

Workshop on Research Evaluation in Austria Vienna, May 5th 2015

Performance Assessment and Programme Evaluation in the Austrian Science Fund (FWF)

Dr. Rudolf Novak
Head of Department for
Development & Strategy,
National Programmes

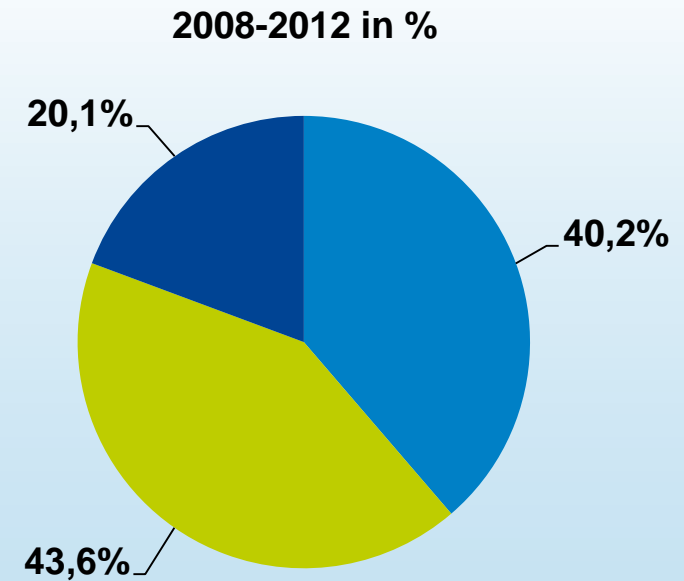
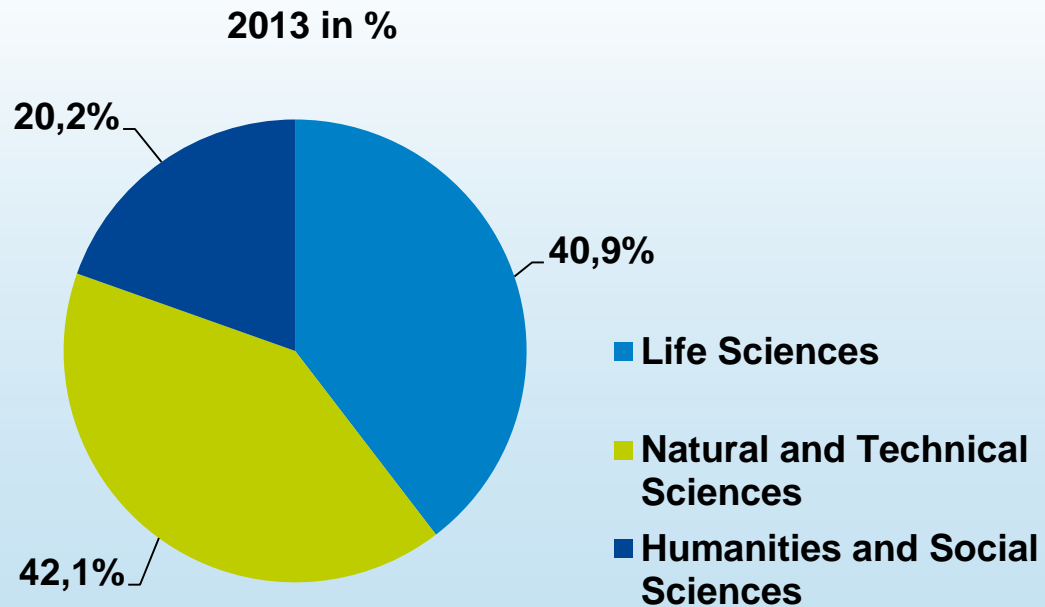
Austrian Science Fund (FWF); Haus der Forschung, Sensengasse 1; A-1090 Vienna
Tel.: +43-1-5056740-8601, Email: rudolf.novak@fwf.ac.at; web: www.fwf.ac.at

FWF Mission

The FWF is Austria's **central body for the promotion of basic research**.

We invest in new ideas that contribute to an **advance in knowledge** and thereby to further developments. We are equally committed to **all branches of science and the humanities** and are guided in our operations solely by the **standards of the international scientific community**.

Grants by research discipline



Scientific research – the FWF definition

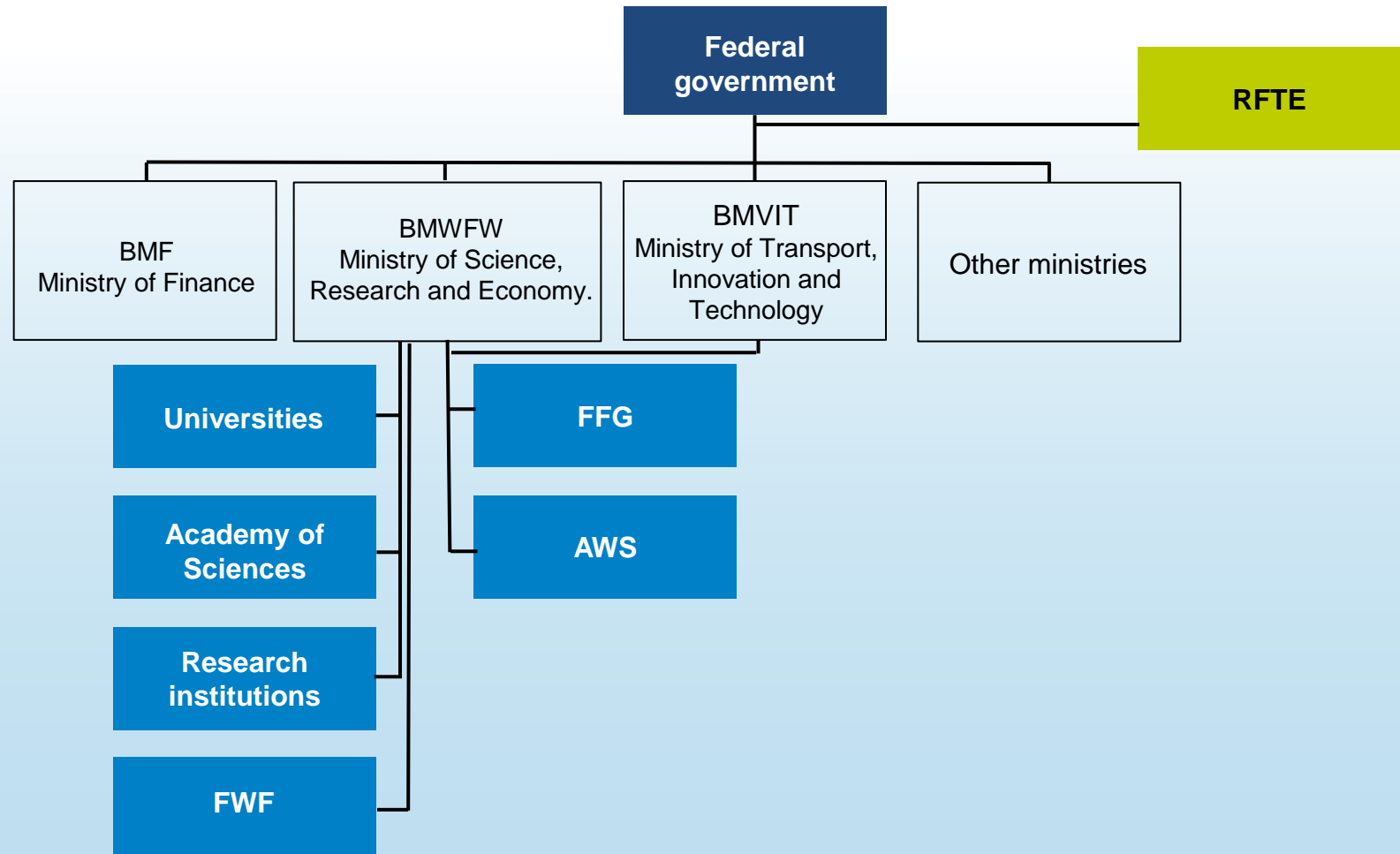
The FWF understands **scientific research** (fundamental or basic research) to mean research that aims not to make a profit but instead to develop scientific knowledge; its value relates primarily to its importance for science.

International Comparison (Differences from other Funding Organizations)

The FWF

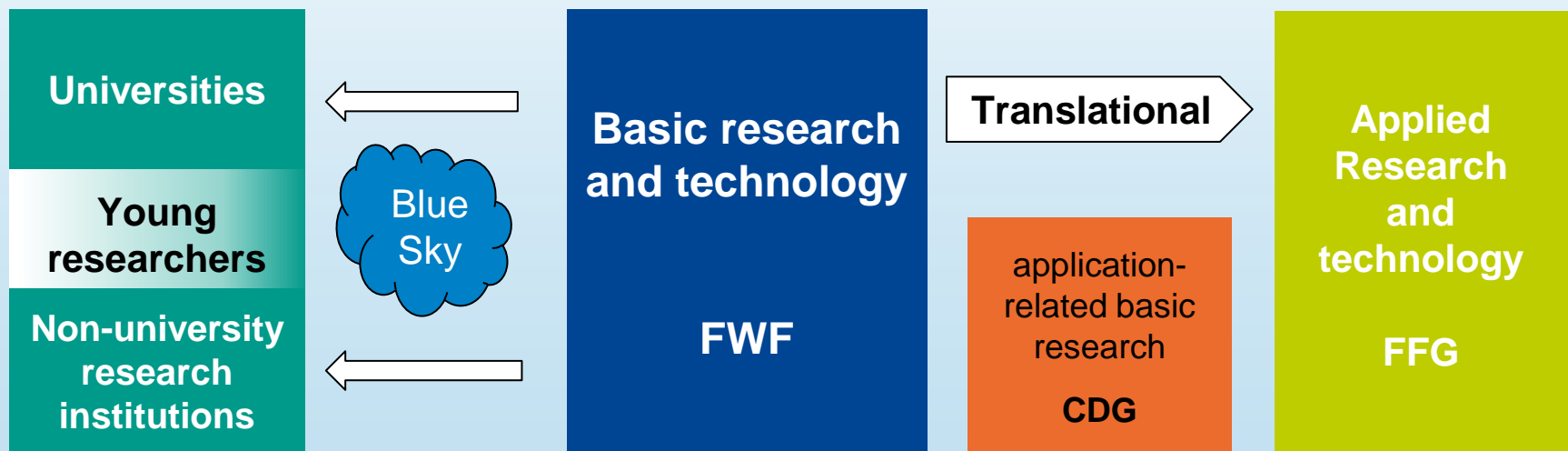
- covers all fields of science and the humanities
(unlike e.g. the British Research Councils)
- is focussed on basic science
(unlike e.g. RCN)
- does not run research institutes
(unlike e.g. NWO)
- does not act as a strategic advisory council for the government
(unlike e.g. RCN)
- uses *exclusively* reviewers from abroad
(virtually unique in international funding scene)
- has a single budget for all disciplines
(virtually unique in international funding scene)

R&D funding Austria since 2014



Positioning of the FWF

The Austrian Science Fund (FWF) is Austria's central funding organization for basic research.

