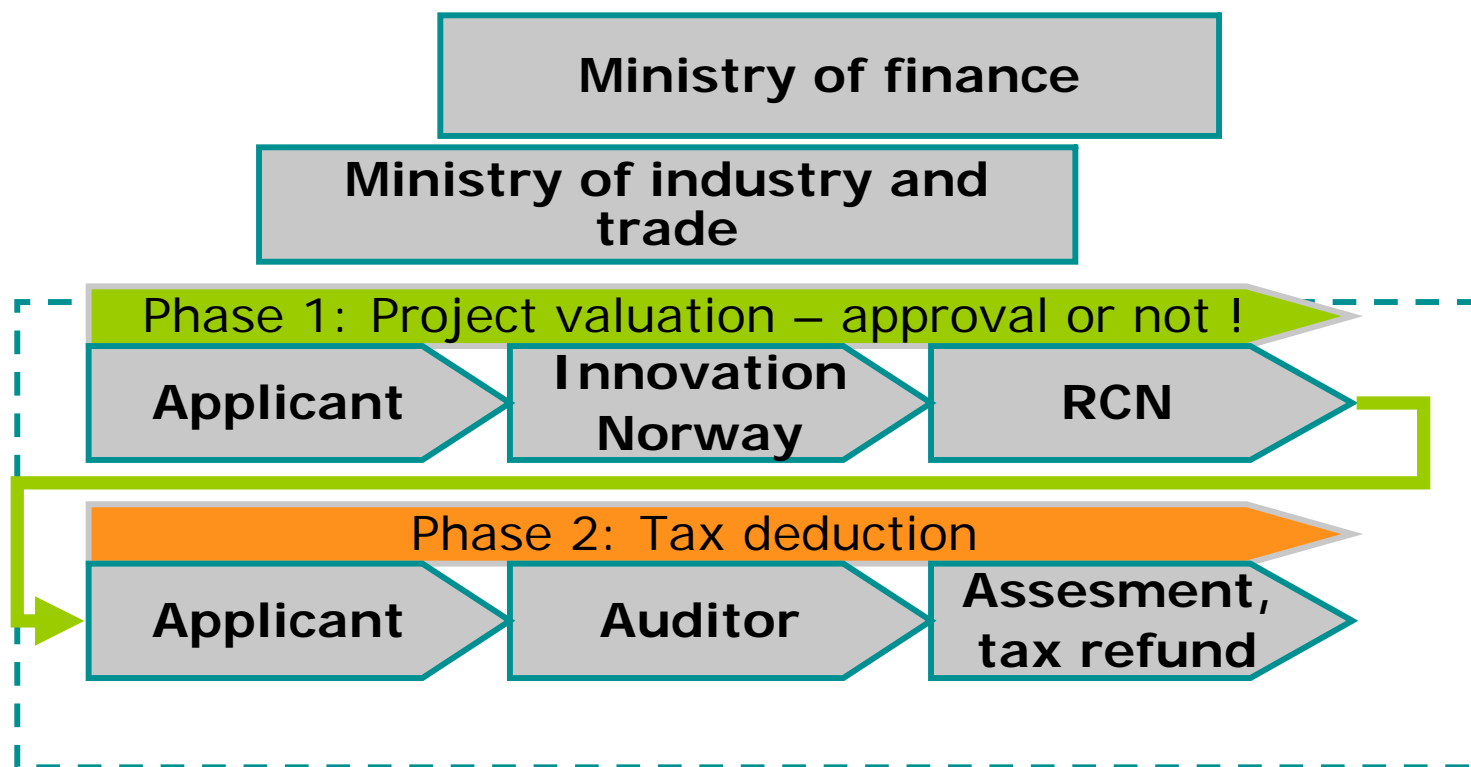
## Problems

- To understand the principles
- To audit productive hours

# The Norwegian tax refund scheme



The Research Council (RCN) has responsibilities toward different partners in the Skattefunn process





# Skattefunn: Volume ..... approved projects !

Date: 09.02.2005	numbers	Project Budget (mill NOK)	Budget for Tax deduction (mill NOK)
2002	2 840	4 535,8	779,2 (690 mill NOK)
2003	5 537	9 052,6	1 560,3
2004	5 853	9 935,5	1 732,3
2005	2 817	5 412,9	930,1
2006	699	1 442,4	244,2
2007	150	348,7	56,7
2008	13	21,8	4,2
<b>Total</b>	<b>17 909</b>	<b>30 749,6</b>	<b>5 307,1</b>

In 2002; 12 % rejected, In 2003: 20% rejected and in 2004 ca. 30% rejected

# Requirements by the Tax authorities

- Copy of the Approval by the Research Council of Norway
  - Type of project, targets and activities
  - period approved for
  - (not budget)
- Project account confirmed by an certified auditor
- The Tax authorities can ask for documentation and reports, but not overrule the approval given by RCN



# Cost – performance auditing

## ■ Principles

- Integrity
- Objectivity
- Confidentiality
- Competency

## ■ Definition of Internal Auditing

- Internal auditing ..... helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.





International Workshop on Accountability in Science Funding  
“Meeting the Challenge”  
Deutsche Forschungsgemeinschaft (DFG)  
Bonn, Germany  
June 1-2, 2005

360° Accountability:  
From awardee selection to utilization of funds

Patrick Vincent  
HFSP Director Administration and Finance



# Accountability in science funding

- HFSP and HFSPPO: a brief introduction
- Definition of accountability and general considerations
- The « Accountability ring » of HFSPPO
- Conclusion



# HFSP and HFSPPO: a brief introduction



# HUMAN FRONTIER SCIENCE PROGRAM “HFSP”

➤ History:

1987: G7 Economic summit Venice introduction of the HFSP

(1989: Creation of HFSP – Strasbourg France)

1992 – 1997 – 2002 – 2004: HFSP Intergovernmental Conferences

➤ Aim of the Program:

*This international program aims” to promote, through international cooperation basic research focused on the elucidation of the sophisticated and complex mechanisms of living organisms and to make the fullest possible utilization of the research results for the benefit of all humankind ...”*

➤ Members :

AUS(2005), CDN, CH, D, F, I, J, ROK (2005), UK, USA, EU





# THE INTERNATIONAL HUMAN FRONTIER SCIENCE PROGRAM ORGANIZATION “HFSPO”

- The Organization HFSPO, created in 1989, is registered with the status of non profit organisation and based in Strasbourg (France).
  
- HFSPO Organizational structure:
  - Board of Trustees: President Masao ITO (Japan) – 22 members
  - Council of Scientists: Chair Joachim Seelig (Switzerland)- 22 members
  - Review committees:
    - Research Grants: Chair Paul Lasko (Canada) - 24 members
    - Long Term Fellowship: Chair Gunter Schneider (Sweden)- 26 members
  - Secretariat: Secretary General Torsten WIESEL (USA)- 15 persons
  
- Membership is voluntary, but subject to acceptance by the Board of Trustees. “Management Supporting Parties” provide resources to the Organization through governmental or other public institutions (e.g. research councils, ministries)



# HFSP Program Activities

Research Grants: to teams of 2 to 4 scientists for 3 years: 250 - 450 kUSD p.a.  
Young Investigators: within their first 5 years after independent lab position  
Program Grants: at any stage of their career

## Fellowships:

Long Term Fellowships: Postdocs scientists for 3 years ~ 42 kUSD p.a.  
Short Term Fellowships: 2 weeks to 3 months

Career Development Awards: support to establish an independent position in home country: 2-3 years, 180 kUSD

Annual Awardees meeting: interaction among Research Grants awardees and Fellows

Occasional policy meetings.



## Snapshot of HFSP in FY 2005 (april 2005 - march 2006)

Annual budget 57 mio USD from 21 Contributing Organizations and “11 MSP’s”  
paid in 5 currencies (CAD, CHF, EUR, GBP, USD)

On going Program Activities: 98 Research Grants, 300 Fellows, 40 Career  
Development Awards

Awardees meeting in June at NIH, Bethesda



# Definition of accountability and general considerations



## Definition of “Accountability”

- Definitely an intensively discussed topic:
  - 36 million hits in a web search for the word,
  - 3 million hits for “accountability research funding organization”
- Interpret “accountability” as an encapsulation of  
“trust, responsibility and answerability and good conduct”

Or: what makes those dealing with HFSP feel “comfortable” with this relationship.



## The challenge of accountability in general

- There have been enough “scandals” recently to (re)confirm that misconduct can be found everywhere, even in highly regulated spheres.
- Need for “accountability” is not new, but the pervasive distrust is new, with increased assertiveness from shareholders and tax payers.
- Response from the legislator is radical: Sarbanes Oxley, IFRS ...but not adapted to all circumstances.
- Accountability is transferred from one link of chain to the next.
- Organizations tend to become more complex and their behaviour results from individual implementation of elaborated procedures. Wrong procedures or inappropriate implementation can jeopardize their very existence.



## The challenge of accountability in science funding

- Basic Research relies mostly on Public funding, but
  - Research content is not readily intelligible to the vast majority, including policy and decision makers.
  - Like art, its value cannot be easily demonstrated.
  - Public funding is in increasingly short supply in several countries.

Faith in research investment is challenged by the pressure for more immediate uses of public resources.

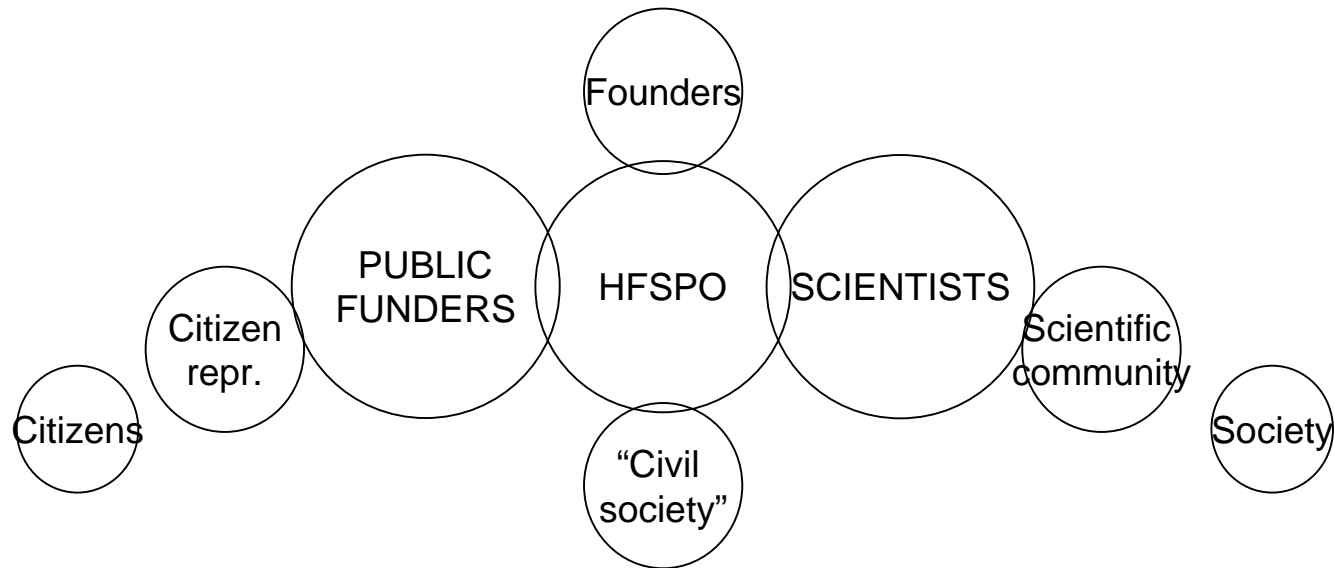


## The « Accountability ring » of HFSP





## The accountability ring of HFSPO (a self-centred view)



HFSPO is accountable for its activities

(a) to its 1)founders, 2)funders, 3)scientists including its awardees and 4) the “civil society”

(b) to citizens representatives (public funds) and the scientific community



## Accountability of HFSP to its founders -1

- HFSP is a young Program and the result of one person's inspiration, endorsed and developed by its early supporters on the basis of key values
- Basic research, life science, excellence, interdisciplinarity and intercontinentality, "Frontier science" and sharing of knowledge
- With this historical background, HFSP is governed by a strong sense of identity and purpose and a drive to remain true to its original values



## Accountability of HFSP to its founders -2

- Accountability of HFSP to its founders is achieved by means of :
  - Regular Intergovernmental Conference that refers to its founding principle to decide voluntarily continuation of the Program
  - Continuity in the Board of Trustees membership since its inception
  - Regular and independent general reviews commissioned by the IGC according to terms of references based on founding values

### Remarks:

- Need to refer to the original statutes and founding documents: a direction at the inception can *de facto* lead to a restrictive understanding of the entire scope of the Organization.
- new initiatives might be introduced. Are statutes an adaptable framework or a straight jacket ?



## Accountability of HFSP to its funders - 1

- Within their limited resources, HFSP funders give HFSP a priority over other programs.

They are entitled to “feel comfortable” with that decision, to be confident that they made the right choice, that funds will be used for their intended purpose and will be used efficiently.

Important issues:

Governance

Budgets

Reporting

Administrative procedures and controls

Overheads



## Accountability of HFSP to its funders – 2 Governance

- An Intergovernmental Conference meets at 3 to 5 year intervals to review and evaluate the HFSP, and if positive give its political approval for the continuation of the Program.
- A Board of Trustees meets at least once a year with 22 members representing the most important funding organisations and the respective MSPs. Decisions for strategy and most other matters are made on a consensus basis (2/3 possible for more technical matters according to statutes)
- A Secretariat with a Secretary General who proposes initiatives to the Board of Trustees and implements those approved (the SG is an *ex officio* member of the Board without voting rights).



## Accountability of HFSP to its funders – 3 Budget

### Ensuring optimal allocations of funds

Prior to Review Committees, Council of Scientist and Board of Trustees, models and simulations are run to maximise the allocations of funds between programs.



## Accountability of HFSP to its funders – 4 Reporting

- Report on activities:

- Scientific activities are reviewed by an external consultant every 5 years.

- Annual program activity and financial report to the Board of Trustees by the Secretary General

- Annual scientific report to the Board of Trustees by the Chair of the Council of Scientists

- Annual report is published in printed form and on the web site.

- Accurate databases with ability to answer specific queries on statistics, finances etc

- Report on finances

- Budget approval by the Board of Trustees

- Monthly financial report to Finance Committee, quarterly to the Board of Trustees.

- Audited annual report on income and expenditures.



## Accountability of HFSP to its funders - 5 Administrative procedures and controls

### ➤ Expenditure:

- Payment of awards and other expenditures by secured electronic protocol and fully traceable
- For all transactions: request and authorization of the transaction; Payment preparation and authorization need explicit (signed) validation by appropriate manager.
- Guidelines for reimbursements of expenditures (travels, meetings, ..)

