

# Mapping the funding portfolio of research funding agencies

A pilot study among 5 funding agencies

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# Outline

1. Participants of pilot mapping exercise
2. Schemes / instruments
3. Methodology
4. Questions asked
5. Conclusion
6. Some literature

# Participants

1. Austria: FWF
2. Germany: DFG
3. Luxembourg: FNR
4. Turkey: TUBITAK
5. UK: BBSRC

# Schemes / instruments

1. Responsive mode (Projects and programmes)
2. Career development instruments
3. Centres of excellence
4. Thematic Programmes
5. Knowledge transfer / Cooperation with industry
6. Infrastructure
7. Others

# Methodology

1. Overview of instruments via external information
2. Confirmation of information on instruments by organisation
3. Focus on 7 most important instruments
4. Written questions on evaluation practices
5. Preliminary conclusions (based on 5 organisations)
6. No interviews at this stage (to be done later)
  - Clarify objectives and intervention logic
  - Understand respective research environments
  - Understand organisational specificities and procedures
  - Reach common terminology

# Matrix: scheme / organisation

	AT - FWF	DE - DFG	UK - BBSRC	TR - TUBITAK	LUX - FNR
<b>Responsive mode</b>	Individual Projects	Individual Grants	Project grants Programme Grants	Research Project Short term project	
<b>Career Development</b>	Erwin-Schrödinger  Lise-Meitner  Elise-Richter Programme  Hertha-Firnberg Programm  Doktoratskollegs	Research Fellowship  Temporary position for PI  Emmy Noether  Heisenberg  NIH-DFG Research Career Transition Awards Program  Scientific Networks  Research Training Groups	New investigators  Fellowships	Fellowships  Scientific Exchange Programme	PhD & Post-Doc Fellowships  ATTRACT Excellence Programme for post-doc students  Mobility Grant financed via Accompanying Measures
<b>Centers of Excellence</b>	Special Research Programmes National Research Networks	Collaborative Research Centers Research Units DFG Research Centres Humanities Research Centers		Networking (?)	
<b>Thematic Programmes</b>		Priority Programmes	Managed Mode		CORE Research programme (Framework programme with subdomains based on Foresight results)
<b>Knowledge transfer; cooperation with industry; commercialization of research results</b>	Translational-Research Programme	Trans-Regio	LINK  Industrial Partnership Awards Follow on Fund	Patent Application  Technical Innovation	Platforms financed via Accompanying Measures
<b>conferences/congress/works hops</b>		Conference and lecture trips International Scientific events Roundtable discussions and Colloquia		Research Meetings	Conference and lecture trips through accompanying measures
<b>Infrastructures / Instrumentations</b>		Scientific Instrumentation and Information Technology Central Research Facilities	National Facilities // (as part of the standard grant applications)		National Facilities (as part of the standard grant applications)
<b>(major) Prize</b>	Wittgenstein-Prize Start - Program	Gottfried Wilhelm Leibniz Programme Heinz Maier-Leibnitz Prize Albert Maucher Prize Bernd Rendel Prize Ursula M. Händel Animal Welfare Prize von Kaven Awards Communicator Award Eugen und Ilse Seibold Prize Copernicus Award EURYI Award			Best scientific publication

# Questions

1. Do you do evaluations of this specific type of instrument?
2. If NO, please write a short explanation on why your organization is not doing any evaluations.
3. What kind of evaluations do you do (ex-ante, mid-term evaluation, ex-post)?
4. How regularly do you do those evaluations?
5. What methodology do you use for evaluating the instrument

# Questions

6. Which is the objective for doing evaluations in your organization?
7. Which aspects are you mostly interested in the evaluations you do?
8. What kind of indicators are you collecting in these evaluations (e.g. quality and quantity indicators)?
9. Conclusion and suggested modifications compared to the actual practice for this specific instrument (right level of evaluation, too much, too little)
10. Please provide a short explanation for your choice.



Do you do evaluations of this specific type of instrument?  
What kind of evaluations do you do?