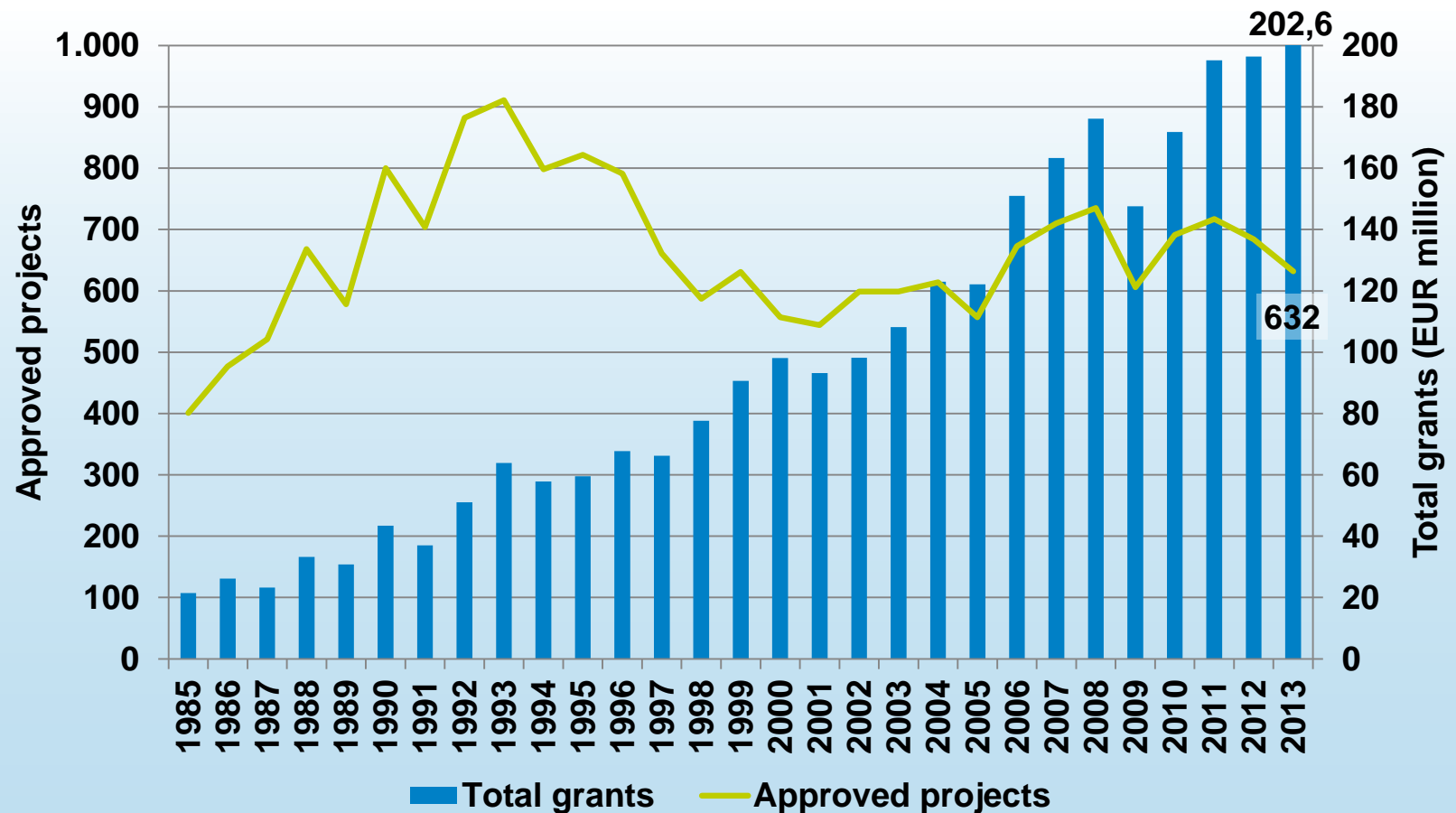


Principles and guidelines of the FWF

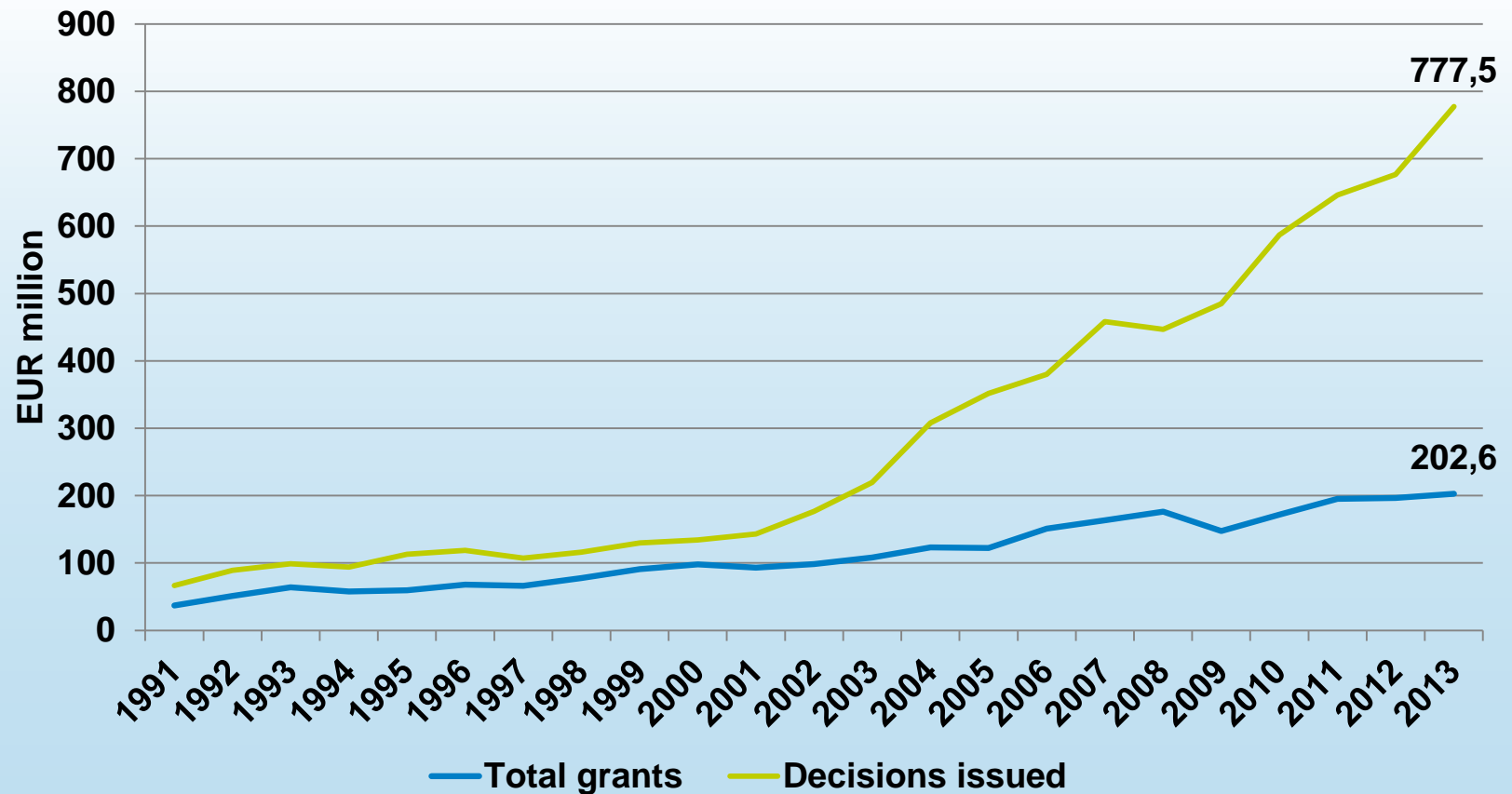
FWF principles	Fundamental guidelines for FWF activities
<ul style="list-style-type: none">▪ Excellence and competition▪ Independence	Strictly bottom-up approach, no prescribed research topics
<ul style="list-style-type: none">▪ International orientation	Quality based on international standards
<ul style="list-style-type: none">▪ Equal treatment of all research disciplines▪ Transparency and fairness▪ Gender mainstreaming, equal opportunities▪ Ethical standards	Principle for activities at all levels: design, decision, Secretariat