### ➤ Funds management:

- Finance Committee empowered by Board of Trustees and chaired by one Vice President of the Board.
- Prudential rules for investments
- Rules for consolidation in USD of accounts in local currencies

### ➤ Workflows documented





## Accountability of HFSP to its funders – 6 Administrative procedures and controls

### ➤ Checks

- Independent Administrative Officer, not paid by HFSP checking compliance with procedures of all transactions
- Systematic audit once a year by three experienced auditors from contributing agencies appointed by the Board of Trustees for one year; report to Board of Trustees on internal procedures, financial reports and any other issues concerning HFSP management and operation.
- Chartered accountants for production of Income and Expenditures accounts and finalisation of accounts
- Certified Auditors for Financial report and Statement of accounts (Deloitte Audit)



## Accountability of HFSP to its funders - 7 Overheads

- Definition of overheads: expenditures not directly related to program activities.
- Target ( 5% of total cost)
  
- Number of employees stable since 2000
- Increase capped to general inflation rate
- Introduction of new procedures as technology becomes available (and reliable):
  - Electronic applications: “DHL” budget from xx to ~0
  - E- banking instead of faxed orders
  - Treasury management: seamless integration between awardees databases - wire transfers – Accounts and Treasury projections.
- Competitive bid every 3 to 5 years for major services (banking, travel, IT support, catering...)



## Accountability of HFSP to its funders - 8

➤ Potential issues:

- Legal reporting under French GAAP in EUR
- Reporting for an international constituency raises the issue of different accounting standards and impact of currency conversion (Combating the Currencies Confusion or the 3 C's)
  - e.g.: Overheads 1999 – 2004 increased from 2.8 mio EUR to 3.1 mio EUR equivalent to 2.2 % p.a. (legal accounts), but this was equivalent to 4.5% p.a. in the accounts consolidated in USD (report to the Board of Trustees)
- IFRS ? SMR IFRS ? IAE ?
- Specific requirements for financial reporting from only a few providers of funds, with no relation to size of funding.



## « Accountability » of funders to HFSP

- Maintaining HFSP awarding capacity
  - Evaluation of cost of doing research – OECD statistics on GERD (General Expenditures on Research and Development)?
- Allow for medium term perspective, program adjustments, new initiatives, and responsible management (vis a vis scientific community and own staff).
  - Recent introduction of a three year budgetary guideline from the Intergovernmental Conference as an indicative framework for annual budget planning by the Board of Trustees.



## Accountability of HFSP to scientists - 1

- Funding research starts with designing attractive and rewarding programs, follows with selecting awardees and concludes with active support to the awardees.
- HFSP is accountable to scientist at all stages of the relationship:

Program design  
Application  
Selection  
Implementation



## Accountability of HFSP to scientists – 2 Program design

Accountability to researchers at program design stage is achieved by means of :

- Responsiveness to the needs of the scientific communities (e.g. Career opportunities, scientific developments) but clearly focusing on interdisciplinary approaches to life science.
- Maintain initiative and dynamism by regular input of new visions (regular rotation of Secretary General and Directors) and implementation by experienced scientists.
- Maintain funding per individual instead of spreading too thin
- Focus attention on scientific content and simplify administration
- Generate a sense of community and interdisciplinary networking

➤ Remark: this information takes time to diffuse. Strategic and programmatic stability is necessary to make an impact.



## Accountability of HFSP to scientists – 3 Application

Application should be unambiguous, simple and interactive.

- Guidelines for applications, FAQ, review procedures ... are publicly available on HFSP web site
- Direct support to applicants from scientific directors and assistants
- Emphasis on scientific content. Administrative and financial items standardised.
- Forms and number of questions kept as small as possible
- Two stage application for Grants (“letter of intent” and full application)
- Most of HFSP application procedures are electronic since 2001.

➤ Remarks:

- Applicants do not read guidelines !
- Last minute submission



## Human Frontier Science Program

[Home](#)

[About HFSP](#)

**[Guidelines](#)**

[Awardees](#)

[Publications](#)

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[Search](#)

[Links](#)

[Guidelines & Application instructions](#)

[Areas Supported](#)

[Eligible Countries](#)

[Review procedures](#)

[FAQS](#)

[Technical Help](#)

[Art of Grantsmanship](#)

### GUIDELINES AND APPLICATION INSTRUCTIONS

#### Research Grants

→ [Guidelines and Application instructions](#)

#### Long-Term Fellowships

→ [Guidelines and Application instructions.](#)  
→ [Update Publication List](#)

#### Cross-Disciplinary Fellowships **New**

→ [Guidelines and Application instructions.](#)  
→ [Update Publication List](#)

#### Career Development Award

→ [Guidelines and Application instructions.](#)  
→ [Update Publication List](#)

#### Short-Term Fellowships

→ [Guidelines and Application instructions.](#)  
**[Application online now !](#)**



Internet





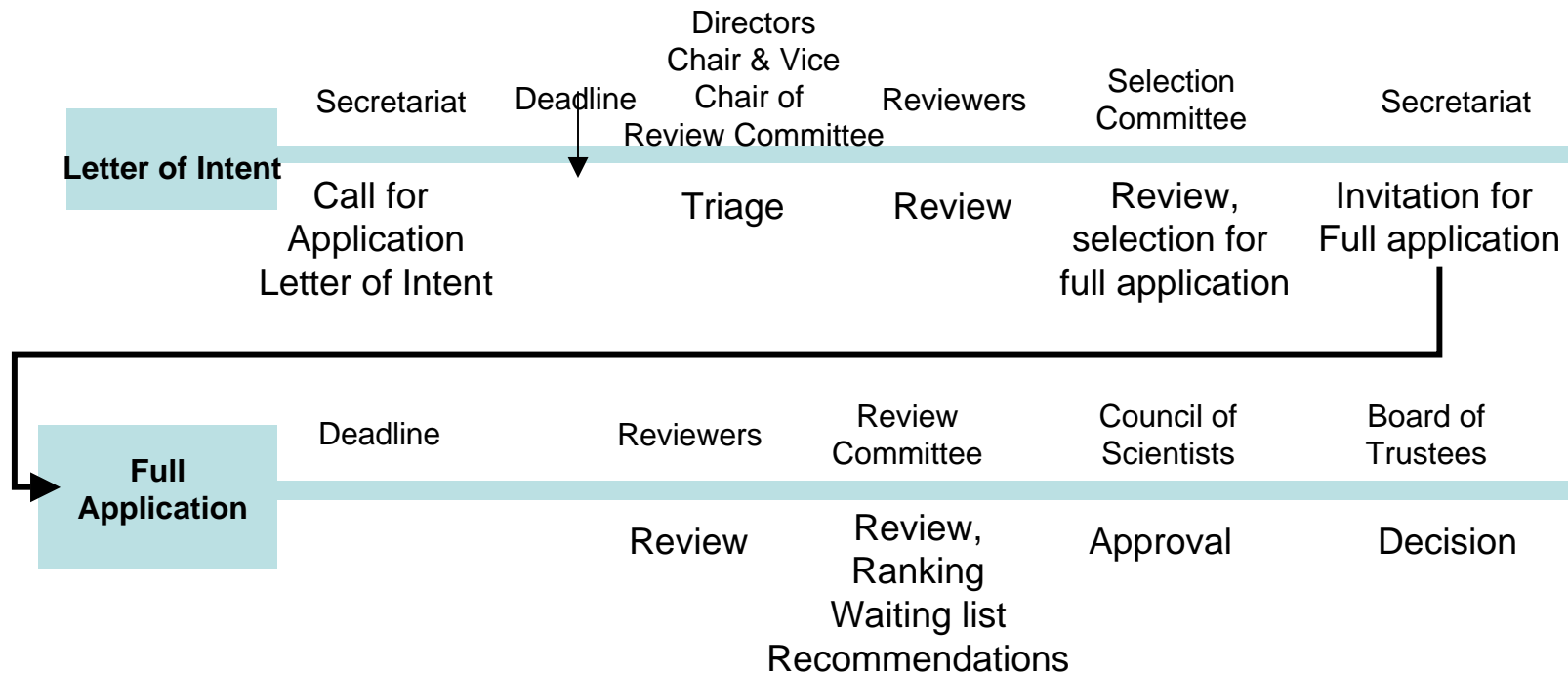
## Accountability of HFSP to scientists – 4 Selection

Selection is critical, and must be fair and fast !

- Accountability at selection stage is critical for all science funding organisations.
- Like others, HFSP is accountable to applicants for the intellectual integrity of the peer review and selection processes, but also for offering a reasonable balance between the time and energy invested by applicants and their chance of success.



## Accountability of HFSP to scientists – 5 Selection for Grants



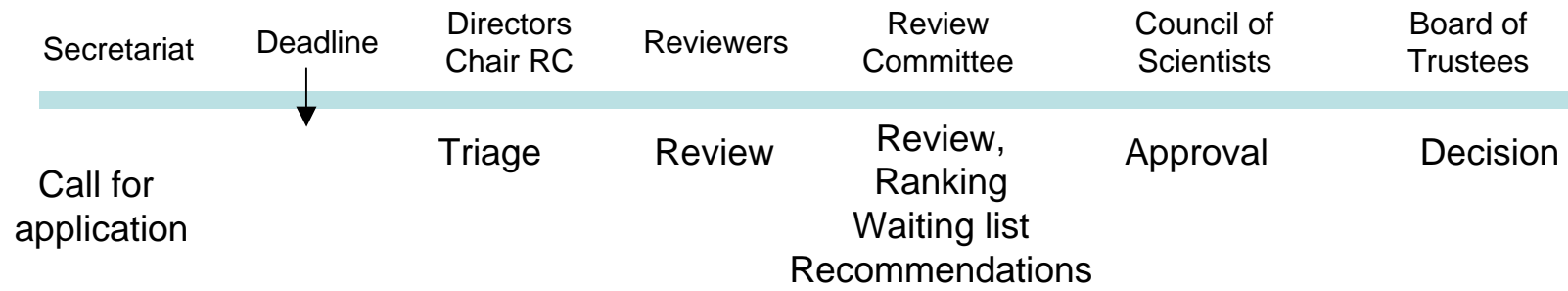
Program Grants statistics for FY2005:

Deadline Letter of Intent: 31/03/2004  
 Triage: 84 rejected  
 Selection committee: Invited 88 full applications  
 Review committee: 34 recommended

Letters of Intent: 719 received  
 Reviewed: 635  
 Deadline 15/09/2004 (86 received)  
 Board finally decided: 34 (38.6 %)



# Accountability of HFSP to scientists – 6 Selection for Long Term Fellowships



## Long Term Fellowships statistics for FY2005:

Deadline: 02/09/2004

Applications reviewed: 674

Review committee: 90 recommended + waiting list

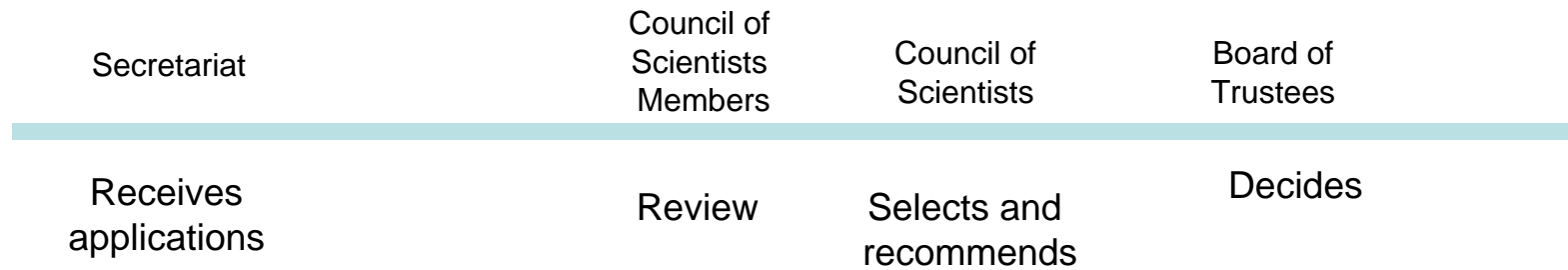
Applications submitted: 789

Application per reviewers: 50~60

Board finally decided: 101 (13.4 %)



## Accountability of HFSP to scientists – 7 Selection for Career Development Awards



### Career Development Awards:

Applications:47

Council recommended: 15 + 3 Waiting list

Board: 18 decided (38.3 %)



## Accountability of HFSP to scientists – 10 Implementation

Administrative and scientific implementation must be hassle free

- No interference with IP or any other ownership or ethical issues (except compliance with host institution regulations)
- Cap on host institution's overheads (10% for grants and Career Development Awards).
- Take into account unexpected events (interruption, parental leave, change institution...)
- Long term fellowship allowance adjusted annually for cost of living on the basis of PPP (transparent formula) and paid directly (whenever possible) in currency of choice.
- Grants paid directly to team members.
- Minimised bureaucratic requests (Scientific report from LTF before final payment, Financial report at end of second and/or third year )
- Feedback from Secretariat in hours, not days.
- Payments guaranteed in amount and time; committed funds systematically accrued.



## Accountability of HFSP to scientists - 11

### IMPLEMENTING HFSP BEYOND SCIENCE FUNDING

- Awardees meeting: networking and stimulation of new ideas – personal interaction between awardees, Board of Trustees, Council and Secretariat members
- Career Development Awards: Help young scientists obtaining independent positions in home country
- Working Policy meeting
  - International Training and Support of Young Investigators in the Natural Sciences (Nov 2001 ESF/HFSP)
  - Promoting Life Science Research and Training in Developing Countries (Nov 2003 EMBO, HFSP, TWAS, the Wellcome Trust)



## Accountability of scientists to HFSP

- Scientists have some liability towards HFSP
  - Implement the program proposed, although there are instances where modification can be approved by scientific directors.
  - Honesty and integrity. Refund at the end of fellowship or grant if spent under budget.
  - Cite HFSP in publications
  - Accept participating in future evaluation of the HFSP
  - Respond positively to requests for participation to HFSP activities (Review committees...)



## Accountability of HFSP to the « civil society »

As an employer, HFSP provides a stable, fair and informal working environment with high expectation on performance and dedication.

➤Remarks:

Difficulty in benchmarking individual and collective performance with other comparable organisations.

Small organisation with limited prospect for career progression.

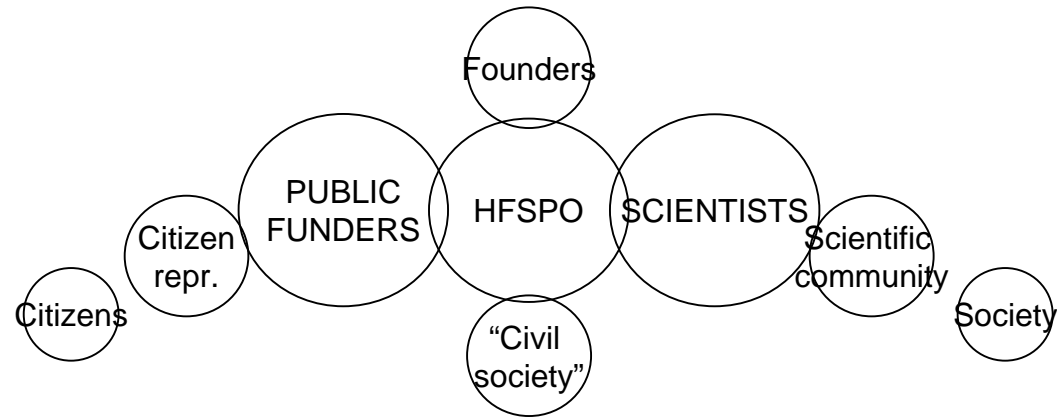




# Conclusion



## Conclusion (1)



HFSP is potentially directly accountable to 21 public organisations from 10 countries and the EU.

