

The image shows the letters 'DFG' in a bold, white, sans-serif font, set against a blue background with a blurred, bokeh effect of light spots. The letters are slightly tilted and appear to be floating or attached to a surface.

DFG

# Evaluation in Research Funding Agencies

Results of the ESF MO Forum on Research Evaluation

# Focus of the Forum

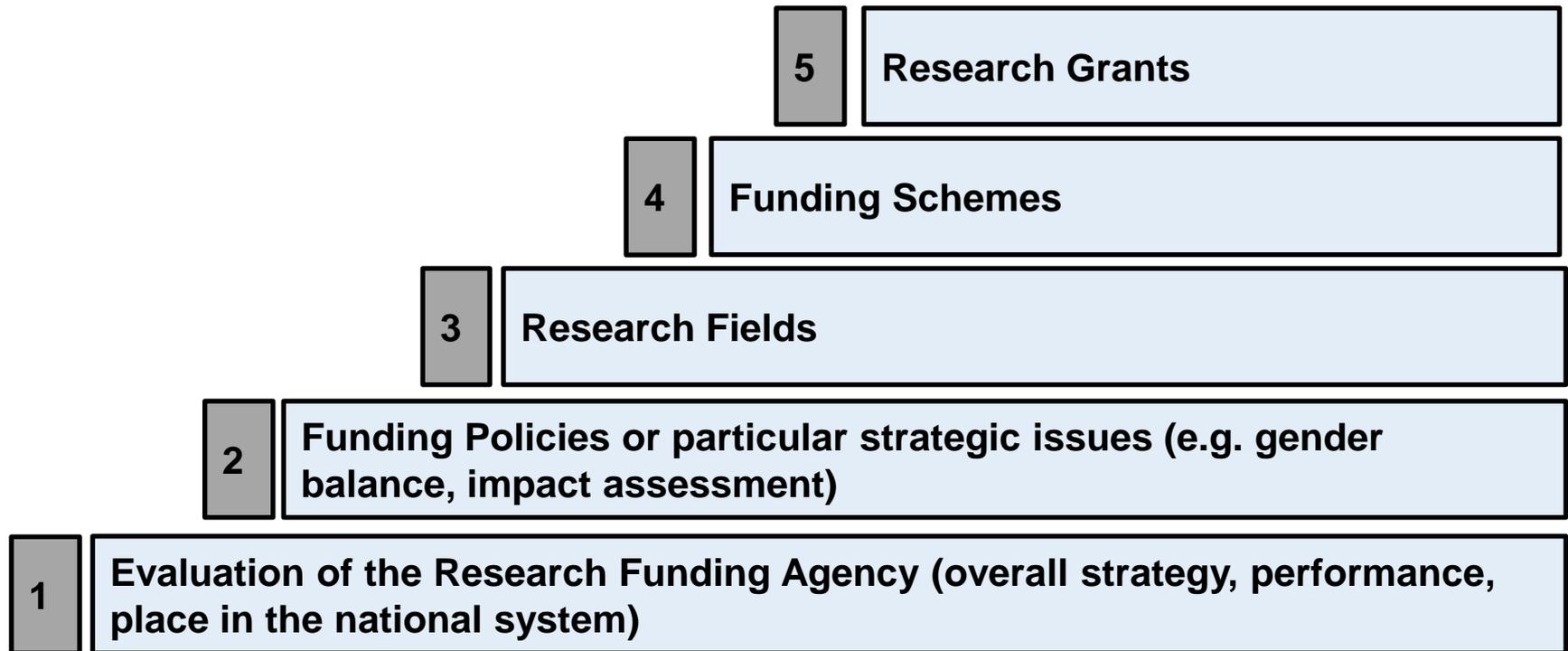
- ▶ objective: exchange of practices and experiences
- ▶ focus on the practices of evaluation (not: on the theory of evaluation or the sense/non-sense of evaluation)
- ▶ focus on ex-post evaluation (not: on ex-ante evaluation/ evaluation of single projects)
- ▶ outcome: mapping exercise and report