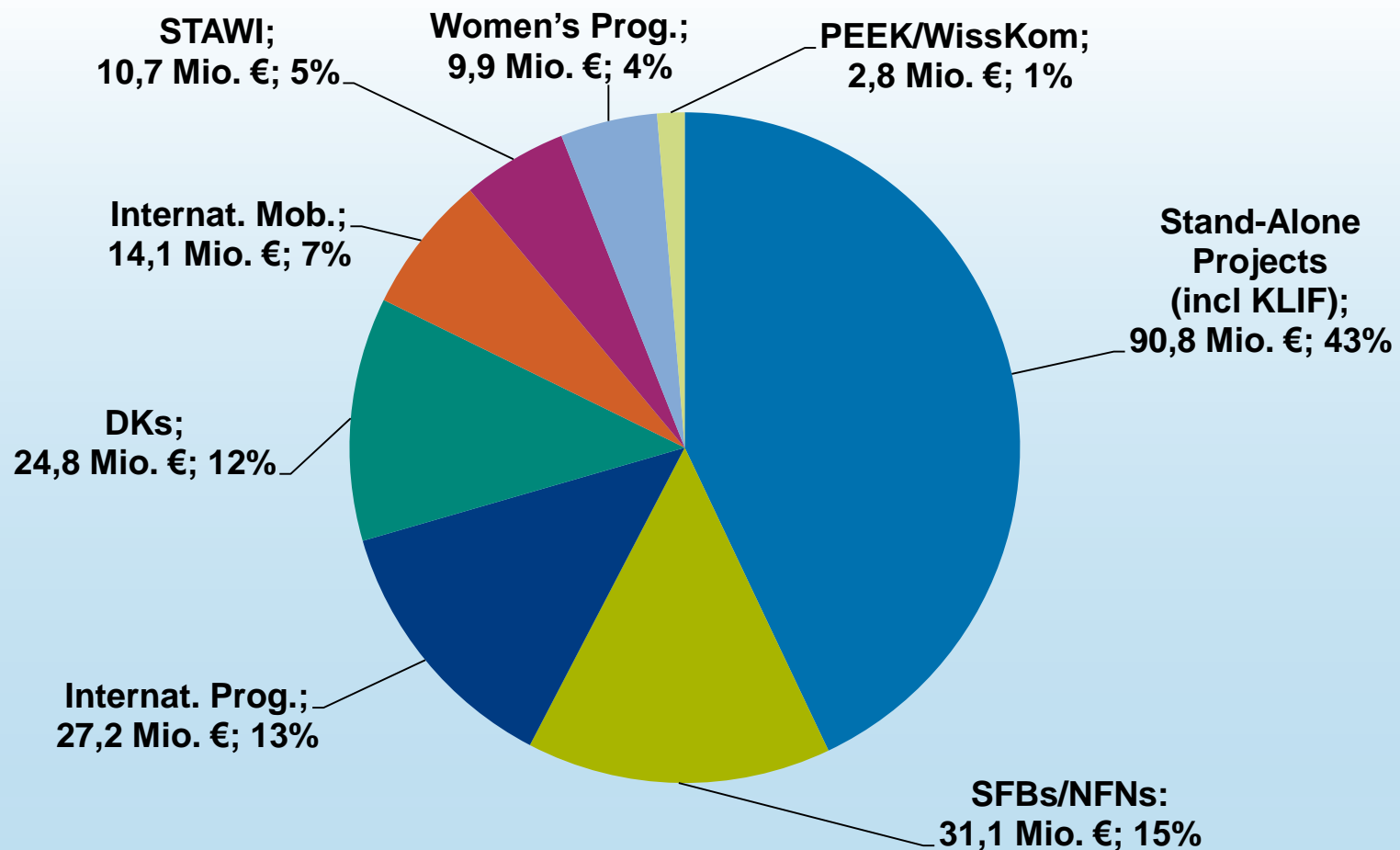
Development of funding / number of projects approved



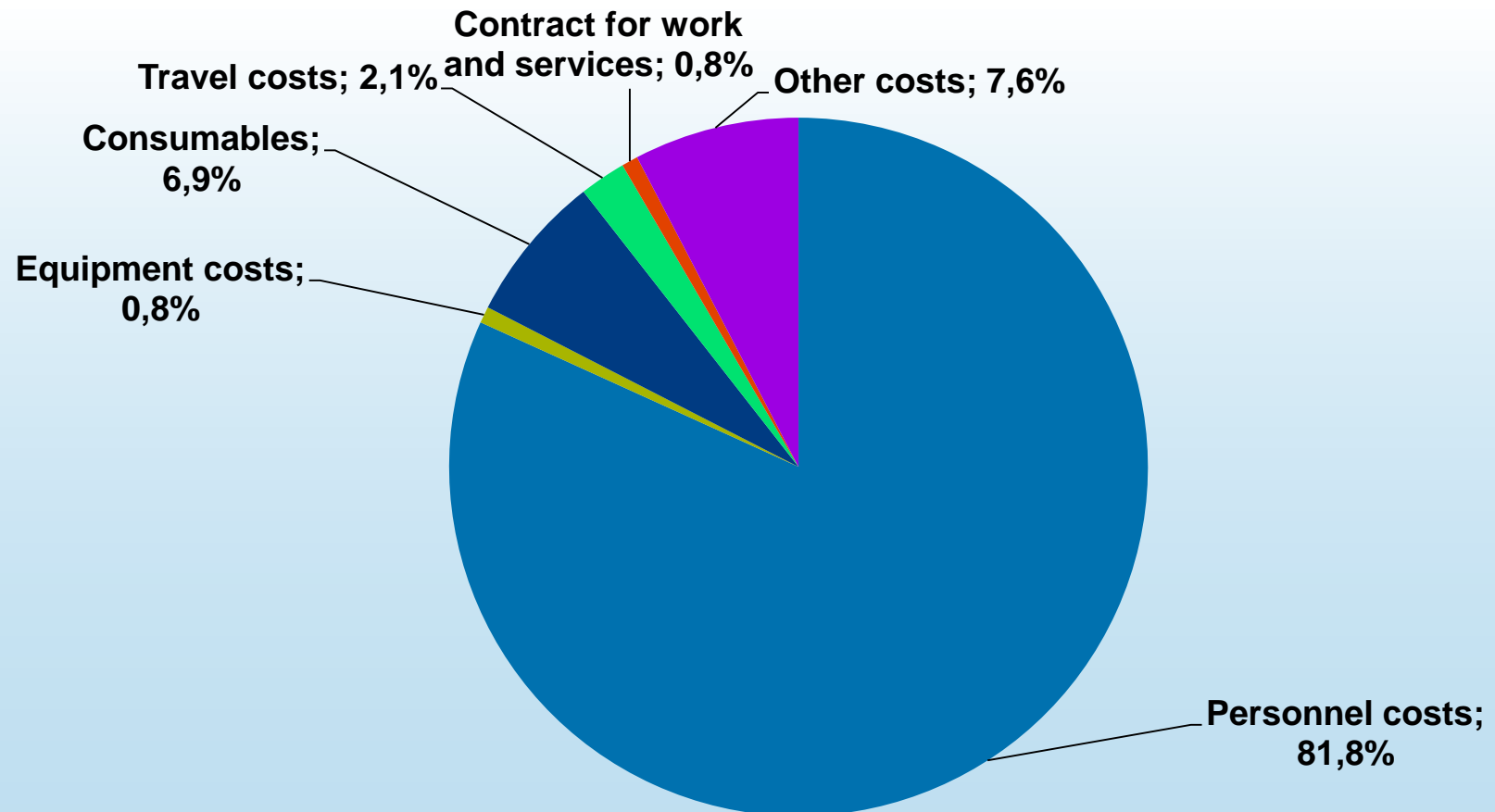
Volume of funding requested and approved



Grants by Funding Category 2014



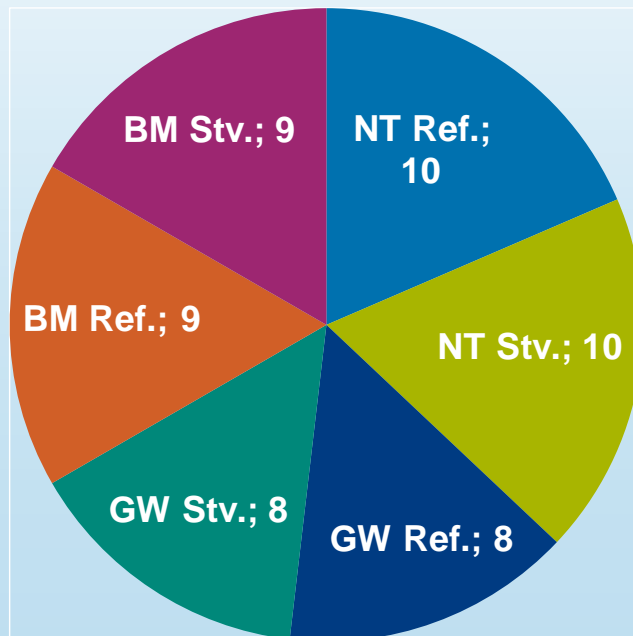
Breakdown of approvals by cost types 2014



The "heart" of the FWF funding machine

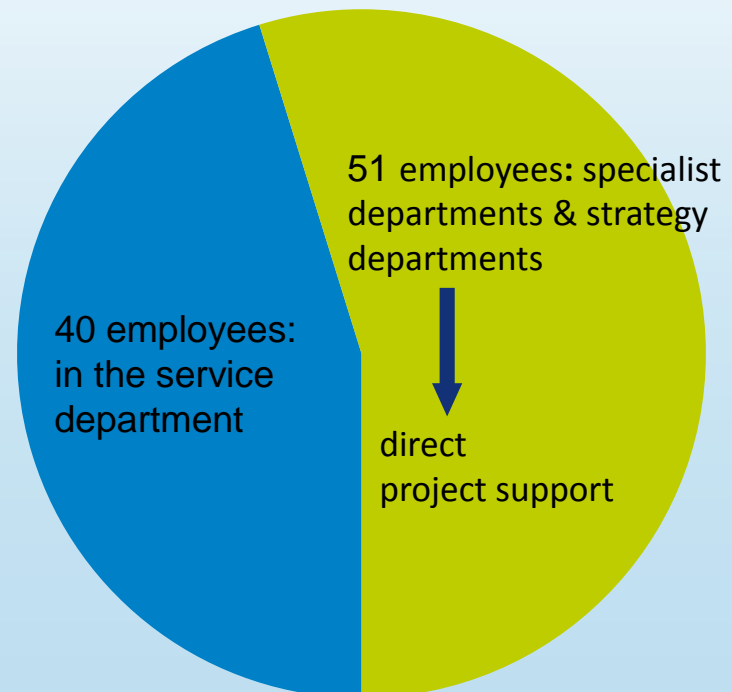
FWF Board

27 reporters (full professors),
27 alternates (full professors)



FWF Secretariat

91 employees



FWF Evaluation approaches

- Evaluation of Projects
- Evaluation Programmes

not performed:

- Evaluation of individual scientist
(taken into account in the course of peer review of projects)
- Evaluation of research institutions
(taken into account in the course of peer review of projects)
- Performance Evaluation of scientific fields
(taken into account in the course of programme evaluations)