HFSP could report formally to all these organisations but the cost and effort involved are difficult to predict:

- Financial reports do not follow international standards for non profit organisations.
- Expectations on reports of non financial aspects of accountability are not defined.



## Conclusion (2)

Like other science funding organisations, HFSP has to take a broad perspective in looking at accountability.

It seeks to address resulting obligations by cultivating a balance of transparency, procedures, new technologies and mindset.

HFSP uses self evaluation but relies on frequent external reviews by experienced auditors who also monitor implementation of their recommendations.

And as we all know...



## Conclusion (3)

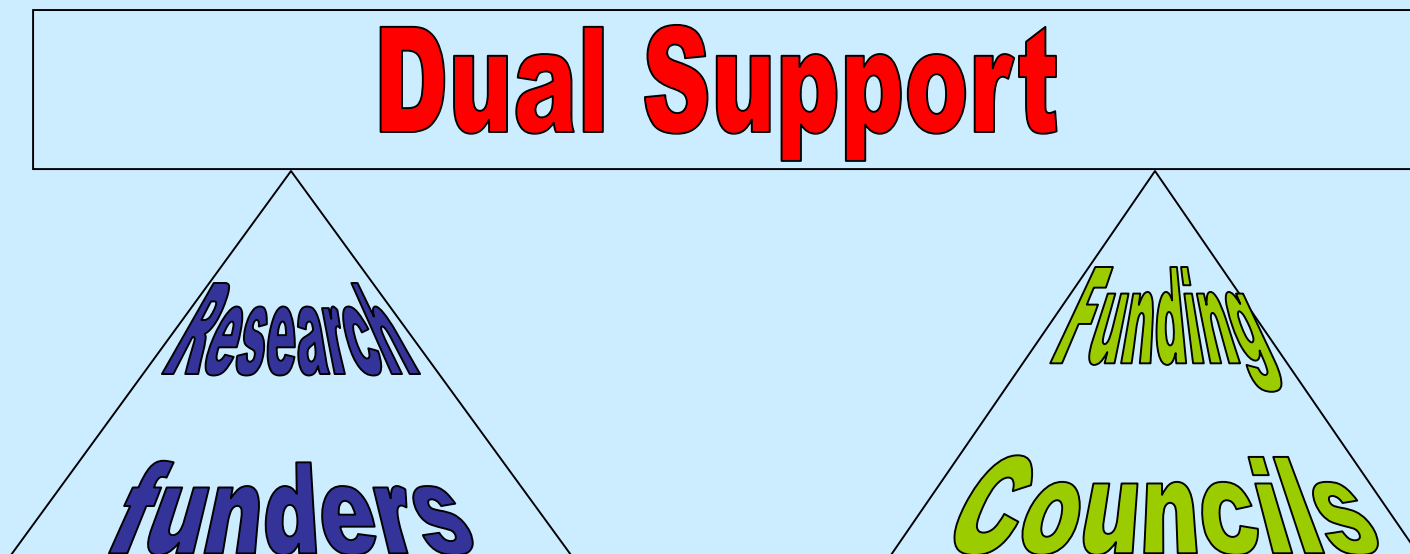
... “ Not everything that can be counted counts and not everything that counts can be counted.”

# **FUNDING SUSTAINABLE RESEARCH**

**Stuart Ward  
Director Resources**

**Engineering and Physical  
Sciences Research Council**

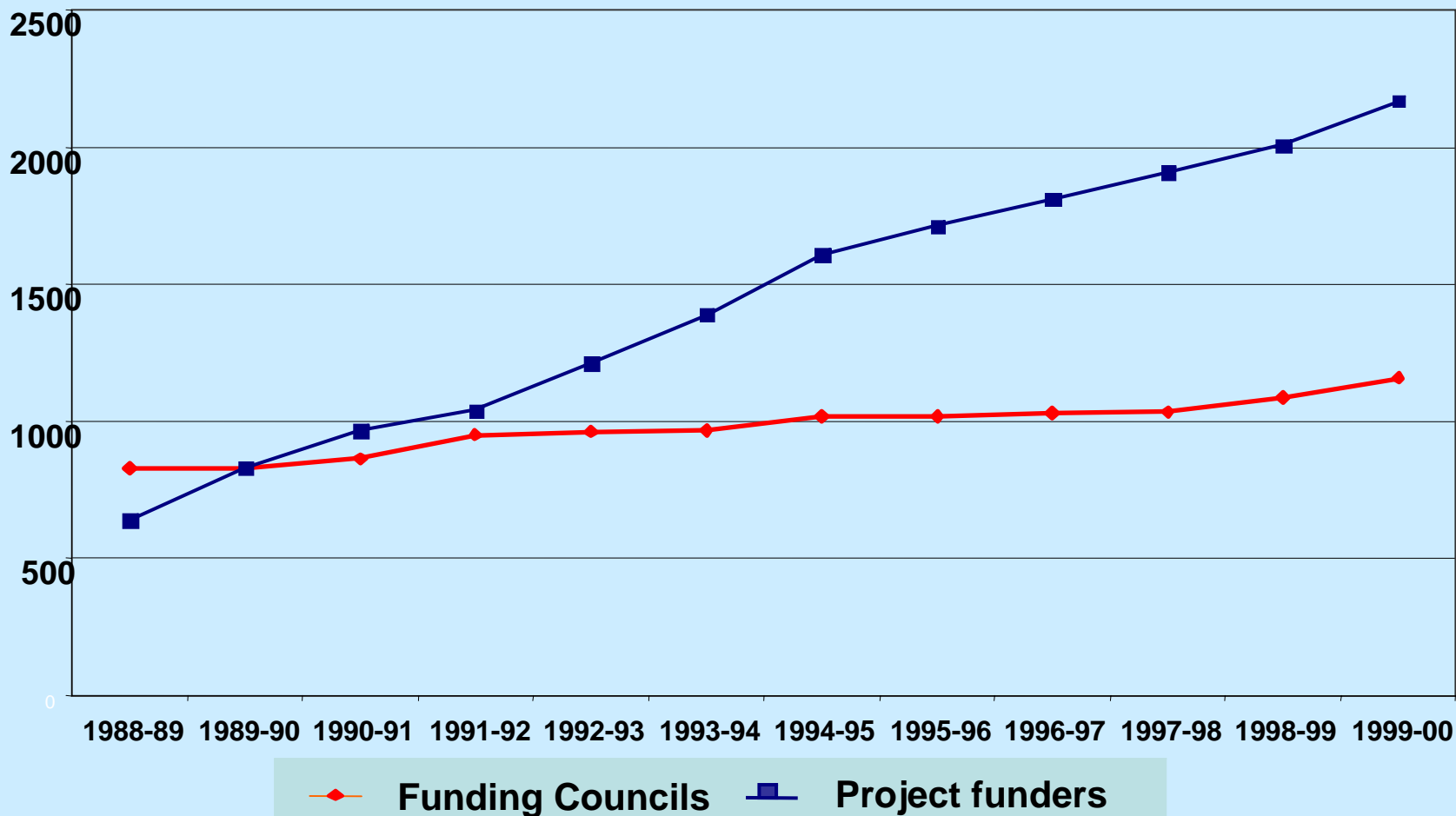
# Funding University Research in the United Kingdom



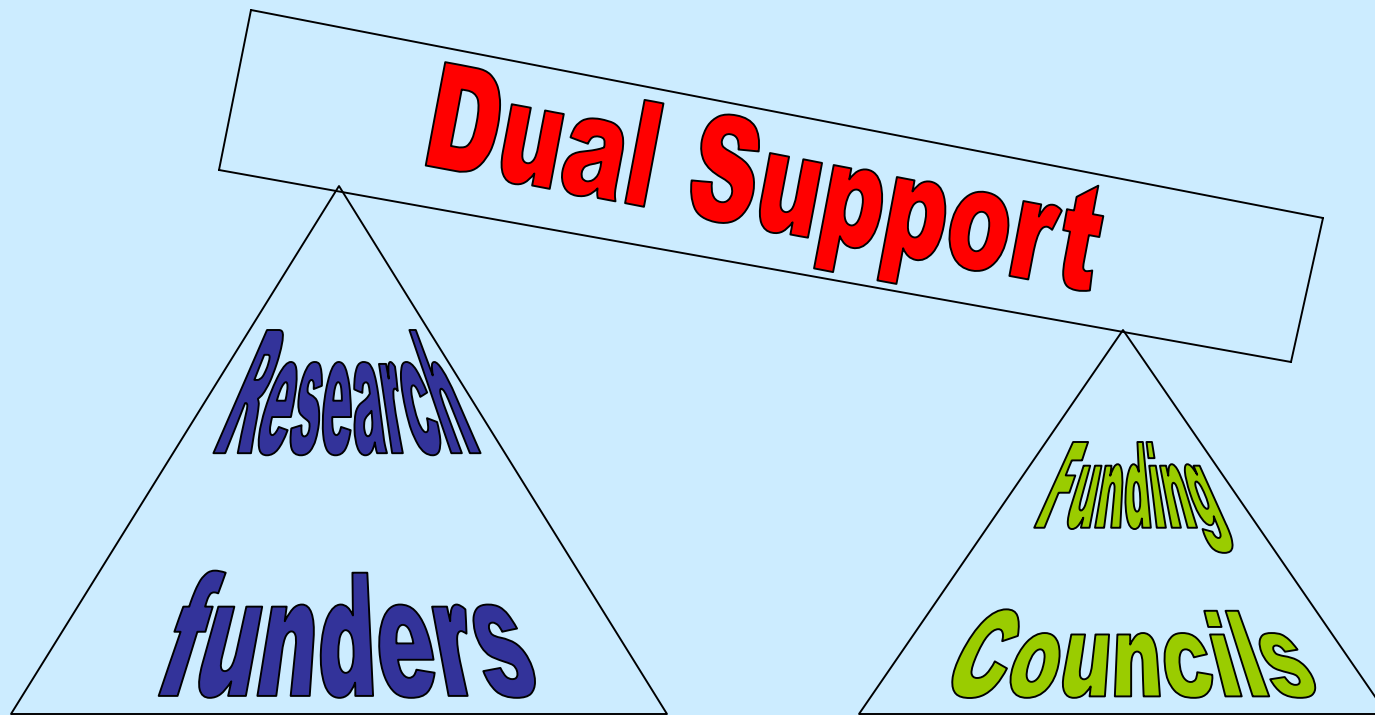
- **Funding Councils:** Academic Staff, Buildings, Utilities, etc
- **Research Funders:** Project staff, Equipment, Consumables

# University Research Income 1988-2000

£M



# Funding University Research





# The Problem - trends

- **Stagnating Funding Council support alongside increased project funding**
- **Increased pressure on university staff to conduct and publish research**
- **Poor understanding within universities of cost base for research**
- **Neglect of long run costs**
- **Low price culture**

# The UK Government's Vision for Science

- **To move to a sustainable, world class research base over the next few years**
- **UK research quality is high; But finances are not sustainable**
- **Universities required to recover full economic costs for research “taking one year with another”**
  - ⇒ **Know the Full Economic Cost (fEC)**
  - ⇒ **Price for Sustainability**
  - ⇒ **Adequate re-investment**

# Sustainability

**“ An institution is being managed on a sustainable basis if, taking one year with another, it is recovering its full economic costs across its activities as a whole, and is investing in its infrastructure (physical, human, and intellectual) at a rate adequate to maintain its future productive capacity appropriate to the needs of its strategic plan and students, sponsors and other customer requirements.”**

# Achieving Sustainability?

- **Universities need to determine Full Economic Cost (fEC) of activities and projects in a robust way - mandatory for all institutions**
- **Reforming the Dual Support System for publicly funded research**
- **To maintain volume of research, Government is providing additional funding to RCs and FCs**
- **Government departments, industry and other funders will need to pay the cost of projects that they commission**

# Transparent Review of Academic Costs

- **TRAC was developed by universities to provide retrospective cost analysis at a high level for accountability and management purposes**
- **To meet the new requirement for fEC, further development has been required**
- **The required changes have required institutions to refine their methods, and to develop better management information**

# Development of Full Economic Costing

- **Identify as many costs as possible as direct:**
  - ⇒ **Academic staff time**
  - ⇒ **Materials, equipment etc.**
  - ⇒ **Estates and facilities costs including support**
- **Allocate indirect costs on a consistent and robust basis**
- **Add in economic adjustments for maintenance and cost of capital**
- **Details set out in TRAC manual**

# Research Council funding – current position

Direct Costs	Indirect Costs
eligible staff costs (e.g. Direct staff (RAs), support staff)	Research council contribution to indirect costs = 46% of eligible direct staff costs
other eligible costs (e.g. equipment)	
ineligible costs (e.g. salary of the Principal Investigator)	

**Paid by Research Councils**

**Paid by University**

# **New terms of trade between HEIs and RCs**

- **Research Councils pay 80% of the full economic cost of research projects from April 2006**
- **Research Councils should meet close to 100% of fEC by 2010**
- **Includes Grants and Fellowships, but not research training (PhDs etc)**
- **100% of equipment over £50k**
- **Additional £200M to RCs to pay for additional costs (will need more to get to 100% of fEC)**



# Research Council funding – Full Economic Costs model

Direct Costs	Indirect Costs
Research Council	pays 80% of full costs
University pays	20% of the costs

# Typical 3 year EPSRC project

				fte/yr	Current	fEC
One RA ~£30k p.a.				1.0	88	88
Technical support (e.g. 20% full-time)					15	15
Equipment					60	60
Consumables/minor equip					45	45
Travel, etc					10	10
<b>Total Traditional Direct Costs</b>					<b>218</b>	<b>218</b>
Academic FTE	60	£k/yr		0.3		54
Indirect costs	36	£k/FTE/yr			47	140
Estates costs	10	£k/yr				39
<b>TOTAL</b>					<b>265</b>	<b>451</b>
<b>Grant (80% of FEC)</b>						<b>363</b>

**Old grant £265,000 New Grant £363,000 (37% increase)**

# Risks

- **Behavioural changes in HEIs**
  - **People**
  - **nature of research**
- **Maintaining volume of research**
- **Retaining balance between RCs/disciplines**
- **HEIs finding their share of the costs**
- **Tight timescale for changes**
- **Bureaucracy!**

# Issues

## Planning timescales - long!

- TRAC been developed since 1998; full implementation by 2009
- Government consultative document 2003
- First payments under new system in 2006

## Other funders – to pay more?

- Government departments
- Industry
- Charities
- European Union

Other research providers - fund on same basis?