- All agencies evaluate all types of schemes or plan to do in the near future (even if some specific instruments are not evaluated)
- Ex-ante, mid-term, ex-post
- Differences among agencies on the use of evaluations
  - Different understanding of ex-ante evaluation (e.g. for project selection / foresight for programme definition) and mid-term evaluation (e.g. monitoring of project / mid-term evaluation of programme)
  - Differences depending on level of evaluation (financing within the schemes vs. the schemes themselves)

## How regularly do you do those evaluations?

- Differences for financing within the schemes and the schemes themselves
  - Financing decisions are more regularly evaluated
  - Some schemes are not regularly / not at all evaluated
- Differences in the level of information provided (schemes vs. financing decisions within the schemes)
- Depending on the scheme (e.g. Responsive Mode vs. Thematic programmes)
- Regularity depending on schemes and organisational structure of funding agencies (e.g. external vs. in-house)

## What methodology do you use for evaluating the instrument?

- In-house data analysis
    - Data from monitoring/final reports
    - Questionnaires to beneficiaries / peer reviewers
    - Interviews with beneficiaries
  - Scientometrics / bibliometrics
  - Peer reviews
  - Expert / peer panel
  - External evaluations (by evaluation experts)
    - Often using a combination of the methodologies above
    - Including interviews with end-users / stakeholders
- Methodologies do not depend so much on the scheme but on the organisation (e.g. external vs. in-house)

## Which is the objective for doing evaluations in your organization?

- Accountability and transparency in the use of public money
  - Identify outputs and achievements
  - Legitimisation of the funded activities
  - Improvement of the quality, the efficiency and effectiveness of activities
  - Steering the scheme (mid-term evaluations)
  - Decision to continue the scheme
  - Organisational learning
  - Forum for policy debates
- Formative and summative purposes (Scriven 1967)
- Formative: internal purpose: to improve
  - Summative: external audience: to justify

## Which aspects are you mostly interested in the evaluations you do?

- Statistics on outputs
  - Scientific performance
  - Career development
  - Efficiency and effectiveness of the scheme
  - Relevance and sustainability
  - Implication beyond the scheme (other branches of science)
  - Economic and societal impact
- Different focus of the agencies
- Different objectives
- Purely science focused >< societal impact
- different intervention logic
  - different function of evaluation

## What kind of indicators are you collecting in these evaluations (e.g. quality and quantity indicators)?

- Scientific and non-scientific publications
  - Intellectual property
  - Spin-Off companies
  - Career development (Diploma, PhDs, Post-Docs, habilitations, etc.)
  - Long list of indicators for career development
  - Conference participations,
  - Collaborations, networks, partnerships
  - Effects of the project outside the scientific field
  - Cooperation with agencies (FWF)
  - Policy outcomes
  - Follow on funding
  - Contribution to public engagement
- Qualitative & quantitative data
- Not always thought beforehand what indicators would be needed

## Conclusion and suggested modifications compared to the actual practice for this specific instrument

- Different conclusions by the agencies (depending on scheme)
- No one considered to have too much evaluation
- Improve the data collection of publications
- Implement programme evaluation in regular intervals (e.g. FWF: 5-10 years / FNR: continuous evaluation of thematic framework programme)
- Showing impact of scheme, necessary for policy debate

## Conclusion (1)

- Funding schemes are comparable
  - Not all schemes present in all countries
  - Potential for jointly conducted / synchronised ex-post evaluations
- Evaluation is used in all the agencies
  - Differences in types of evaluation, regularity and objectives
- No one considered to have too much evaluation
- Different terminology among agencies
  - Pay attention when synchronizing ex-post evaluation
- Difference in size, age and structure of organisation has an impact on evaluation practices
  - In-house evaluation department vs. External experts
  - Developing research environment vs. Mature environment



## Conclusion (2)

- Sometimes schemes have been developed, without thinking of how to measure success (indicators)
  - not thought on how ex-post evaluation will be done
- Different objectives (between schemes / agencies)
  - E.g. purely science focused >< societal impact
- Different objectives → different intervention logic (maybe not always explicit) → different function of evaluation practices
- Showing impact is becoming more and more important
  - Use of external evaluation experts
  - In line with findings of academic research in this area

## Conclusion (3)

*Research quality has become an increasingly sophisticated concept and research is no longer evaluated based on the sole criterion of its contribution to knowledge.*

*This implies that research evaluation has evolved from the traditional peer review system to a system involving growing numbers of criteria and accommodating social, environmental and economic considerations.*

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