Interaction between reporters and the FWF Secretariat

FWF Secretariat

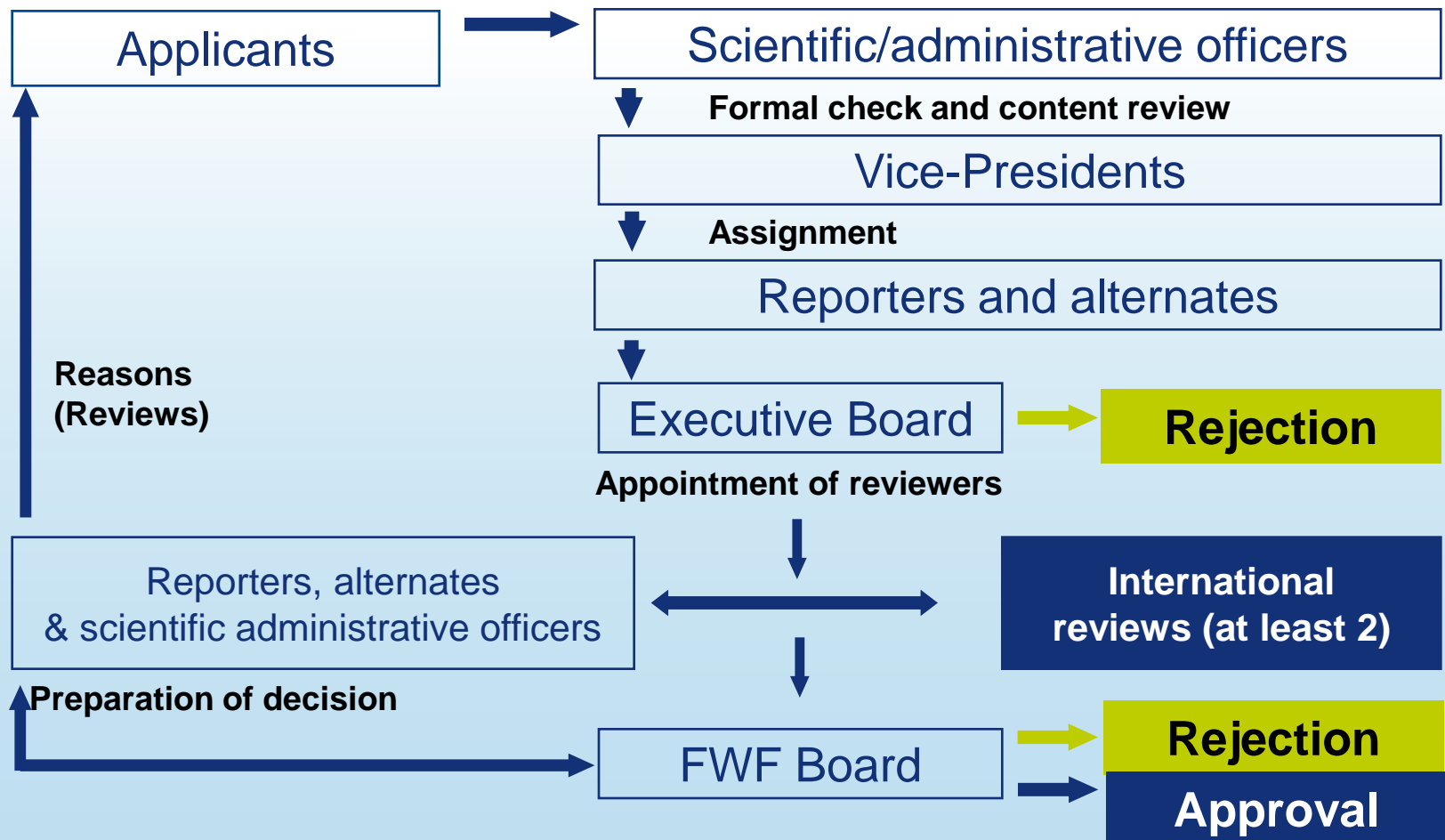
- Advising of applicants
- Application processing
- Interaction with FWF bodies
- Organisation of review process
- Communication with reviewers and applicants
- Preparation of decision recommendations for the FWF Board

Interaction between reporters and the FWF Secretariat

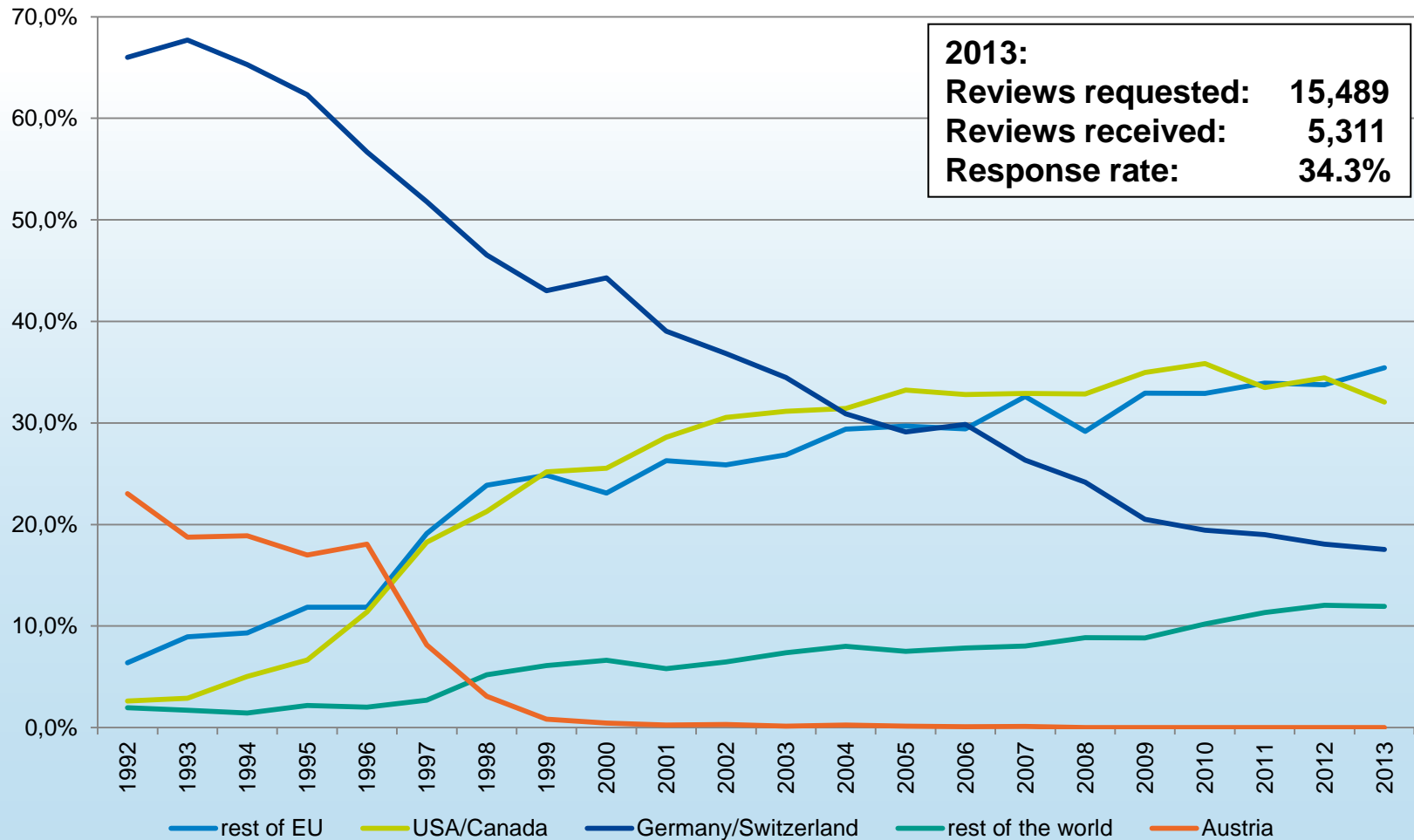
Reporters (Alternates)

- Nomination of reviewers
- Presentation of review results before the FWF Board, decision recommendation
- Cooperation in decision-making process