Bureaucracy – Timesheets?

Accountability ??

# Accountability

## Initial Quality Assurance of TRAC

- Provide reassurance that TRAC is being implemented robustly.
- Funding Council/Research Council QA team
- Not an audit. Developmental for universities

## Peer Review processes

## Post Award monitoring

- End of Grant reconciliation
- Dipstick tests (light touch, process-orientated checks)

## Long Term Quality Assurance

- Audit of TRAC costs by Funding Council/Research Council (eventually perhaps all research funders)



Deutsche  
Forschungsgemeinschaft

# **Cost-Performance Auditing and Controlling at the DFG Head Office**

**Dr. Beate Wilhelm**  
**Bonn, June 2005**

**DFG**



## Topics of the Presentation

1. **Development and aims**
2. Elements of cost-performance auditing
3. Reporting
4. Integration into the controlling system



## Implementation of Cost-Performance Auditing

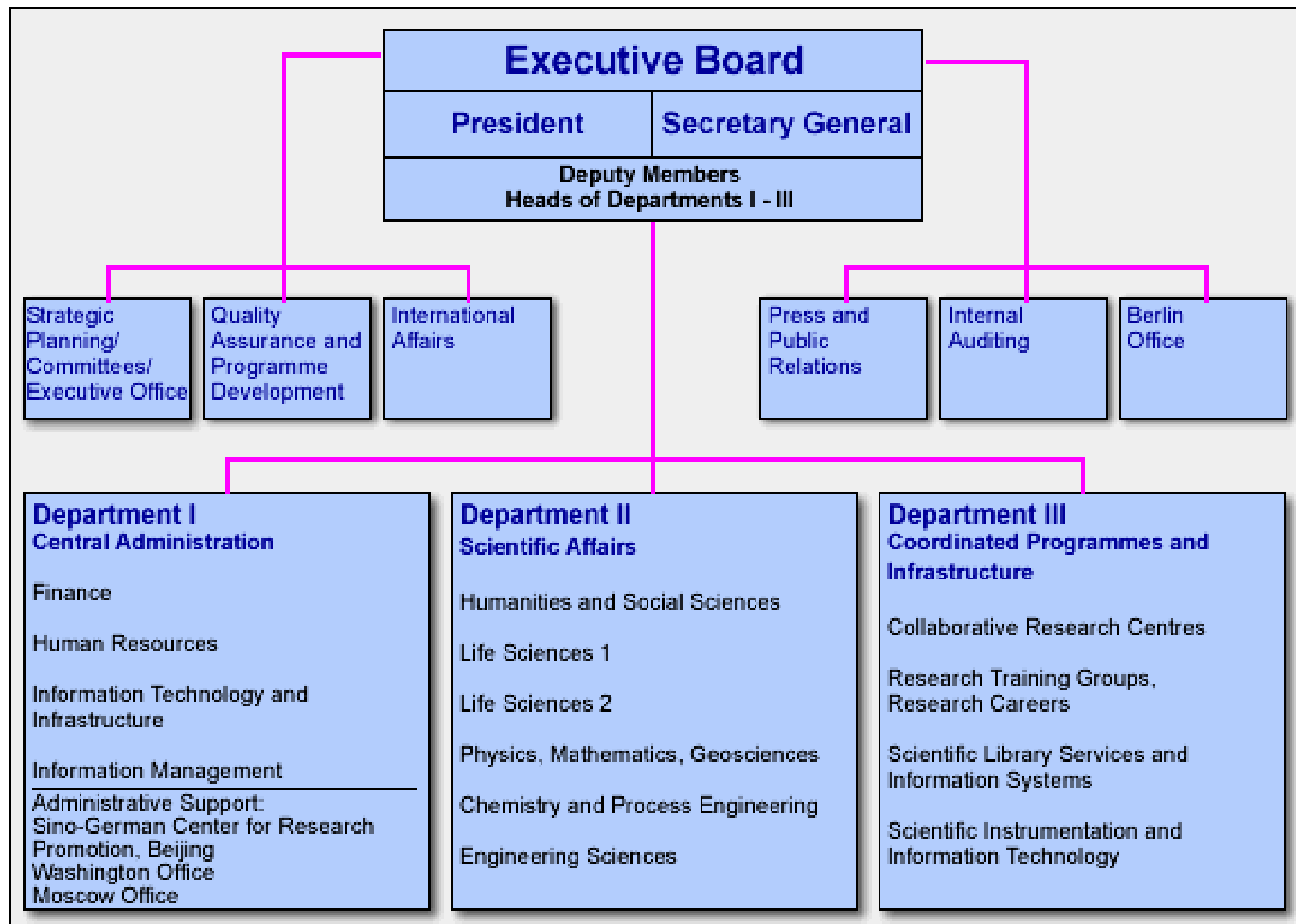
since Jan. 2002    Cost element accounting  
                         Cost centre accounting

since Jan. 2003    Product costing

since Jan. 2005    Advancing integration of the cost-performance  
                         audit into the operative controlling



# Responsible Organisational Unit in the DFG Head Office



Cost- Performance Auditing



## Aims of Cost-Performance Auditing

- Create cost transparency of internal processes
- Increase cost consciousness
- Monitor cost development
- Improve the data basis for planning resource allocations
- Provide supplementary information about the efficiency of review and administrative processes



## Topics of the Presentation

1. Development and aims
2. Elements of cost-performance auditing
3. Reporting
4. Integration into the controlling system



## Characteristics

Cost-performance auditing uses data from the administrative budget and does not consider the funding budget.

It is designed as full costing on an actual cost basis.

In some essential items it is based on the guidelines of the Standard Cost-Performance Auditing described by the German Federal Finance Administration (Set of Regulations by the Federal Finance Administration H 90 01, August 1997).

# Components of Cost-Performance Auditing

triple  
allocation of  
an account

calculation of  
overheads

Data from the  
financial  
accounting

Allocation of  
personnel costs



Cost element accounting:  
Which costs have been incurred?

Cost centre accounting:  
Where did the costs occur?

Cost object accounting:  
What have the costs been incurred  
for?



Reports

## Cost Elements

- All administrative costs are cleared
- Personnel costs are, with reference to the wage groups, calculated in a standardised manner on the basis of the annually published personnel cost rates of the German Federal Ministry of Finance.
- Depreciation allowances of the fixed assets and the imputed interest on the capital bound up on fixed assets are included.

## Cost Centres

Most of the 107 cost centres correspond to the DFG's internal organisational units.

**Clearing cost centres** are set up for costs which are not caused by any single cost centre, e.g.

- buildings
- IT depreciations

**Service cost centres** provide internal services. They are largely located in department I, e.g.

- Human Resources Division
- Finance Division
- Information Technology and Infrastructure Division
- Executive Board and Heads of Departments

**Primary cost centres** provide external services. They are largely located in departments II and III, e.g.:

- special fields in the Life Sciences
- special fields in the Collaborative Research Centres