# Structure of the presentation

1. Five Levels of Evaluation
2. Evaluation of Funding Agencies
3. Evaluation of Funding Policies or strategic issues
4. Evaluation of Research Fields and Disciplines
5. Evaluation of Funding Schemes
6. Ex-Post Evaluation of Research Grants
7. Some Conclusions



# Five levels of Evaluation



# Structure of the presentation

1. Five Levels of Evaluation
2. Evaluation of Funding Agencies
3. Evaluation of Funding Policies or strategic issues
4. Evaluation of Research Fields and Disciplines
5. Evaluation of Funding Schemes
6. Ex-Post Evaluation of Research Grants
7. Some Conclusions



# Level 1: Evaluation of Funding Agencies

- ▶ Funding Agencies are part of the national research and innovation system
- ▶ they are occasionally evaluated to assess whether they fulfil their role in this ecosystem or whether they work appropriately
- ▶ two models:
  - panels of established scientists
  - consortium of science policy or evaluation experts selected after a call for tender
- ▶ mostly: static snapshot at a given time, to be repeated in the future (next evaluation monitoring)

**Table 1.** List of case studies presented in this chapter

Funding agency	Year of publication
German Research Foundation (DFG)	1999
Research Council of Norway (RCN)	2001
Austrian Science Fund (FWF)	2004
Netherlands Organisation for Scientific Research (NWO)	2008
Swedish Research Council (SRC)	2008

# Structure of the presentation

1. Five Levels of Evaluation
2. Evaluation of Funding Agencies
3. Evaluation of Funding Policies or Strategic issues
4. Evaluation of Research Fields and Disciplines
5. Evaluation of Funding Schemes
6. Ex-Post Evaluation of Research Grants
7. Some Conclusions



## Level 2: Funding policies or strategic issues

- ▶ reasons to go into this field
  - accountability and validation
  - strategic planning
  - policy and advocacy
- ▶ examples:
  - Gender issues in science (VR, DFG, SNF, ...)
  - Impact Assessment (HRB, UK MRC, ERiC, UK AHRC,...)
  - *Internationalisation, Open access policies, ...*
- ▶ depend on the „mission“ of the agencies (e.g. Gender)
- ▶ impact is growing field

# Structure of the presentation

1. Five Levels of Evaluation
2. Evaluation of Funding Agencies
3. Evaluation of Funding Policies or strategic issues
4. Evaluation of Research Fields and Disciplines
5. Evaluation of Funding Schemes
6. Ex-Post Evaluation of Research Grants
7. Some Conclusions



## Level 3: Research fields and disciplines

- ▶ record quality of state of field at a given time
- ▶ rationale:
  - to learn how research fields perform and
  - to learn how to better support them in order to raise their international standing
- ▶ often used to inform universities and/or government
- ▶ mostly combination of qualitative and quantitative approaches
- ▶ mostly they take into account the international situation/perspective,
  - but rarely have an international comparative design (exception: VR and Academy of Finland)
- ▶ examples: RCN, Academy of Finland, VR, FAS, UK EPSRC, US National Academies

# Structure of the presentation

1. Five Levels of Evaluation
2. Evaluation of Funding Agencies
3. Evaluation of Funding Policies or strategic issues
4. Evaluation of Research Fields and Disciplines
5. Evaluation of Funding Schemes
6. Ex-Post Evaluation of Research Grants
7. Some Conclusions



## Level 4: Funding Schemes

- ▶ two-step survey:
  - information on funding schemes
  - information on the evaluation of these funding schemes within the last 5 years
- ▶ goal:
  - to identify core areas of evaluation activities
  - to identify commonalities and differences