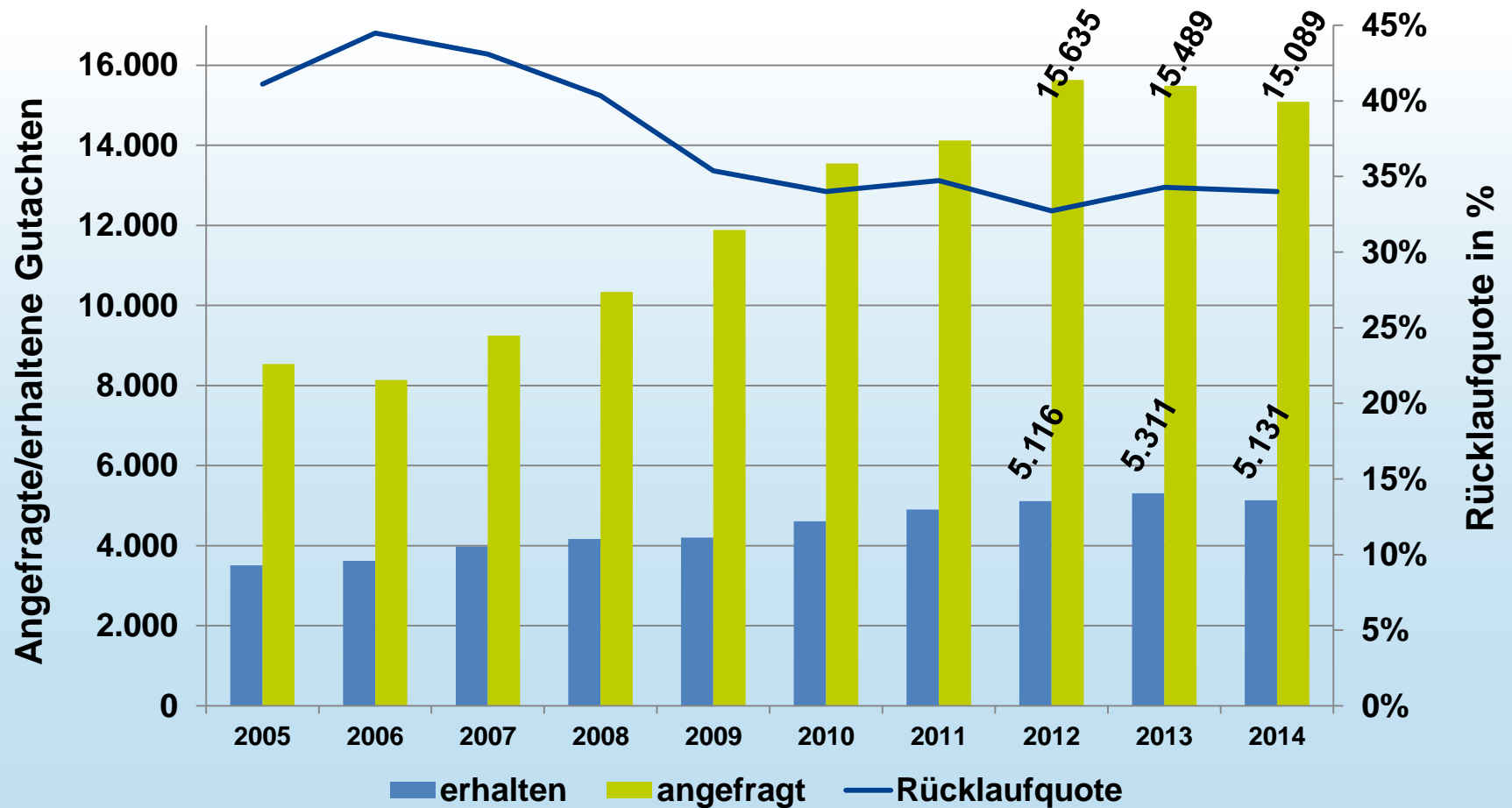
The FWF funding machine



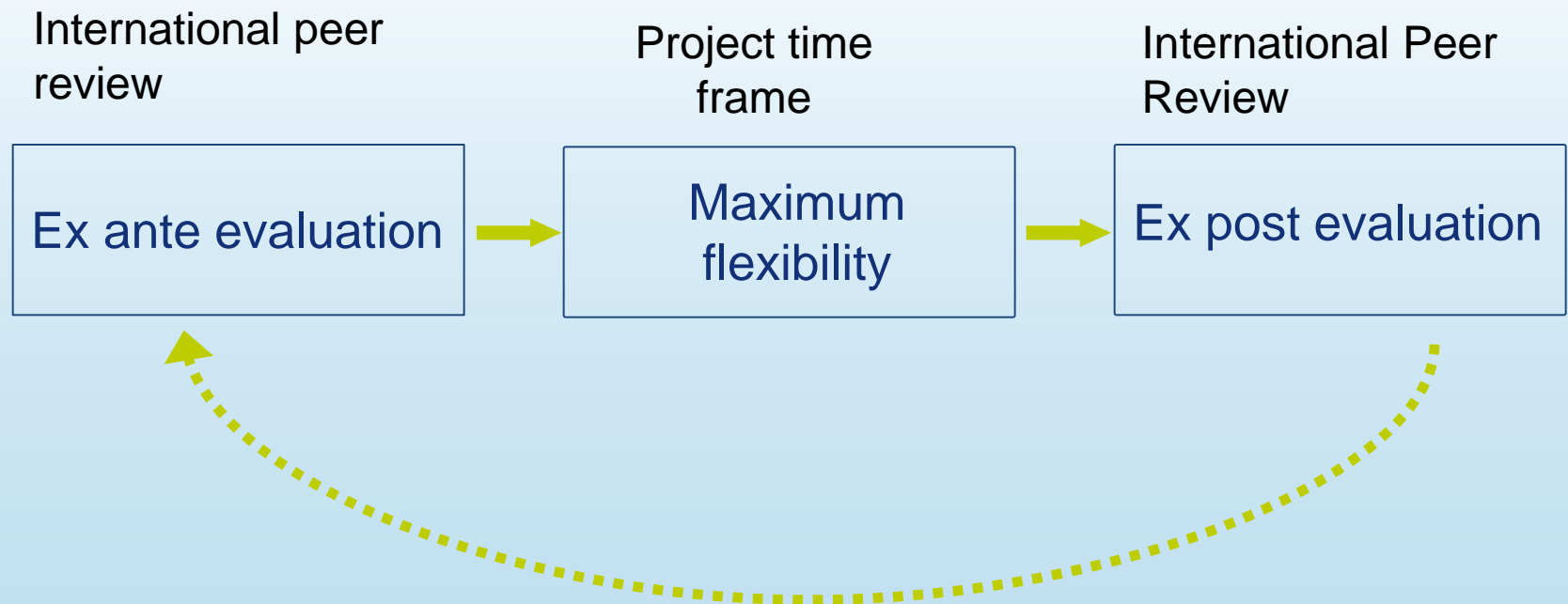
Percentage of reviews per region 1992-2013



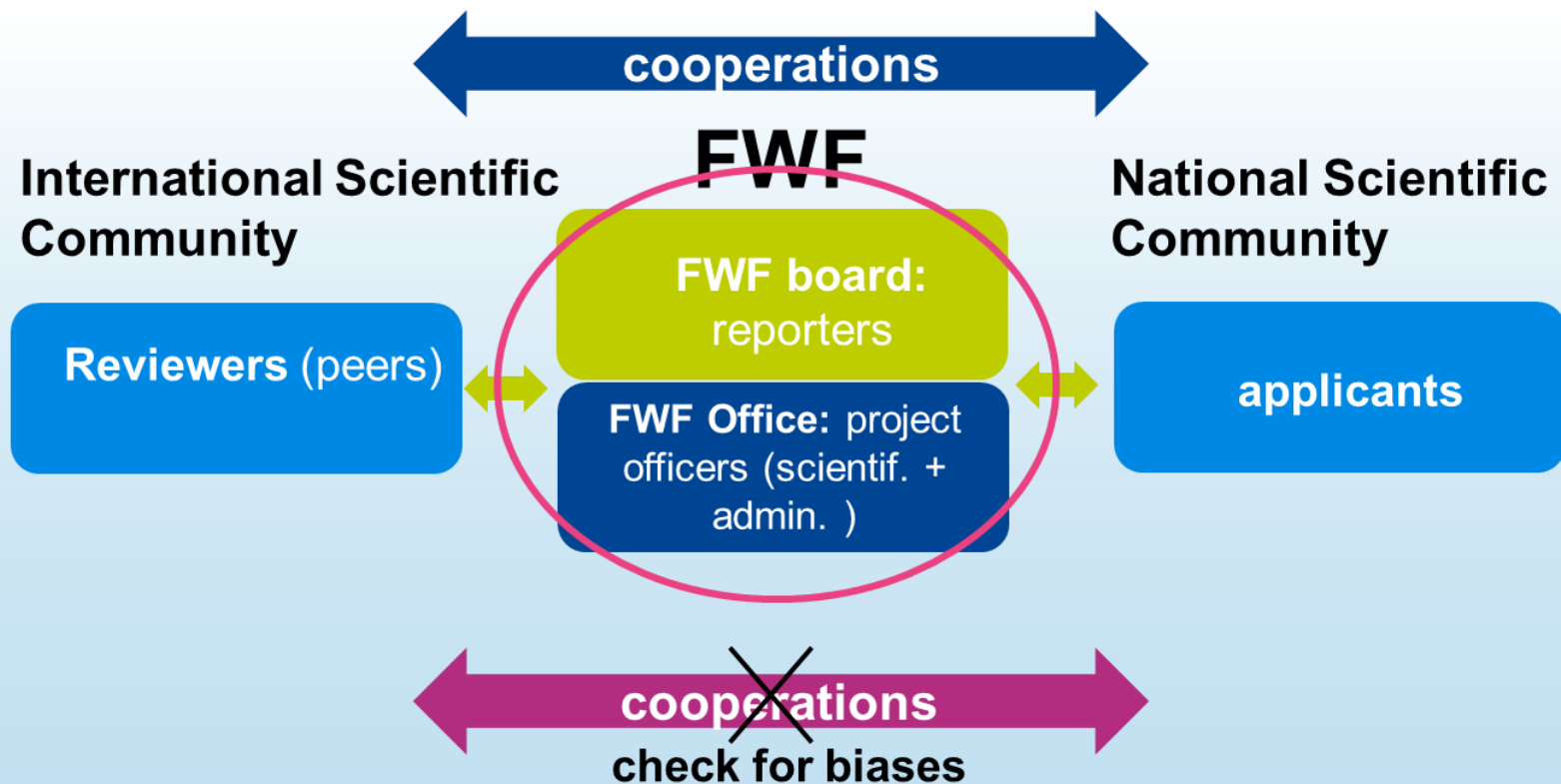
response rate of reviewers 2005 – 2014



Quality assurance mechanisms



Principles of the FWF's review procedure



Content of project descriptions

- **Quality of the project**
 - Position/value in international research landscape
 - Innovative aspects
 - Significance of expected results
 - Clarity of research goals (hypotheses)
 - Appropriateness of the methods chosen (including work/time planning and planned dissemination strategies)
 - Quality of cooperation arrangements (national and international)
- **Quality of human resources**
 - Scientific quality / potential of the scientists involved and significance of project for their career development
- **Broader implications**
 - Impact on other disciplines or applications
- **Financial aspects**
 - Information on the research institution and the funding requested

Questions to reviewers

Section 1 (to be transmitted to the applicant in its entirety):

- 1 Scientific/scholarly quality (including innovative aspects and originality) with special attention to strengths and weaknesses
- 2 Approaches/methods and feasibility of the proposal with special attention to strengths and weaknesses
- 3 Qualifications of the researchers involved (based on their academic age) with special attention to strengths and weaknesses
- 4 Overall evaluation with regard to key strengths and weaknesses

<input type="checkbox"/> excellent	<input type="checkbox"/> very good	<input type="checkbox"/> good	<input type="checkbox"/> average	<input type="checkbox"/> poor
------------------------------------	------------------------------------	-------------------------------	----------------------------------	-------------------------------

5 Ethical issues

Section 2 (confidential remarks to the FWF)

Other comments intended solely for the FWF

Notes on the FWF evaluation form (1)

Excellent = funding with highest priority

The proposed research project is among the best 5% in the field worldwide. It is potentially groundbreaking and/or makes a major contribution to knowledge.

The applicant and the researchers involved possess – relative to their academic age – exceptional qualifications by international standards.

Very Good = funding with high priority

The proposed research project is among the best 15% in the field worldwide. It is at the forefront internationally, but minor improvements could be made.

The applicant and the researchers involved possess – relative to their academic age – high qualifications by international standards.

Notes on the FWF evaluation form (1)

Good = resubmission with some revisions

The proposed research project is internationally competitive but has some weaknesses, and/or the applicant and the researchers involved possess – relative to their academic age – good qualifications by international standards.

Average = resubmission with major revisions

The proposed research project will provide some new insights but has significant weaknesses and/or the applicant and the researchers involved possess – relative to their academic age – fair qualifications by international standards.

Poor = rejection

The proposed research project is weak and/or the applicant and the researchers involved lack sufficient qualifications by international standards.