## Cost Objects – Internal Product Groups

**Management-level products**

**Human resources products**

**General internal services**

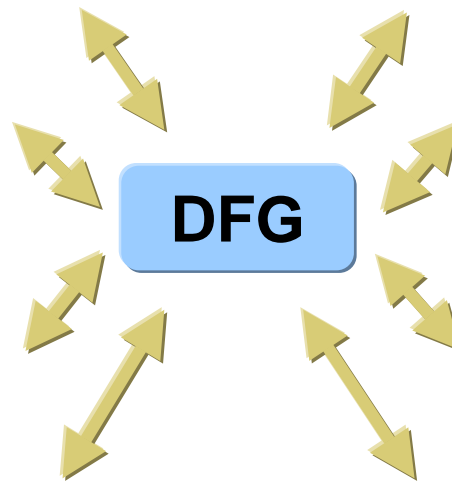
**Budget and finance**

**Internal Organisation**

**Data processing and information technology**

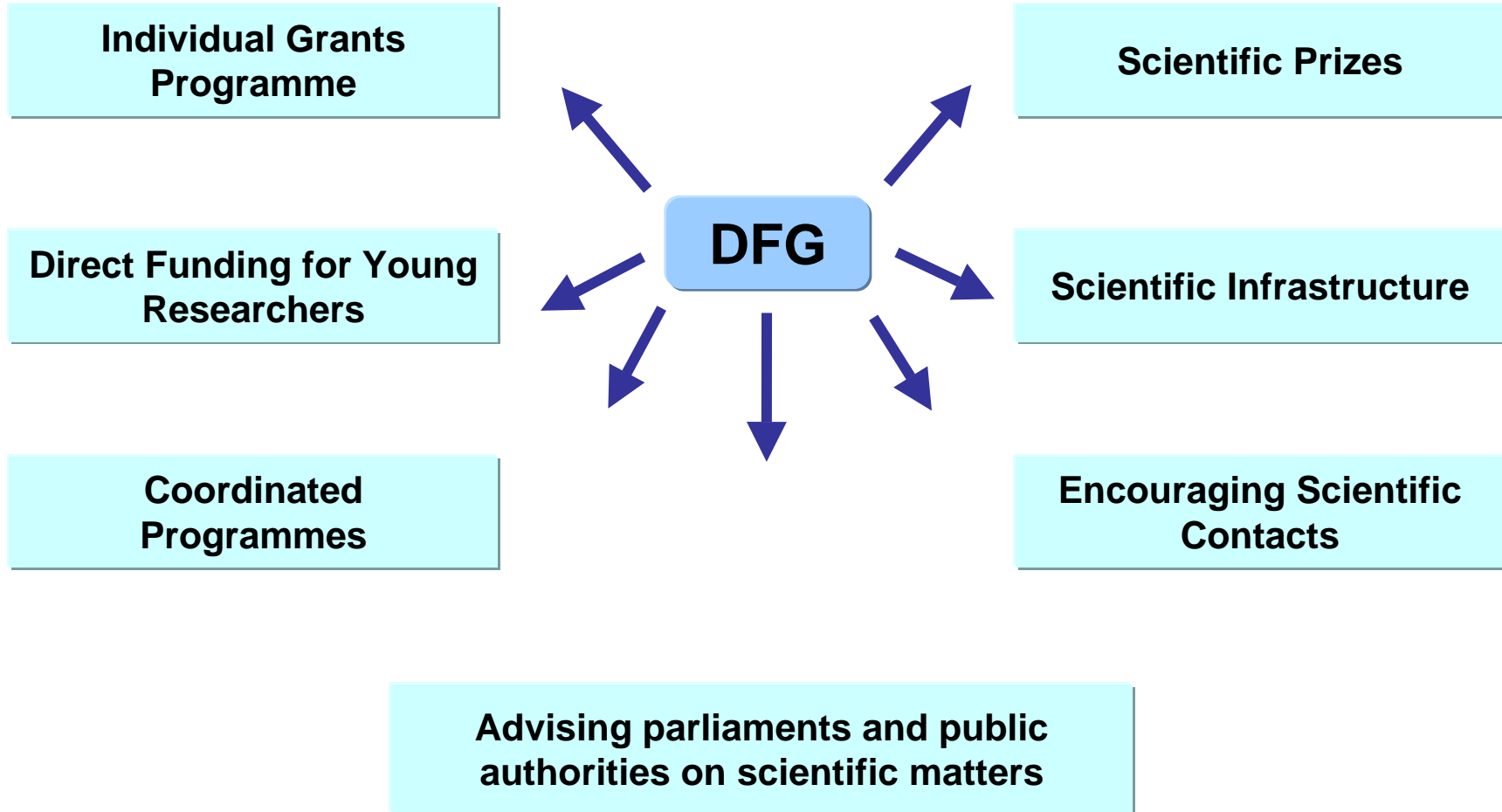
**Information management**

**Financial administration of grants**

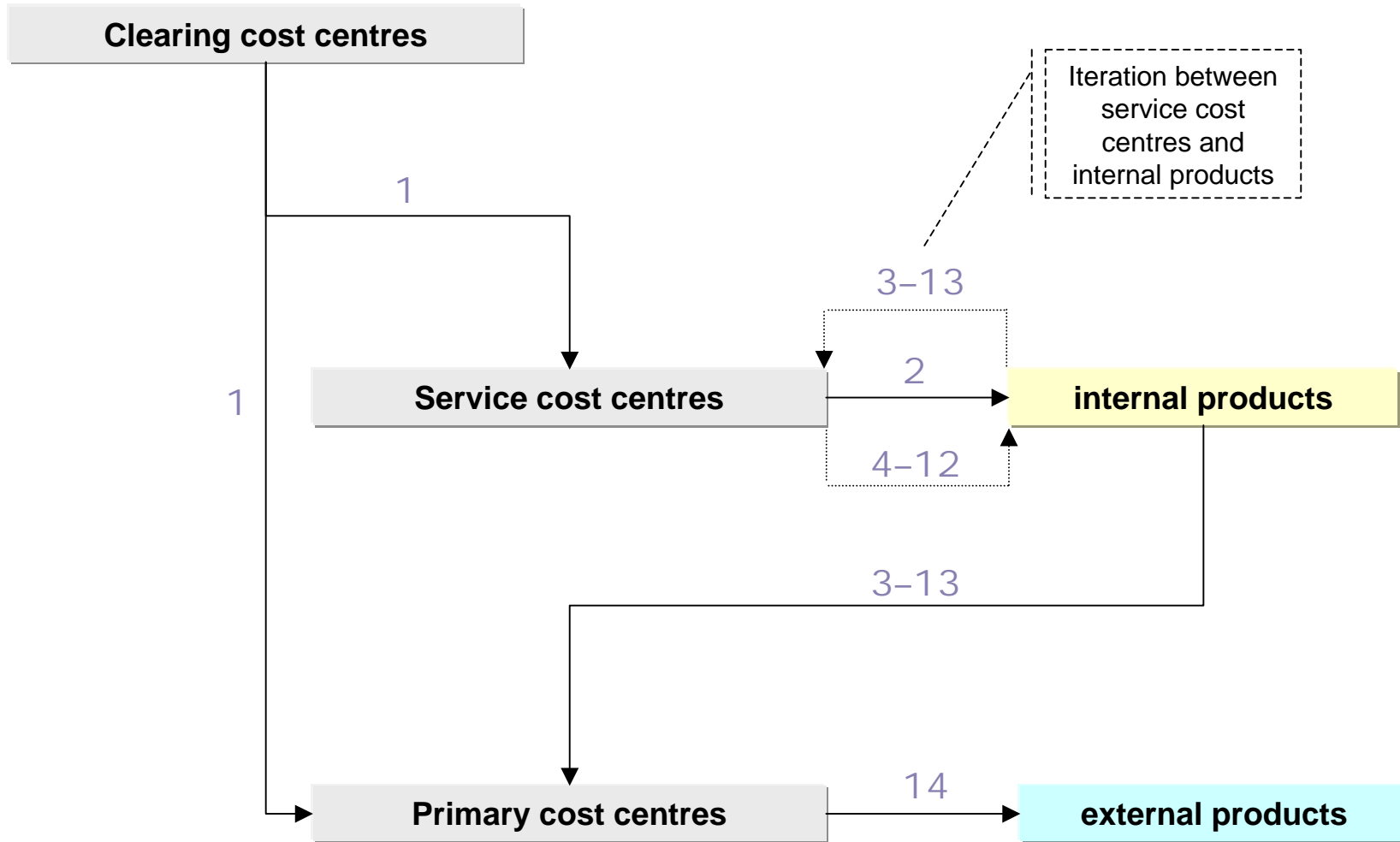




## Cost Objects – External Product Groups



# Internal Cost Allocation

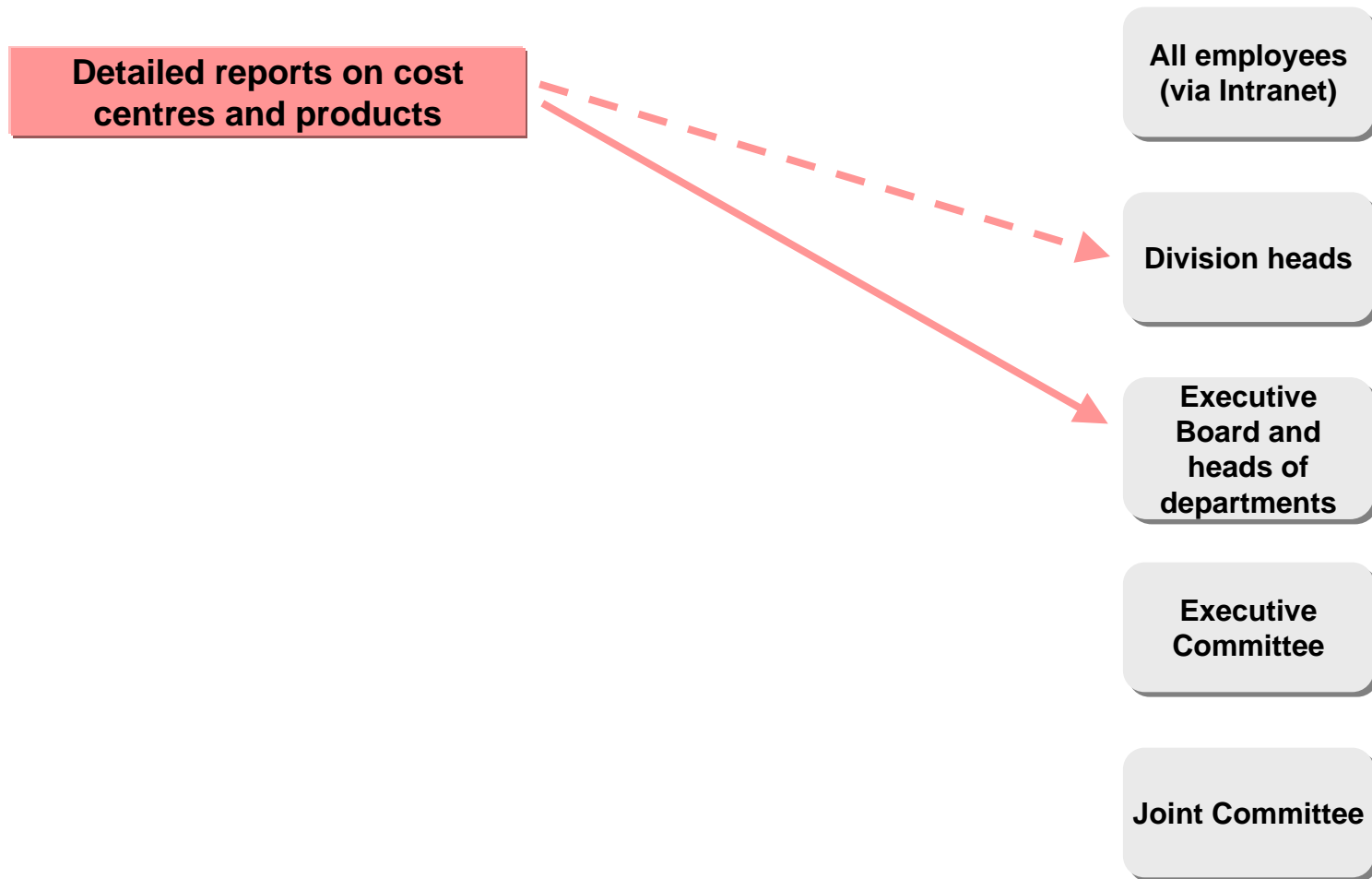




## Topics of the Presentation

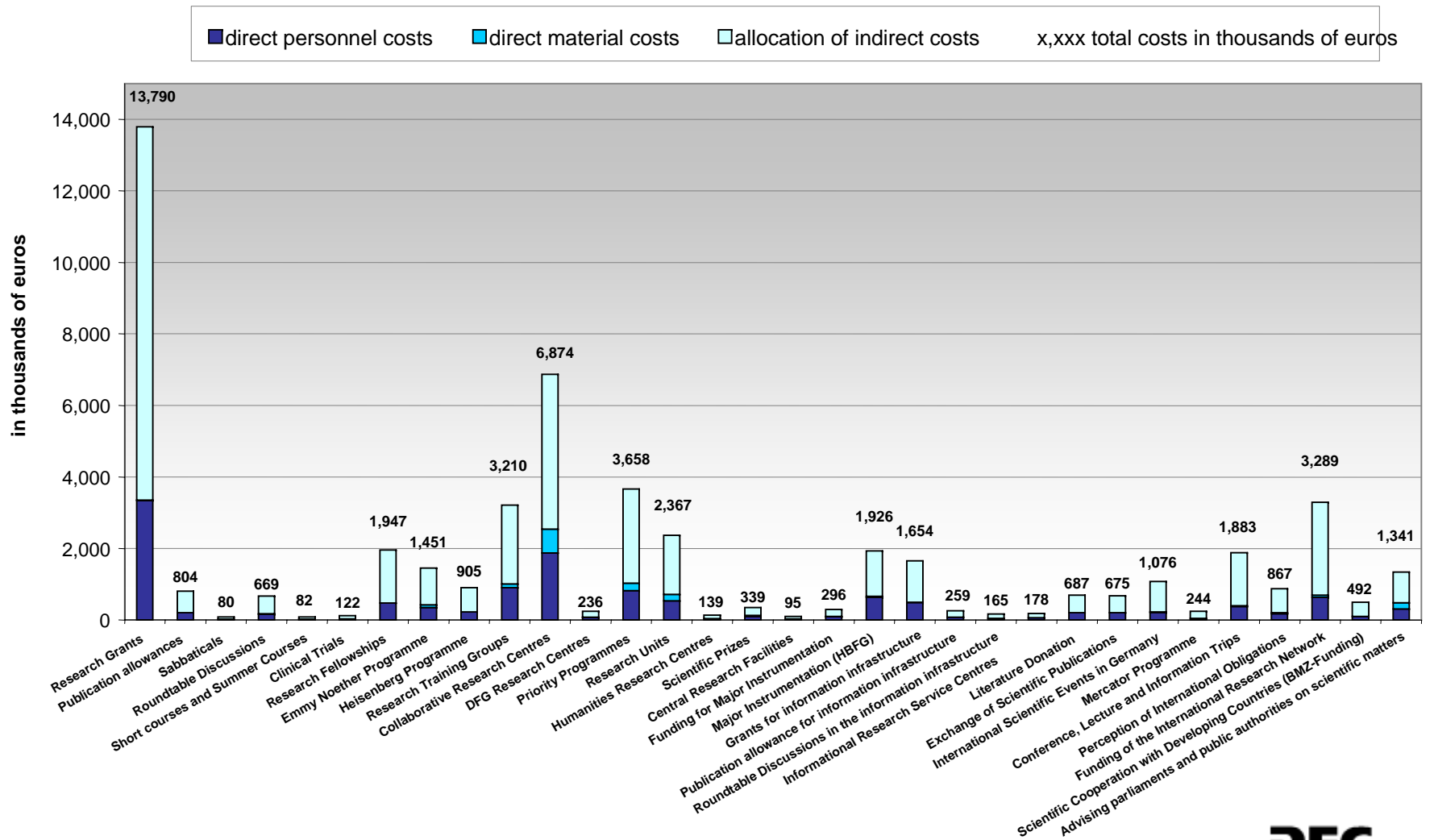
1. Development and aims
2. Elements of cost-performance auditing
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## Regular Reports Used in Cost-Performance Auditing