Table 3. Participation in the survey

Information on funding schemes	Additional information on evaluation
Austria – FWF	•
Belgium – FWO	•
Czech Republic – GAČR	
Germany – DFG	•
Hungary – OTKA	
Ireland – SFI	
Ireland – HRB	•
Luxembourg – FNR	•
Netherlands – NWO	•
Norway – RCN	•
Poland – FNP	•
Sweden – SRC	•
Sweden – FAS	•
Switzerland – SNSF	•
Turkey – TÜBITAK	
UK – BBSRC	•
UK – ESRC	•

# Level 4: Funding Schemes

## Identification of the Funding Modes

<b>INSTRUMENTS</b>	<b>AT – FWF</b>	<b>BE – FWO</b>
<b>Responsive mode</b>	Individual Projects	Research Project Research Grant
<b>Career development</b>	Erwin-Schrödinger Lise-Meitner Elise-Richter Programme Hertha-Firnberg Programm Doktoratskollegs	PhD & Post-Doc Fellowships Special PhD Fellowships for people in full employment Clinical PhD Fellowships Senior Clinical Investigator Mobility Allowance Odysseus (Brain gain programme) Visiting postdoctoral fellowships
<b>Centres of excellence</b>	Special Research Programmes National Research Networks	Scientific Research Network
<b>Thematic programmes</b>		
<b>Knowledge transfer; cooperation with industry; commercialisation of research results</b>	Translational-Research Programme	Scientific awards
<b>Infrastructures/ Instrumentations</b>		Big Science (support for research at international research facilities) Scientific Instrumentation (as part of the standard research project applications)
<b>Others</b>		Travel grants Bilateral exchange programmes ESF Research Networking programmes EUROCORES International coordination action Scientific meetings in Belgium International conferences and seminars

# Level 4: Funding Schemes

## Identification of Seven Funding Modes

**Table 4.** MO funding schemes by funding modes

Schemes within 7 funding modes	AT – FWF	BE – FWO	CZ – GAČR	FI – AKA	DE – DFG	HU – OTKA	IE – SFI	IE – HRB	LU – FNR
Responsive mode	1			1				1	
Career development	1	1		1	2			1	
Centres of excellence	1			1	1				
Thematic programmes				1					1
Knowledge transfer; cooperation with Industry									
Infrastructures									
Others				2					
Scheme evaluations	3	1	no evaluation of schemes	6	3	no evaluation of schemes	no evaluation of schemes	2	1

# Level 4: Funding Schemes

## Identification of Seven Funding Modes

NL – NWO	NO – RCN	PL – FPS	SE – SRC	SE – FAS	CH – SNSF	TR – TÜBITAK	UK – BBSRC	UK – ESRC	Total
					1		1	1	6
2		1	1	1	2			1	14
	1		1	1					6
	1		1	1	1				6
									0
			1						1
	1								3
2	3	1	4	3	4	no evaluation of schemes	1	2	36

# Level 4: Funding Schemes

## Main questions

1. Evaluation questions
2. Organisational set-up/particularities of the evaluation
3. Evaluation methodologies employed
4. Main findings and recommendations
5. Indicators
6. Benchmarking of findings
7. Utilisation and follow-up of evaluation

as well as: frequency of evaluations, experiences and learning processes during the project, costs, duration of the project, resources employed.