Standardised reasons for rejection (1)

1	<p>The reviews of your application were entirely positive with regard to the research project itself as well as your research qualifications. However, the reviewers expressed even greater support for other applications. For budget-related reasons, the FWF can currently only approve those applications which receive the most favourable reviews and ratings; this means that your application could not be approved. If you choose to resubmit your application, please place greater emphasis on the strengths of the project in order to improve your chances of approval.</p>
2	<p>The reviews of your application were predominantly positive with regard to the research project itself as well as your research qualifications. However, there were several minor points of criticism in the review, and the reviewers expressed greater support for other applications. For budget-related reasons, the FWF can currently only approve those applications which receive the most favourable reviews and ratings; this means that your application could not be approved. If you choose to resubmit your application, please place greater emphasis on the strengths of the project and take the reviewers' suggestions into account in order to improve your chances of approval.</p>

Standardised reasons for rejection (2)

3	The reviews of your application were largely positive with regard to the research project itself and/or your research qualifications. However, there were a number of points of criticism in the review, meaning that your application cannot be approved in its current form. If you choose to resubmit your application, please focus on the strengths of the publication and take the reviewers' comments and suggestions into account visibly and in a transparent manner.
4	The reviews of your application were only partly positive with regard to the research project itself and/or your research qualifications. However, there were numerous points of criticism in the review, meaning that the project would have to be revised substantially and possibly re-oriented in order to be eligible for funding. If you choose to resubmit your application, please take the reviewers' comments and suggestions into account visibly and in a transparent manner.
5	The reviews of your application were predominantly very critical. As it cannot be assumed that the weaknesses in the application can be remedied within a short period of time, the FWF Board has decided that a resubmission to this funding programme will only be permitted after a period of 12 months.

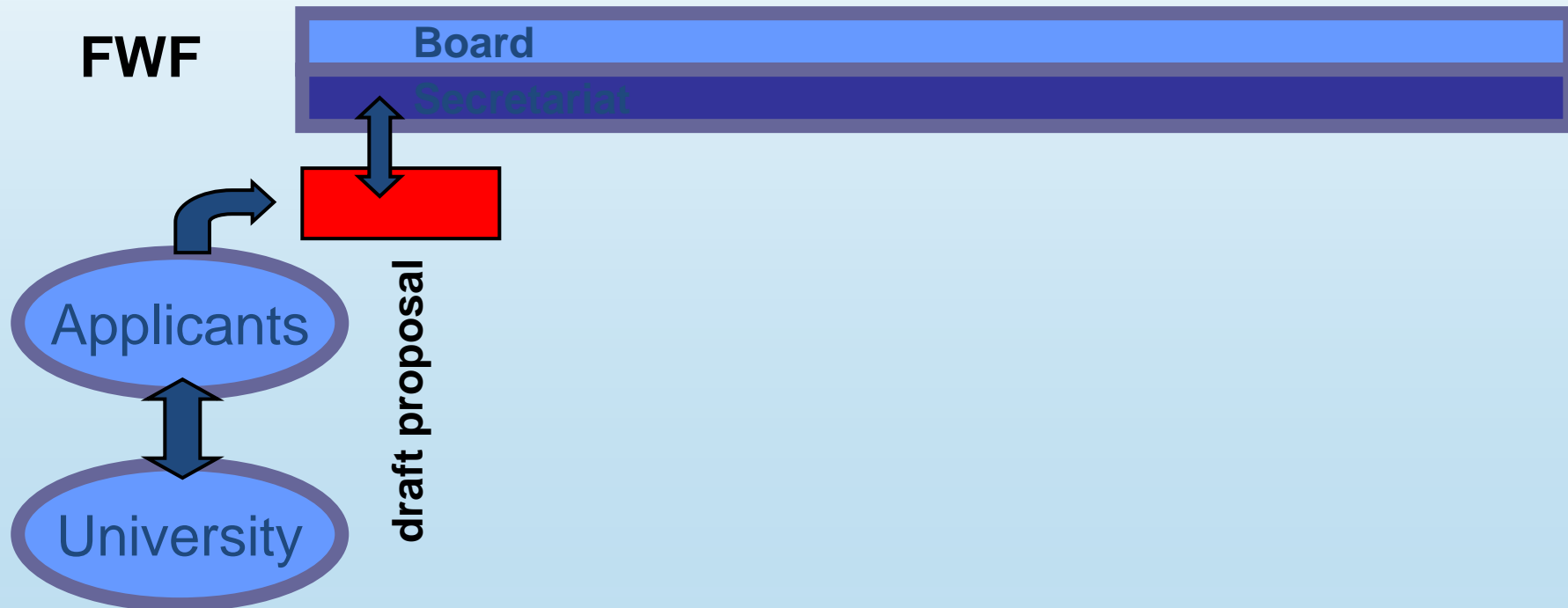
Key points of the FWF procedure

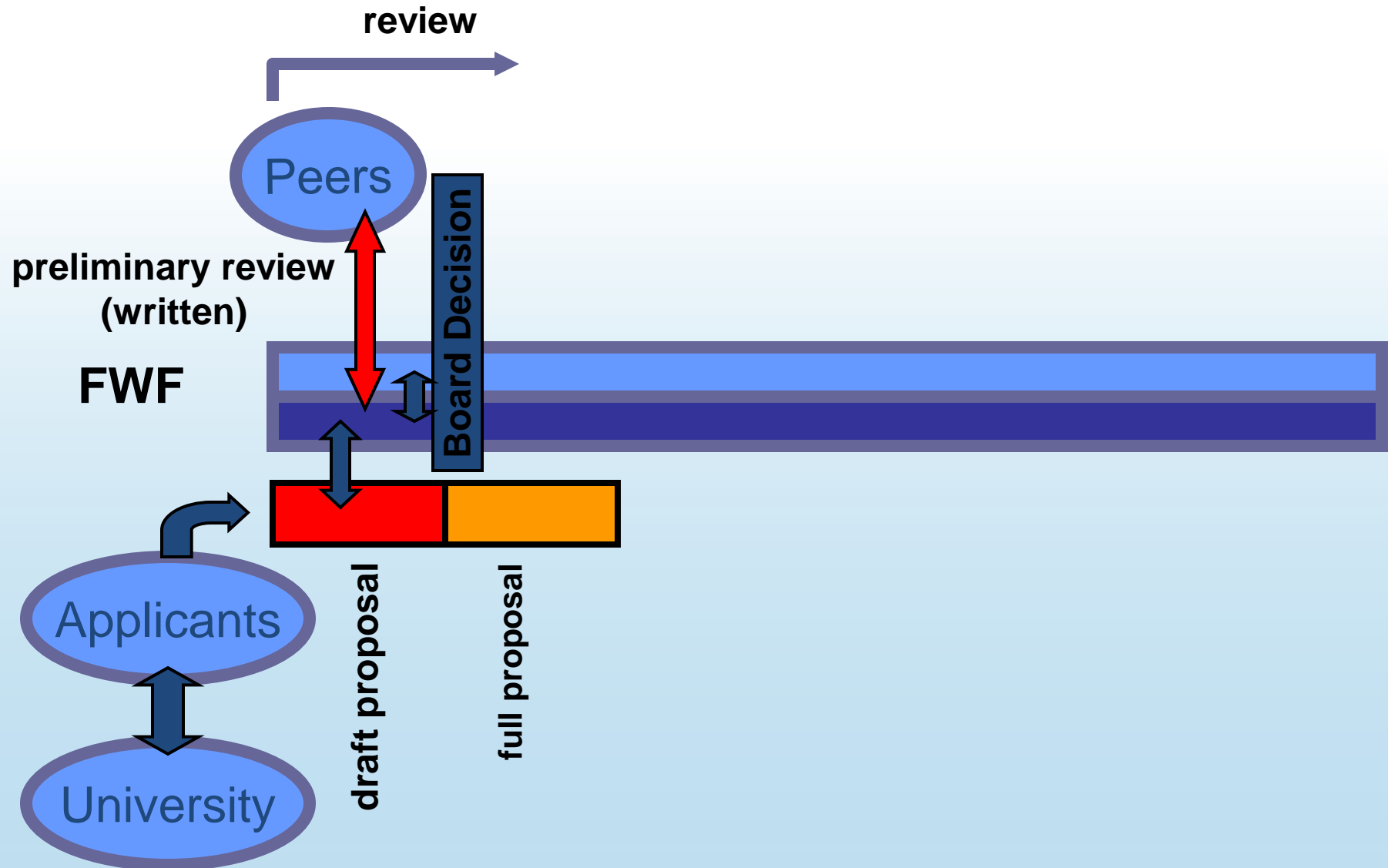
- Strict bottom-up principle: no pre-defined themes, no quotas, no preferences
- Several people involved in all stages of procedure and in all decisions („checks and balances“)
- Close interactions with applicants for maximum transparency
- Independent international peer review as the basis for evaluation of quality
- Review texts are important basis for decisions (ratings are merely indicative)
- Discussion of and decisions concerning all projects from all scientific disciplines in a single Board containing representatives of all branches of science