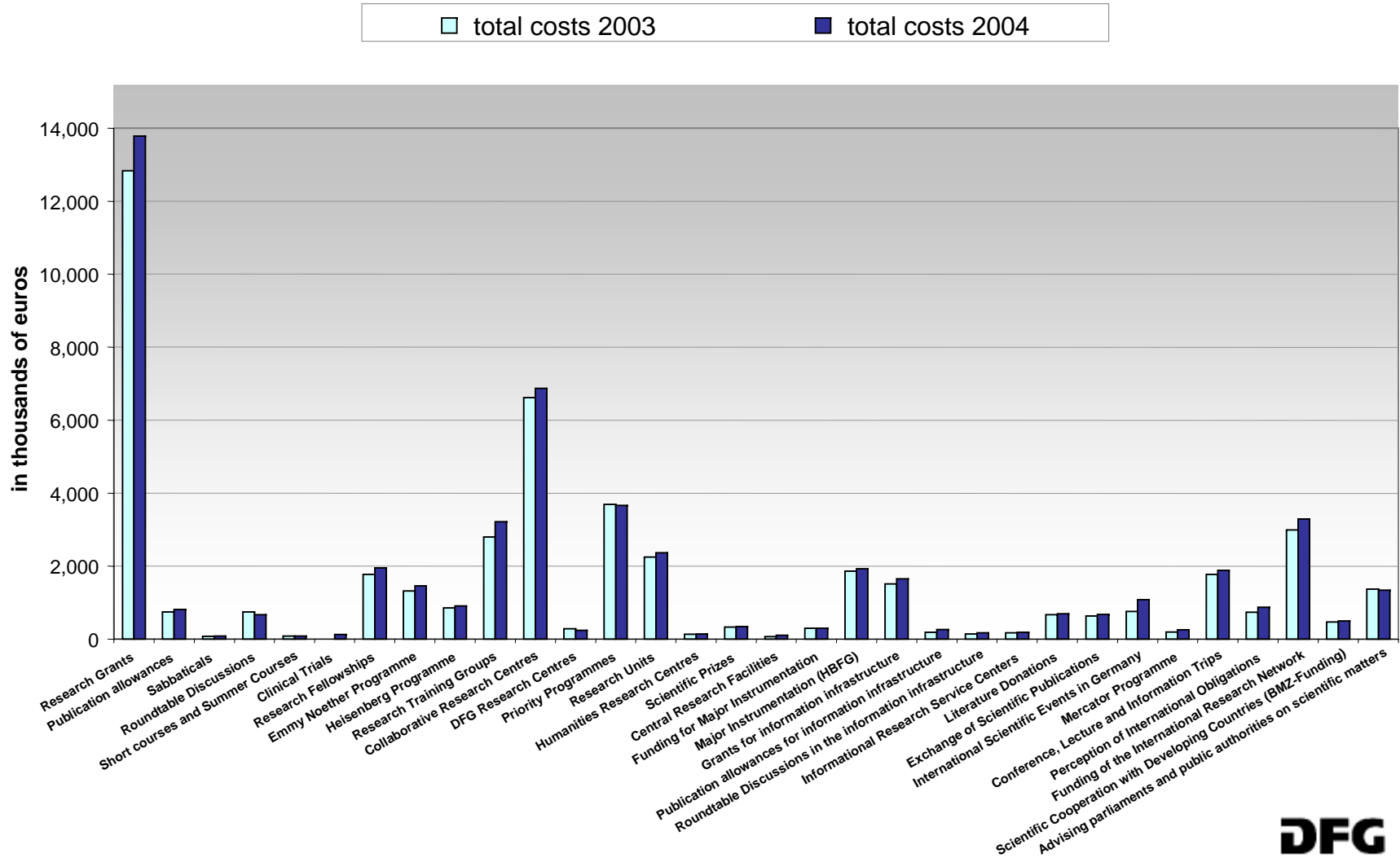
# Detailed Reports on Products

## Costs of external products, January to December 2004



# Detailed Reports on Products

Annual comparison of external products, January to December 2003 and 2004



# Detailed Reports on Products

**Here:  
Table regarding an  
external product**

## Direct costs

- direct personnel costs
- direct material costs

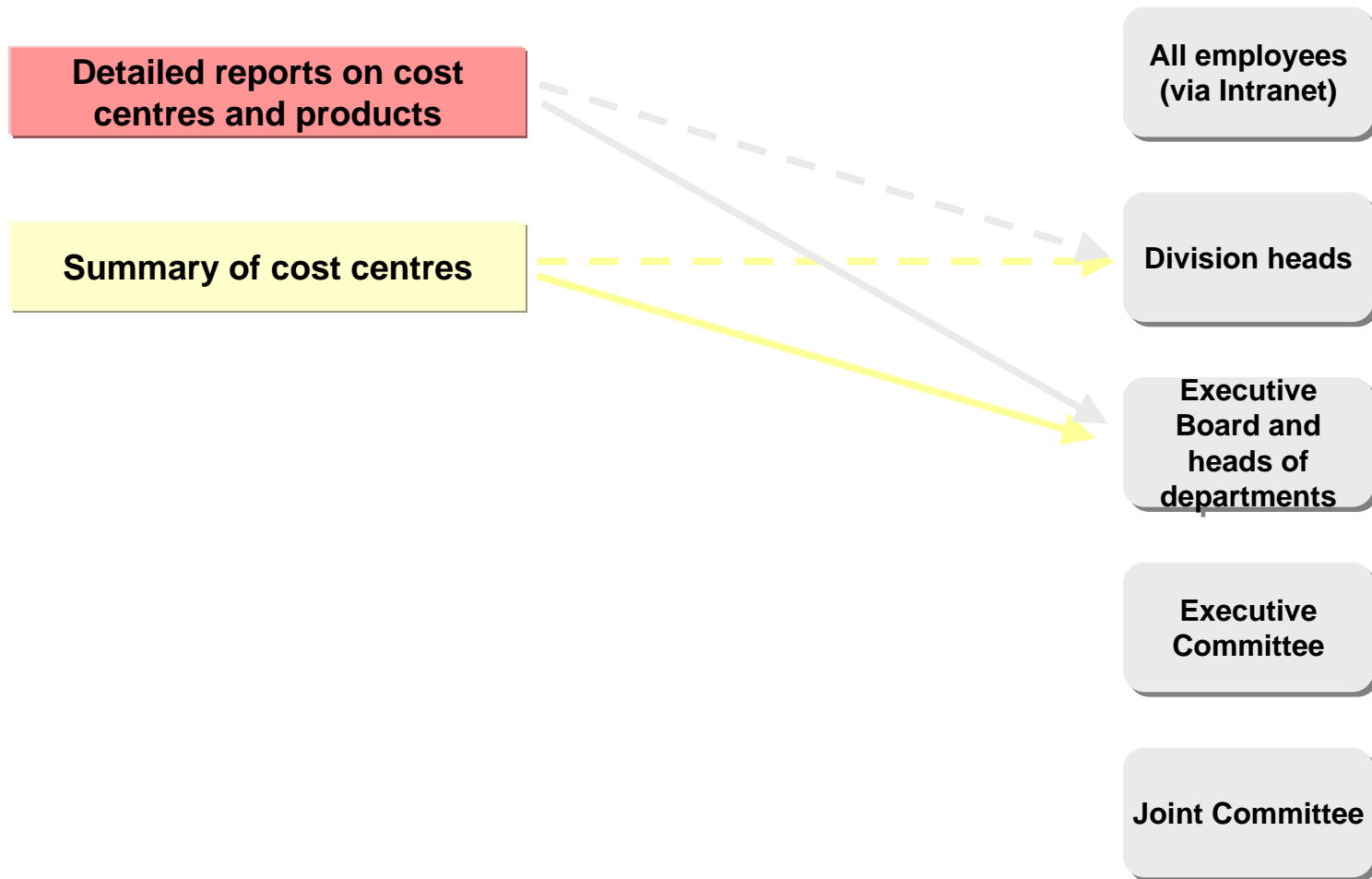
## Allocation of indirect costs

## Statistical information

- employed personnel in months
- ratios direct costs / indirect cost

Text	Buchung
DFG <b>BAB 820303 Schwerpunktprogramme</b> M1 Angefordert von: Wilhelm, Beate RWPerioden [] 9/2004 - 12/2004 26.04.2005 13:32:19 Seite: 1	
PRODUKTBERICHT	
EINZELKOSTEN	
PERSONALEINZELKOSTEN	
Personaleinzelkosten	272.290,74
<b>Summe Personaleinzelkosten</b>	<b>272.290,74</b>
SACHEINZELKOSTEN	
Reisekosten	34.602,58
Sonstige Einzelkosten	376,26
<b>Summe Sacheinzelkosten</b>	<b>34.978,84</b>
<b>SUMME EINZELKOSTEN</b>	<b>307.269,58</b>
GEMEINKOSTEN	
Belastung durch Hauptkostenstellen	985.724,91
<b>GESAMTKOSTEN DES PRODUKTS</b>	<b>1.292.994,49</b>
Nachrichtlich:	
STATISTISCHE GRÖSSEN	
Personenmonate	63,44
Kennzahlen z. Verrechnung Haupt - KST	272.290,74
KOSTENVERHÄLTNIS	
Personaleinzelkosten / Einzelkosten (%)	88,62
Sacheinzelkosten / Einzelkosten (%)	11,38
Einzelkosten / Gesamtkosten (%)	23,76
Selektion: Währung EUR,	

## Regular Reports Used in Cost-Performance Auditing

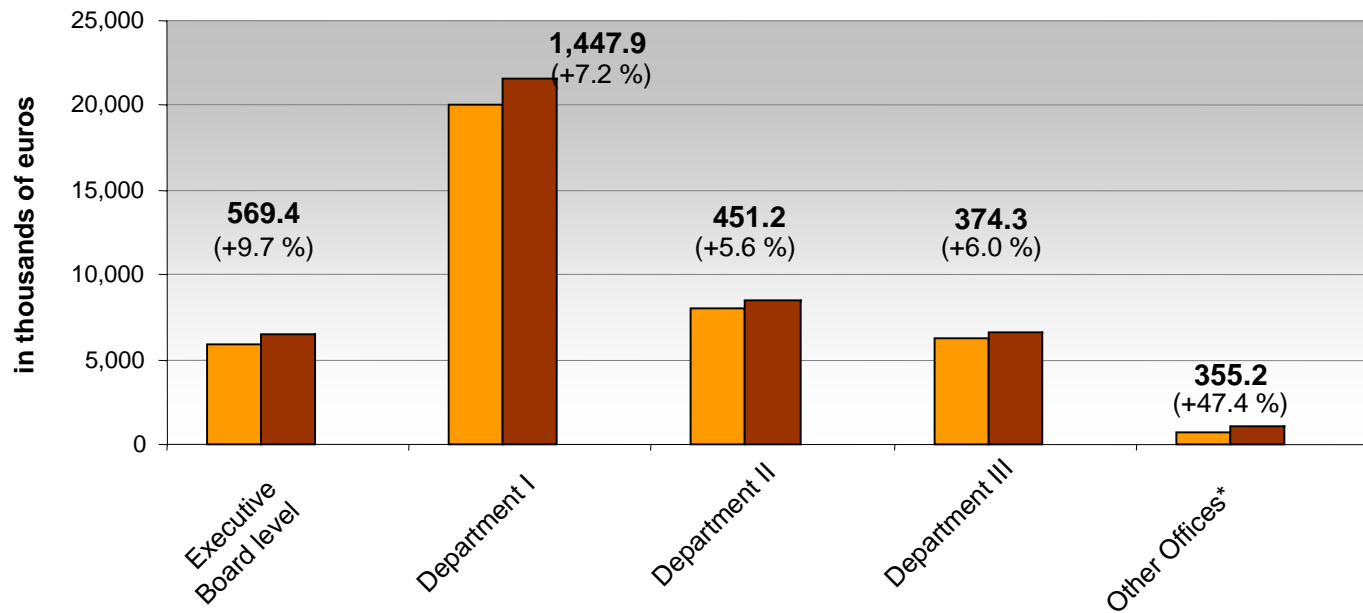




# Summary of Cost Centres

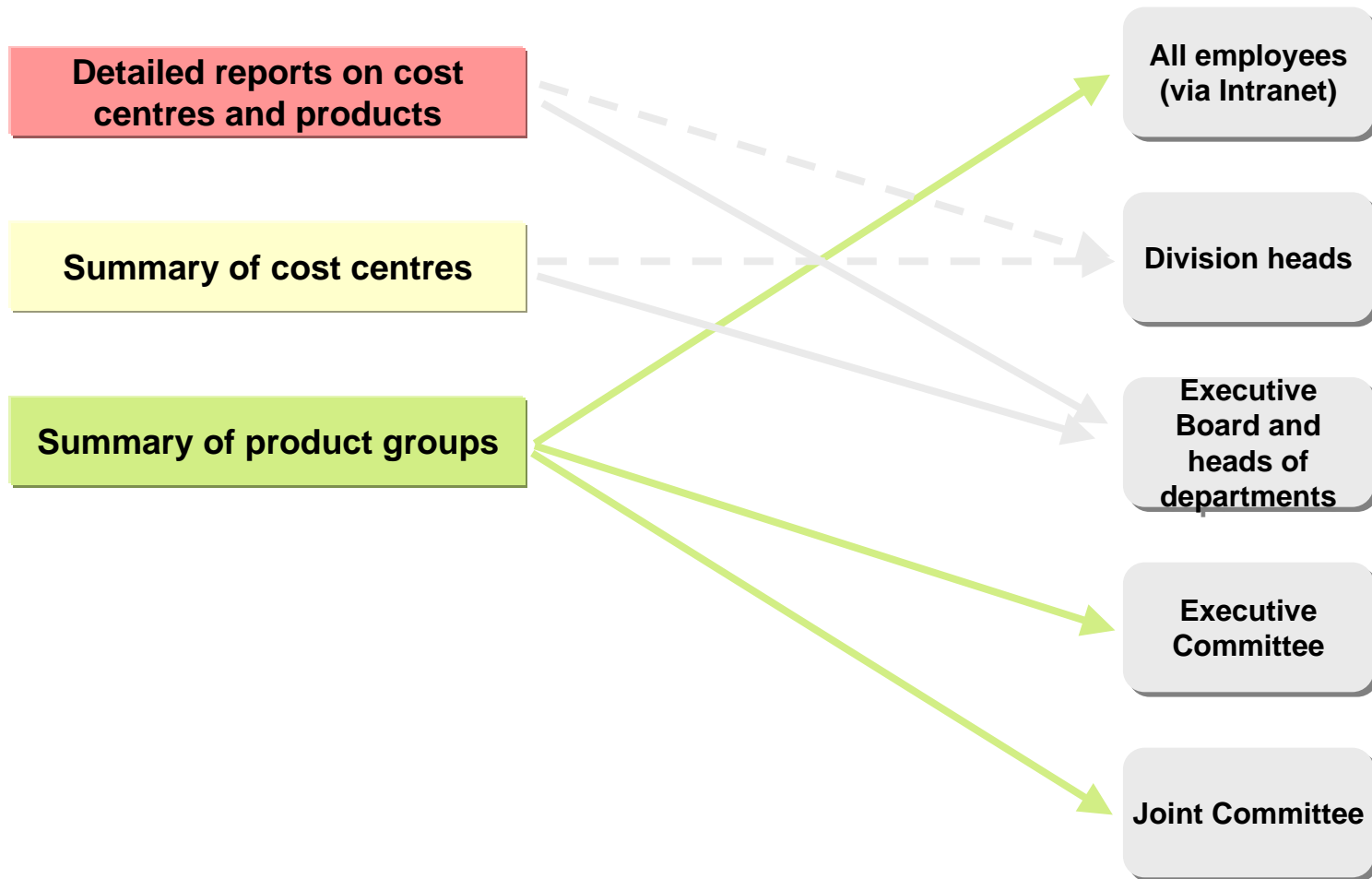
## Annual comparison of costs by department

■ total costs without cost allocation 2003 ■ total costs without cost allocation 2004 x,xxx.x difference in thousands of euros

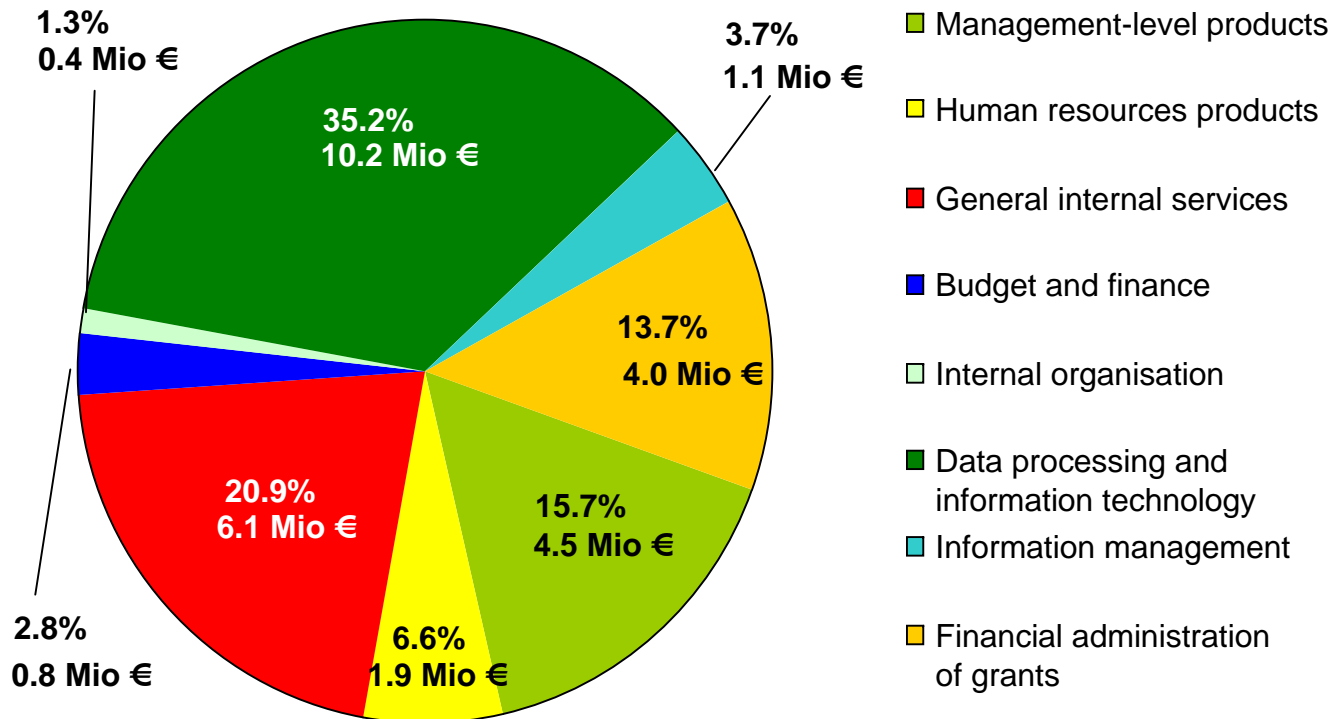


\* Berlin, Moscow and Washington Offices, and the Sino-German Center in Beijing

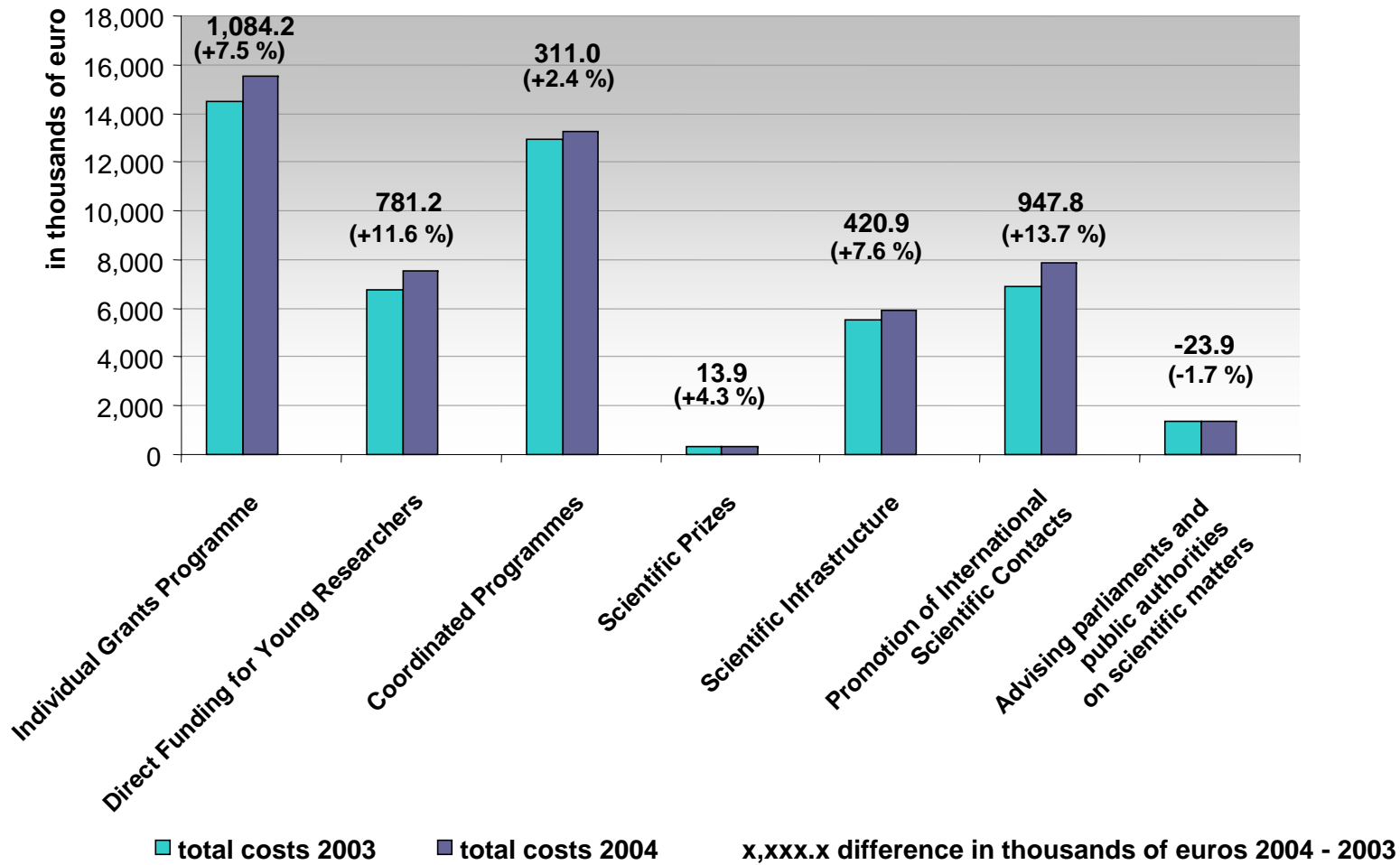
## Regular Reports Used in Cost-Performance Auditing