# Level 4: Funding Schemes

## Aggregated Findings; example „Research Careers“

**Table 6.** Evaluation of “research careers” funding schemes

<b>1. Methodologies</b>	Desk research; document, application and award analysis; output analysis, (online) questionnaires to grant holder, interviews, focus groups
<b>2. Evaluation question</b>	<ul style="list-style-type: none"> <li>• Did the programme reach the objectives (outputs, outcomes, impacts)?</li> <li>• Are the objectives of the scheme still valid?</li> <li>• Rationale for funding</li> <li>• Useful to continue?</li> <li>• Recommendations for improvements</li> </ul>
<b>3. Findings</b>	Mostly positive answers to the respective evaluation questions Objectives not clearly formulated and difficult to evaluate Concrete recommendations (duration, flexibility, transparency, efficiency, networking)
<b>4. Follow-up</b>	Address the study’s key findings (“lessons learnt”), implement recommendations (in two cases not yet clear)
<b>5. Cost and duration</b>	Cost: not indicated/± 25000 € (external) Duration: 4 months (evaluation only) – 2 years (staff time)
<b>6. Indicators</b>	Quantitative and qualitative <ul style="list-style-type: none"> <li>• Scientific/other output and impact, career development, cooperation,</li> <li>• Satisfaction of scheme, job satisfaction</li> </ul>
<b>7. Benchmarks</b>	Variable (yes – national, international/no/international perspective but no real benchmarking)
<b>8. Positive points</b>	<ul style="list-style-type: none"> <li>• Expertise and external perspective of evaluation team</li> <li>• Prove efficiency of instrument</li> <li>• Good responses from surveys</li> <li>• Multidimensional insight through mix of methodologies (and indicators)</li> <li>• Findings and follow-up</li> </ul>
<b>9. Negative points</b>	<ul style="list-style-type: none"> <li>• Include scientometrics</li> <li>• Difficult to track former applicants (à institutionalise network)</li> <li>• International benchmarks would have been helpful</li> <li>• Include all stakeholders in survey</li> <li>• Difficult to evaluate isolated scheme</li> </ul>
<b>10. Regularity</b>	Variable (occasionally/1-2 every year/every 4-7 years)

## Level 4: Funding Schemes

### General remarks on mapping exercise

- ▶ Funding Schemes are comparable → potential for comparative studies
- ▶ different terminology among agencies
- ▶ no organisation considered it was conducting too much evaluation
- ▶ difference in size, age and structure of an organisation has an impact on evaluation practices
- ▶ some schemes have been developed without consideration beforehand of how to measure success.
- ▶ different objectives of the agencies are reflected on evaluation questions asked and methodology used (e.g. purely scientific vs. societal impact)
- ▶ showing impact is becoming more important

# Structure of the presentation

1. Five Levels of Evaluation
2. Evaluation of Funding Agencies
3. Evaluation of Funding Policies or strategic issues
4. Evaluation of Research Fields and Disciplines
5. Evaluation of Funding Schemes
6. Ex-Post Evaluation of Research Grants
7. Some Conclusions



## Level 5: Ex-post evaluation of Research Grants

### Use of final reports for evaluative purposes

- ▶ reports are collected for a variety of reasons, mainly for programme management purposes → can also be used for evaluative purposes
- ▶ contents: abstract, detailed report on scientific work, staff (in different degree of detail), publication list, PhD/master's thesis, other outputs, collaboration with national and international partners
- ▶ new trends and problems:
  - electronic availability – possibility to process the data
  - publication on website of funding agency
  - quality of final reports is often poor – this is problematic for evaluative use
  - more dimensions asked in the final report (e.g. outcomes and impacts)
  - timing and set-up of a project and its results may differ by funding source – attribution problems

# Structure of the presentation

1. Five Levels of Evaluation
2. Evaluation of Funding Agencies
3. Evaluation of Funding Policies or strategic issues
4. Evaluation of Research Fields and Disciplines
5. Evaluation of Funding Schemes
6. Ex-Post Evaluation of Research Grants
7. Some Conclusions



# General Conclusions and Final remarks

- ▶ overview of evaluation practices shows the variety of approaches
- ▶ overview in which kind of evaluation agencies are involved
- ▶ evaluation is becoming increasingly professionalised within the agencies and in the methodologies and data collection that is employed
- ▶ some hints on „good practices“
- ▶ activities are dependend on the data available
- ▶ transnational evaluation studies possible?



# Thank You for Your Attention

## Further Information

- ▶ on the DFG: [www.dfg.de](http://www.dfg.de)
- ▶ on DFG-funded projects: [www.dfg.de/gepris/](http://www.dfg.de/gepris/)
- ▶ on more than 17,000 German Research Institutions: [www.dfg.de/research\\_explorer/](http://www.dfg.de/research_explorer/)