General principles for review and decisions

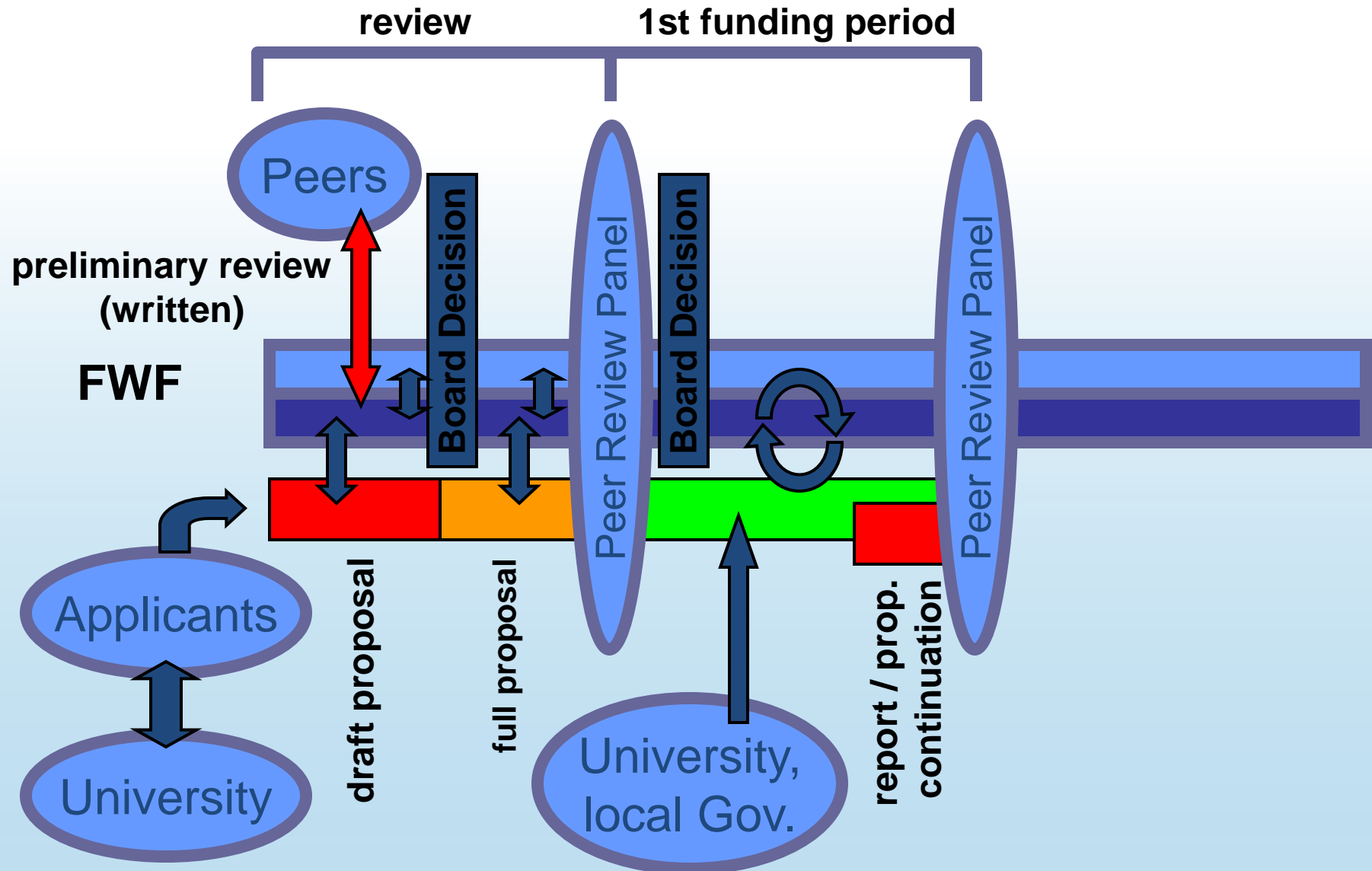
Quality standard	⇒	international scientific community
Peer review	⇒	exclusively outside Austria
FWF Reporters	⇒	nomination of referees
FWF Executive Board	⇒	request for reviews
Number of reviews	⇒	at least 2 (according to requested funding)
Funding Decisions	⇒	ca. every 2 months
Decisions	⇒	entire FWF Board based on the reviews
Justification	⇒	reviews made available to applicants
ex post evaluation	⇒	peer review of the final reports

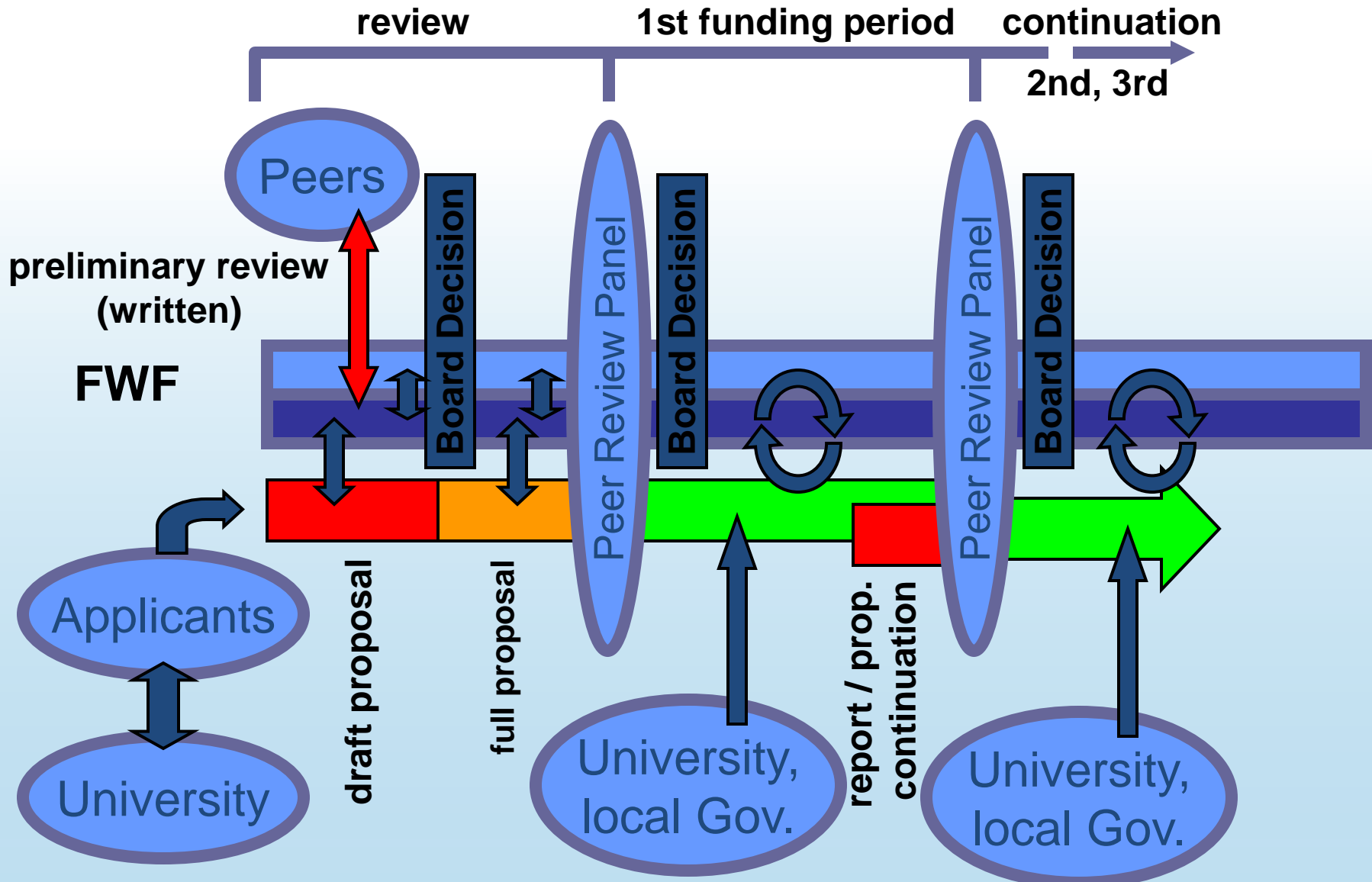
Multi-step evaluation of research networks

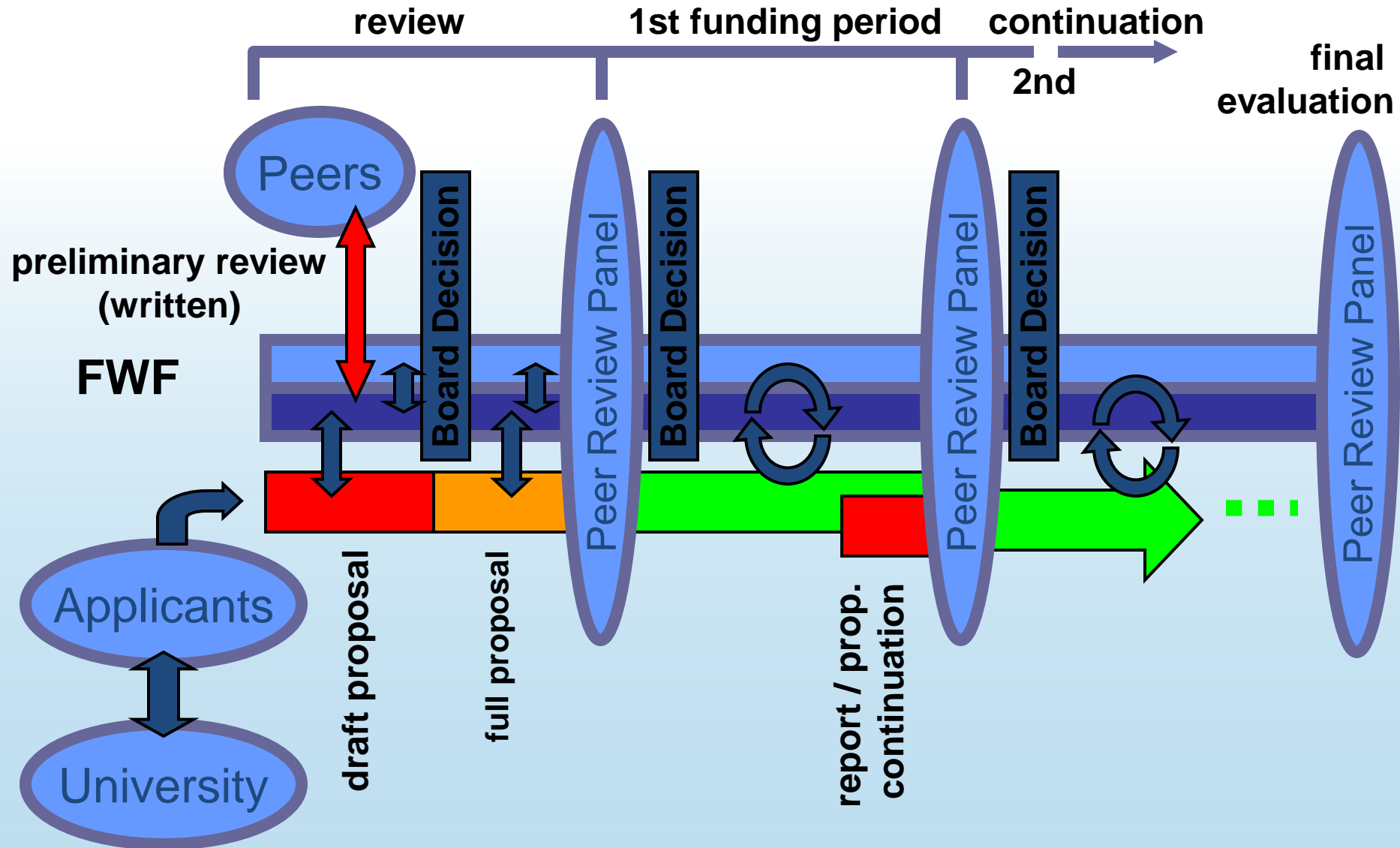












What does “flexibility” mean?