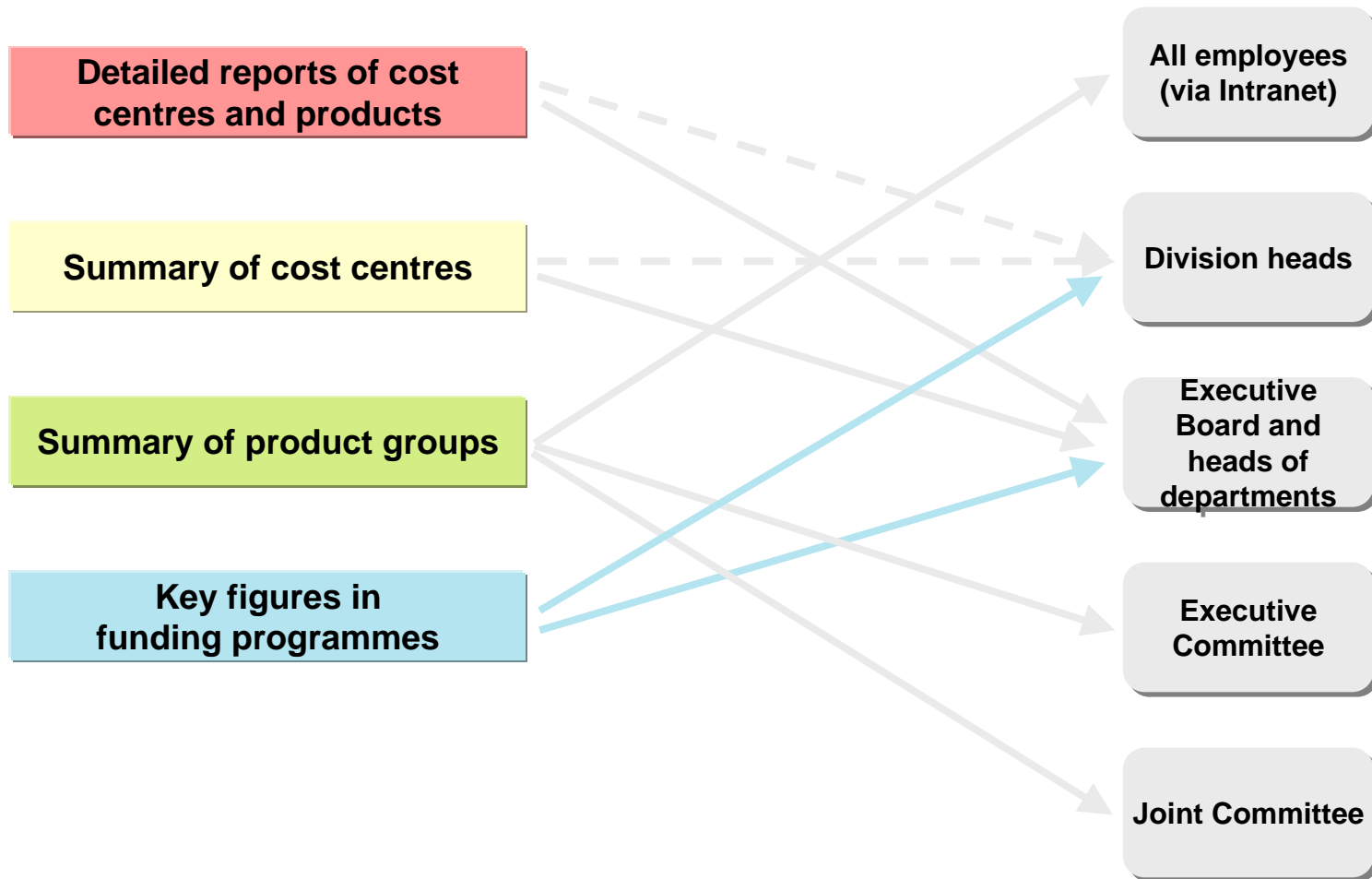
## Summary of Product Groups



# Annual Comparison of Product Groups



## Regular Reports Used in Cost-Performance Auditing



## Management Ratios of Funding Programmes

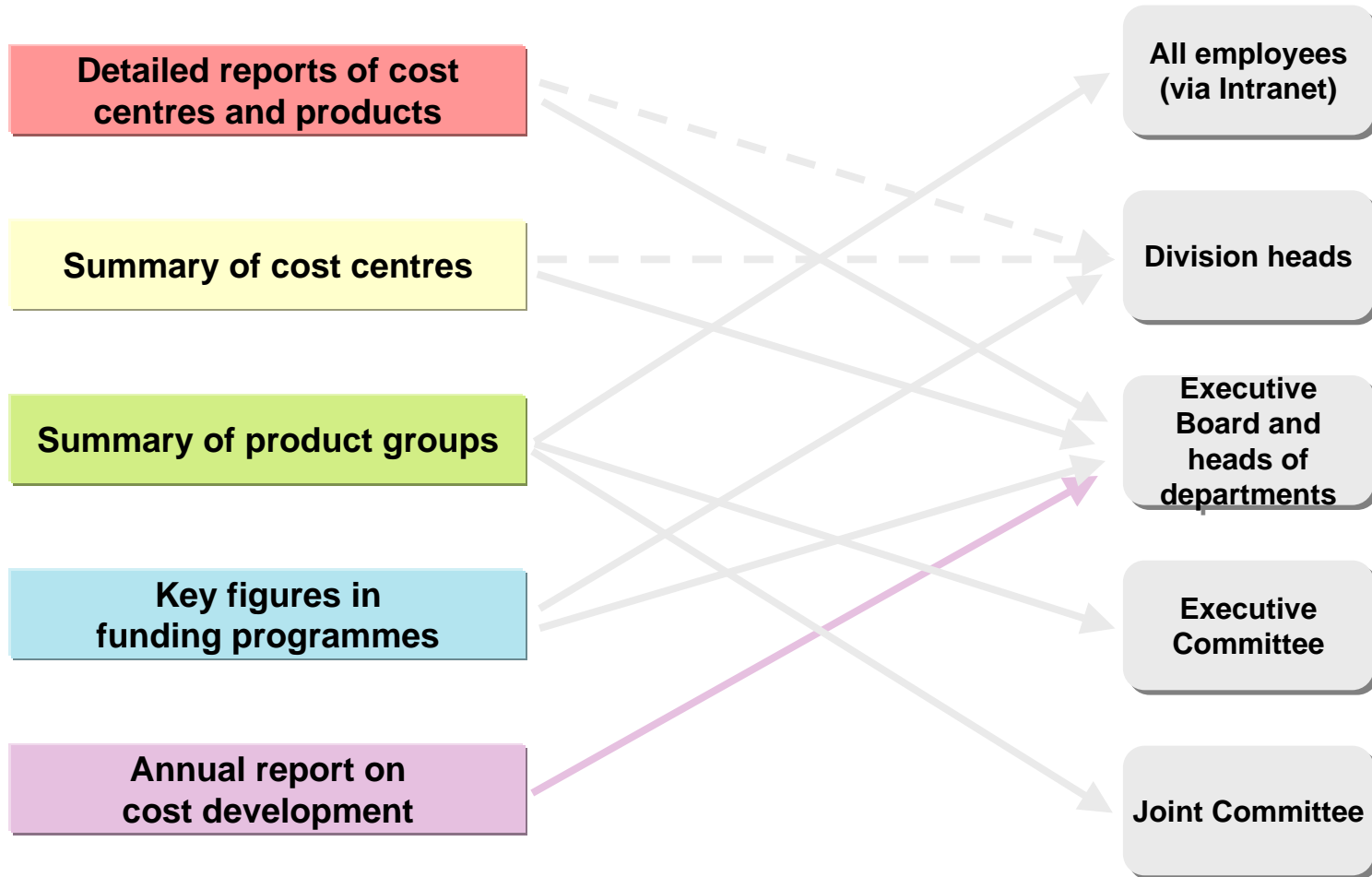
### **Commented evaluation of the following ratios:**

- **administrative costs per granted proposal**
- **administrative costs per awarded euro**
- **administrative costs per presented proposal**
- **administrative costs per proposed euro**

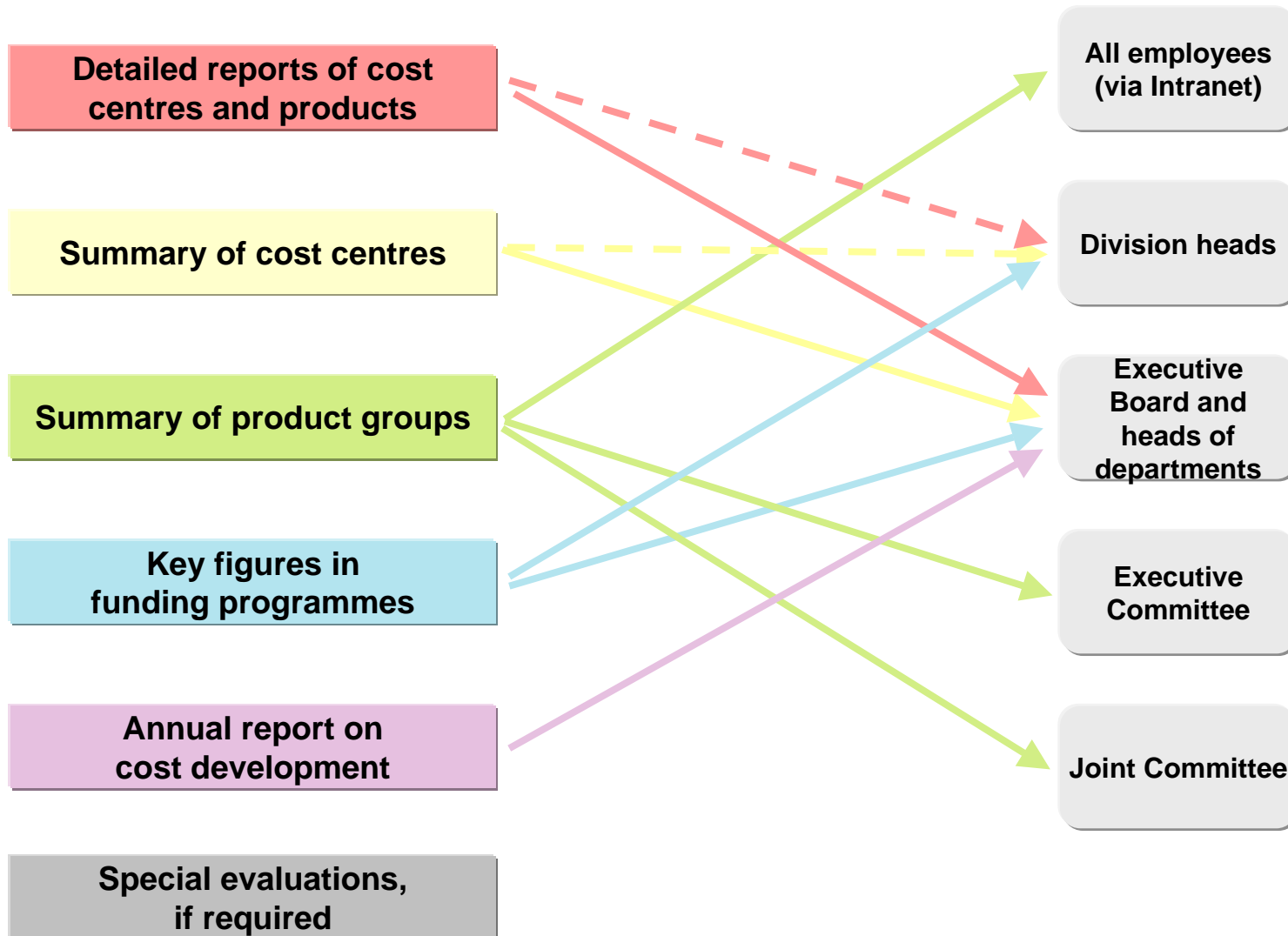
### **Example about the administrative costs per granted euro :**

- **Individual Grants Programme: 3.2 cents per euro awarded**
- **Research Fellowships: 13.8 cent per euro awarded**
- **Collaborative Research Centres: 1.6 cents per euro awarded**