- Overall budget + 5% “general project costs” (since 2003)
- no requirement for annual reports (only accounting)
- removal of the 6-year limit for “independent scientists” (2004)
- removal of the limit of 2 projects per project leader (2005)
- Senior Postdoc salary for experienced “independent scientists” (since 2005)
- extension of the length of time calculated for children: 3 years per child (since 2005)

Project documentation / final report

- annual accounts and brief (one page) progress report
- comprehensive report at the conclusion of the project, consisting of 5 parts (a total of ca. 2,400 words or 4 pages):
subjected to peer review (1 ex-ante reviewer)



1. summary for PR work (German and English)
2. brief project report
 - 2.1. report on the scientific work
 - 2.2. personnel development – importance of the project for the scientific careers of those involved (including the project leader)
 - 2.3. effects of the project outside the scientific field
3. Information on project participants

Project documentation / final report

4. Attachments → for peer review and data collection

List 1.a. scientific publications

(the publication list must mention for each work: all authors; full title; series/journal title; year; volume; and page numbers.

List 1.b. publications for the general public and other publications

List 2 project-related participation in international scientific conferences

List 3 Development of collaborations (national, European, international)

List 4 “Habitations” (professorial qualifications) /
PhD theses / diploma theses

List 5 Effects of the project outside the scientific field
(where appropriate)

List 6 Applications for follow-up projects

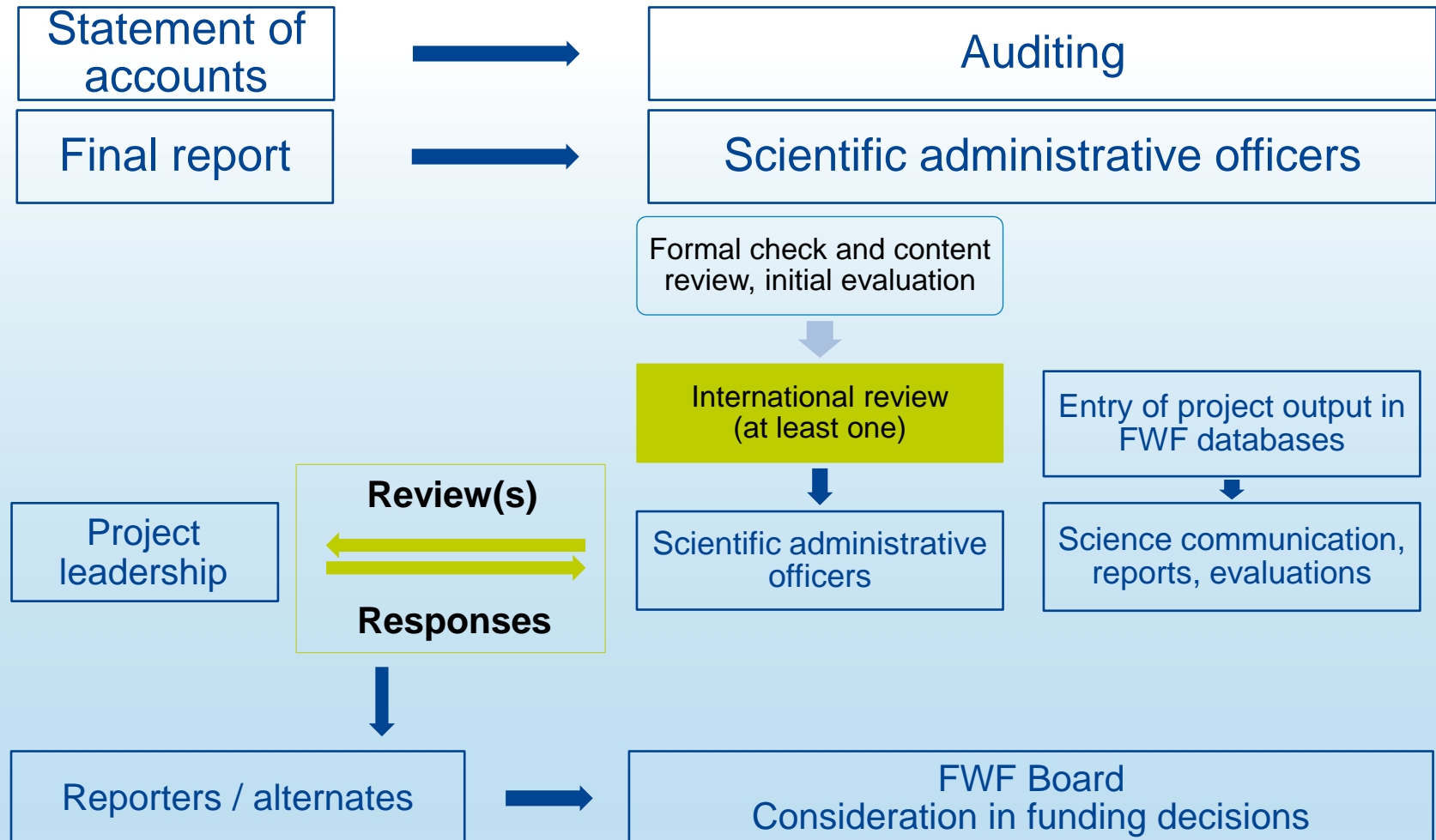
5. Feedback about Work with the FWF

Peer review of of project reports

Reviewers are asked to comment on:

1. the scientific success of the project;
2. the development of human resources in the course of the project;
3. effects beyond the scientific field (in the sense of applications in or impacts on social, cultural, ecological, medical, economic and/or technological areas);
4. the running of the project with regard to use of available resources;
and
5. the future perspectives of the research work.

Project completion/evaluation



FWF self-assessment and evaluation measures:

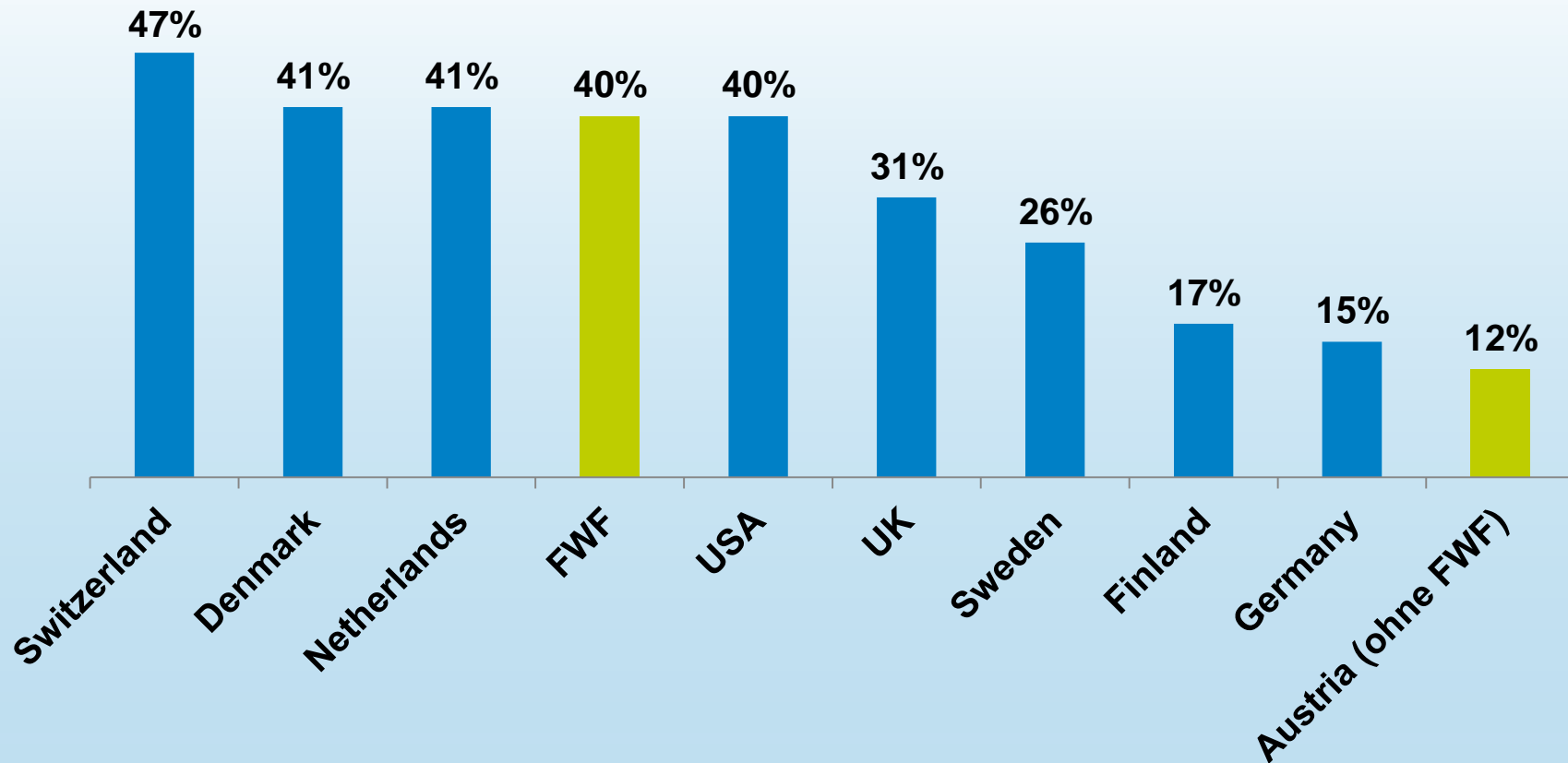
Internal and external analyses und evaluations

- 1) 2010: Empirical study of FWF's ex-ante evaluation processes**
 - **Stand-Alone Projects Programme, 1999–2009**
- 2) 2011: Analysis of output and ex-post evaluation of end-of-project reports**
 - **Stand-Alone Projects Programme, 2003–2010**
- 3) 2012: Bibliometrics and publication output analysis by CWTS**
 - **All project types, 2001–2010**
- 4) 2013: Client survey on the FWF's funding policies**
 - **Comprehensive survey conducted by the IfQ**
- 5) “Umbrella Paper” to be completed by summer 2015**

See also: http://www.fwf.ac.at/de/public_relations/publikationen/fwf-selbstevaluation.html

FWF's impact on international visibility of research performed in Austria

citations of scientific publications above global average 2001 – 2010



Evaluation of FWF-Priority Research Projects (Research Networks)

Publications Austria and FWF-Priority Research Projects