## Regular Reports Used in Cost-Performance Auditing



## Regular Reports Used in Cost-Performance Auditing







## Topics of the Presentation

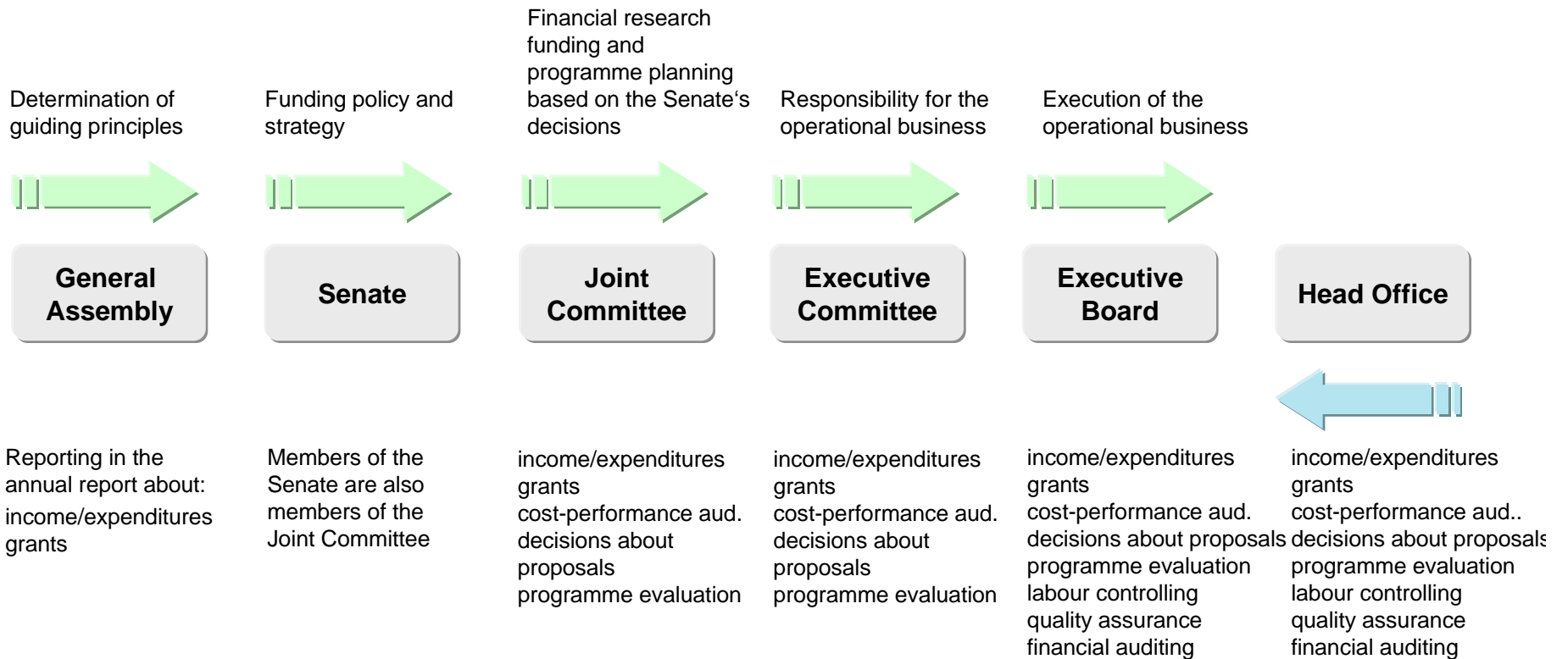
1. Development and aims
2. Elements of cost-performance auditing
3. Reporting
4. **Integration into the controlling system**

## Controlling at the DFG

Budget	income / expenditure grants
Cost-Performance Auditing	monitoring of costs figures for operational planning
Information Management	proposal receipt decision about proposals per funding programme duration of the processing of proposals consumption of funding budgets of the subject areas programme evaluations ...
Human Resources	figures about human resource allocation
Quality Assurance and Programme Development	auditing of the adherence to the funding guidelines, development of new funding programmes
Internal auditing	financial and operational auditing


# The DFG's Controlling Cycle

## Presetting of the operation framework



Reporting

**DFG**



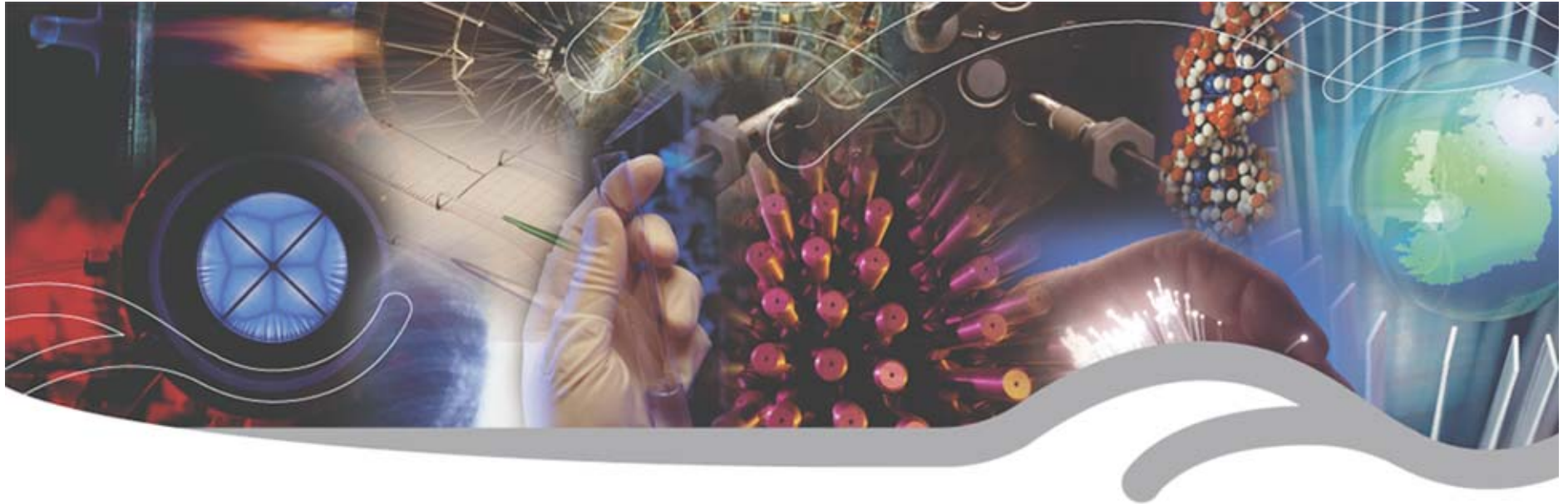
Deutsche  
Forschungsgemeinschaft  
German Research Foundation

**Thank you for your attention!**

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53175 Bonn, Germany  
Tel. 0228/885-2228  
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▶ Infos under [www.dfg.de](http://www.dfg.de)

**DFG**



# Science Foundation Ireland Annual Overhead Investment Plan

John Wilkinson  
Accountability Workshop  
2 June 2005



# Background



- **Universities giving significant % of overheads back to PIs for direct costs (PI “slush funds”)**
- **Little coherent, strategic planning for investment in research infrastructure & services**
- **HR & Financial Systems for research particularly weak**
- **VPs Research poorly empowered**



# Annual Overhead Investment Plan - 2004

A simple 5-page strategic plan for investment of 2005 SFI overhead contribution



## Contents

- **Nominated AOIP Responsible Official (VP research)**
- **Nominated Advisory Group of PIs, international experts**
- **Strategic Investment Plan (including metrics for success)**
- **Overhead costs calculations**
- **Research services details & commitments**

# Annual Overhead Investment Plan - 2004



## “Reverse Site Visit” November 2004

- **Presentation by VPs Research**
- **Q&A by Review Panel**

## Review Panel

- **Pat Fottrell**  
Chair of Science Foundation Ireland Board
- **Jackie Hunter**  
Senior Vice President, GlaxoSmithKline
- **Erich Bloch**  
Principal, Washington Advisory Group
- **Martina Newell-McGloughlin**  
Director, University of California Biotech. Research & Ed. Program
- **Lynn Chronister**  
Associate Vice Chancellor for Research Administration, UC Davis
- **John Wilkinson**  
*then of the* National Science Foundation, USA
- **William Harris**  
Director-General, SFI, also participated in the Q&A sessions.





# Some Best Practices



- Overhead investment part of **longer term strategic planning** (not just year by year)
- Leverage overhead contribution with **private cost-sharing**
- Leverage overheads funds through **internal cost-sharing commitments from departments, etc** (optimizing value for money from AOIP)
- **No two-tier system** of SFI researchers and “others”
- Combine investment with **redesign of service departments** to account for research needs



## Some Consequences so far



- **VPs of Research significantly more empowered**
- **New focus on quality of service for PIs (e.g. TCD PI Meetings with Service Dept.s)**
- **Overheads no longer being used for PI “slush funds”**
- **Greater awareness & focus on opportunities of private matching funds**



## Some Lessons Learned (SFI)



- **“Reverse Site Visit” good for advice on general approach: investment, prioritization, effective research service operations, etc**
- **Need process that gives more information and analysis of “true” overhead rate (i.e. detailed costing of hosting SFI research)**
- **Need to encourage longer term investment planning**



# Overhead Investment Plan – 2005



## Overhead contribution for 2006

- based on Research Body direct cost claims to SFI in 2005

## New Overhead Rate Calculation

- Institutions provide detailed costs of hosting SFI-funded research
- Indirect cost calculations “audited”
- New overhead “baseline” rate determine based on audit and SFI budget

## Multi-year “Overhead Investment Plan

- Detailed plan for 2006 (based on new “baseline” overhead rate)
- Outline plan / investment priorities for 2007-2009
- Progress reviewed annually; contribution adjusted for new awards, etc

## Reverse site visit

- Panel with expertise in running campus research services, etc
- Give advice/recommendations on overhead investment plans & priorities
- Can recommend enhanced overhead rates for best performers

# Overhead Investment Plan – 2005

## Timetable



- **June 30: Issue new OIP Call**  
allow time for consultation with research community
- **September 30: Submission of Indirect Cost Calculations**  
to coincide with Sept submission of direct cost claims
- **October 15: SFI Issues new Overhead Rate**  
late in year to allow for optimal spend of remaining 2005 funds
- **October 30: Submission of 2005 OIPs**
- **November 10: OIP Panel Review**
- **November 31: SFI decision on overhead awards for 2006**



# Overhead Costs in Research Grants

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“Meeting the Challenge”

Deutsche Forschungsgemeinschaft

June 1 and 2, 2005

Charlie Zeigler – National Science Foundation

[czeigler@nsf.gov](mailto:czeigler@nsf.gov)

USA – 703-292-4578



# Basic Considerations All Costs

---

- Reasonable
- Allocable
- Necessary
- Consistently Treated
- Accepted Accounting Practices
- Institutional Policies
- Terms & Conditions of award agreement



# Reasonable

---

- Nature of goods or services, amount involved, prudent person, circumstances prevailing
- Generally recognized for operation or performance
- Requirements imposed by law, arms length transaction, due prudence





# Allocable

---

- Goods and service assigned in proportion to benefit received (IDC or Direct)
- Incurred solely to advance work under a sponsored agreement (Direct)
- Necessary to overall operations and assignable in part to sponsored projects (IDC)
- Costs allocable to one agreement may not be shifted to another to meet deficiencies or overruns.



# Limitations

---

- Applicable credits - used to reduce costs
  - discounts, rebates, indemnities, accounting adjustments (educational discounts and recharge centers)
- Unallowable costs - segregated - Laws & regulations of country, policies of organization, Cost Principles, and Terms & Conditions (T&C) of award



# Unallowable Costs

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- Entertainment, social activities, membership in clubs golf courses, alcohol, interest, bad debt expense, lobbying, overruns from other awards, reorganization costs, certain legal costs (fines penalties, defending against Federal claims).
- May not be claimed as Direct or IDC and may bear share of IDC cost (DC base)



# Direct Costs

---

- Identified w/ a specific sponsored project
- Easily assigned w/ high degree of accuracy
- Consistently treated in like circumstances
- Examples – Salaries & fringe benefits – time & effort reports, Materials and supplies – purchase order or requisition from stock, research platforms – actual hourly use log.



## Indirect Costs (F&A)

---

- Those costs incurred for common or joint benefit that cannot be readily identified specifically with a particular sponsored project or other institutional activity
- Facilities, operation & maintenance, legal, organizational, human resources, Executives & Directors, procurement, security, Sponsored projects administration



# Basic Theory of IDC

---

- Total Costs of Organization from Financial Statement by expense line item
- Remove unallowable costs (include in DC base – salaries, occupy space, or benefit from IDC)
- Segregate costs as direct base or indirect pool
- Divide indirect cost pool by the direct cost base
- Fraction yields % rate – applied to direct costs on an individual award = recovery of portion of IDC



# Simple IDC Calculation

---

■ Expense		Direct	Indirect
■ S&W	1000	250	
■ Supplies		500	
■ O&M		250	
■ Facilities		250	
■ Computers	500	250	
■ Subtotal	2000	1000	= 50%



# Entity Lifecycle

---

- New Organization – Institute or Facility established single funding source pays all costs as direct costs
- Attracts funding from other sources – original funding source pays base costs other funders pay incremental costs
- As funding grows establish IDC rate or subsidize other funders sponsored projects
- IDC rate allocates base costs to all funding source proportionately





# Direct Cost Base

---

- Salaries and wages (+ or - fringe benefits)
- Total Direct Costs (TDC)
- Modified TDC – exclude capital equipment, subcontracts > \$25K, and pass through funds (participant support and scholarships, tuition remission)
- Distorting items do not incur IDC as per salaries and wages – can cause fluctuations in IDC rate over time if included



# Direct Cost Base

---

- Important to include all direct cost activities of an organization
- Museum – collections, curation, exhibits, traveling exhibits, Imax theatre, promotion, public relations, membership services, fundraising, education, outreach
- General rule – if it generates income it is a direct cost activity



# Quick Calculation

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- From Financial statements
- Operations & Maintenance
- General & Administrative
- Divided by:
- All other costs



# Single Tier Rate

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- Simple IDC pool divided by DC base
- Single line of business or similar costs for multiple lines (departments)
- Straight forward organizational structure
- Includes fringe benefits in IDC pool or DC base in proportion to salaries



# Fringe & Overhead

---

- Fringe benefits allocated based on salaries (may have different classes or employees – part-time, full-time, professional professorial with different fringe benefit structures and hence different rates)
- Overhead or IDC allocated based on MTDC or total cost input



# Multiple IDC Rates

---

- More than one line of business with significantly different cost structures
- Headquarters or G&A rate allocated on total direct costs (Ex Dir, HR, Purchasing, Legal)
- Different IDC pools and bases set up by department or business unit
- Examples – Education, Biomedical lab, Telescope, High Energy Physic lab
- Common in business – profit or loss by division



# University Rates

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- Research
- Instruction
- Other sponsored projects
- Student services or other institutional activities
- Specific labs or departments



# Indirect Cost – Allocation Base

---

- Building / interest – functional use of space by building
- Equipment depreciation – space use by department
- O&M – space use by building
- G&A – MTDC
- Department Admin – MTDC by Dept.
- Sponsored Project Admin – MTDC
- Library – users – faculty & graduate student
- Student services – ratio grad to total student





# Intermediate Allocations

---

- Building, interest, depreciation, and O&M are allocated to the G&A pool
- These costs are then allocated to Department Admin, Sponsored Projects Admin, Library and applied to
- DC base for Research, Instruction, other sponsored projects, and other institutional activities



# University Rates Long form

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- Simplistic overview – more complex in actual calculation
- Department of Health & Human Services
- Division of Cost Allocation
- Review Guide for Additional detail



## IDC rate high or low?

---

- Allocation base – S&W or TDC?
- Types of costs charged as direct or indirect
- Type of organization – state sponsored, non-profit, for-profit, production
- Business they are in – think tank vs. biomedical research?
- Direct cost activities vs. research?