Experiences of the first ERC call

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ESF MO FORUM on Peer Review,
Outline

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2. Selection and accreditation of Peer Reviewers
3. ERC peer review system basics
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On the inter-nationalisation of peer review: a simple position

ERC does not exist without international peer review

• This is obvious at the EU level

Globalisation of the peer review must be pursued, in the interest of quality and fairness

• Broadening the pool of detailed expertise
• Reducing reviewer – applicant inter-dependencies

Globalisation introduces some challenges

• One competes for resources on ‘unknown’ territory
• Mixing of review cultures demands a ‘normalisation’
• Maximisation of ‘remote’ methods is crucial
On the selection of reviewers

ERC follows an accreditation approach

- Scientific Council selects the panel chairs and members for a given review cycle
- ScC or panel members can select referees

Panels typically serve alternate years

For referees, a partial pool principle will be followed

- A balance between the panel member’s skill in identifying the best referee, and the need for a good degree of independence between panels and referees

Strong drive to recruiting non-EU reviewers
ERC review system basics

Core values derive from the EU programmes

- Excellence, Transparency, Fairness, Impartiality, Confidentiality, Efficiency, Speed

ERC specificities

- Focus on the excellence of the individual and the science
- Need to cover all areas of science - bottom-up
- Potentially very high throughputs
ERC review system basics

Implementation through a system of panels and referees – collectively ‘reviewers’

1. Referees and / or panel members provide individual assessments – remotely, typ. 4 per proposal

2. Panels convene and make decisions within their indicative budget range

3. Panel chairs convene to resolve problems and make decisions within an ‘extra’ budget allocation

Can be configured to have multiple submission and / or selection steps – following efficiency considerations
Example: stage-2 of the Starting Grant review

- Reception of proposals
- Eligibility and withdrawals
- INDIVIDUAL ASSESSMENTS
  - Panel members
  - Referees
- INTERVIEWS
  - 2 to 3 days
- PANEL MEETINGS
  - 20 panel-ranked lists
- PANEL CHAIR MEETING
  - 1 day
- Single Consolidated list

Number of proposals: 554
Number of eligible proposals: 547
Starting Grant key data - numbers of proposals by evaluation step

Submitted stage 1: 9167
- 368 ineligible
  - 5 withdrawn
Evaluated stage 1: 8794
- 8235 rejected
Selected stage 1: 559
- 5 not submitted to second stage
Submitted stage 2: 554
- 1 withdrawn
  - 2 passed away, 4 ineligible
Evaluated stage 2: 547
- 201 in main list
- 116 in reserve list
- 113 reserve: reject for no budget
- 117 rejected: below thresholds
ERC review system budgetary principles

The Scientific Council makes an allocation of the call budget to the main scientific domains\(^1\):

- Physical sciences 36%
- Social Sciences / Humanities 12%
- Life Sciences 32%

But maintains an ‘extra’ budget

Within each domain, budget is divided over panels in proportion to the total demand — *the indicative panel budgets*

The ‘extra’ is aimed at support of inter-disciplinary or other specifically deserving proposals — *under control of panel chairs*

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\(^1\): 2007 Starting Grant data
On the quality of reviews

Transparency is seen as a key driver of improvement

- All actors (referees, panels) document their decisions
- The applicant receives all of these comments
- There is no need for convergence of the scientific judgement of the individual reviewers – differences of opinion are legitimate
- But the sum-total of the comments must explain the fate of the proposal, e.g. identify key weaknesses

If these requirements are not met, the applicant has cause for complaint

In cases of procedural error (e.g. obvious error, wrong proposal), the applicant has cause for formal redress
Inter-disciplinarity is a vaguely defined and slightly controversial concept – *like beauty*

Nevertheless broadly seen to be a key ingredient of modern-day scientific progress

It’s importance forces a continuous rethink of the boundaries of scientific (sub)disciplines. The consequence:

- A review-system’s panel structure is not a reference, but more a ‘convenient operational arrangement’
Inter-disciplinarity: ERC uses a hybrid approach

A ‘main-streaming’ approach, in which each panel takes responsibility for proposals in it’s care

- By subjecting it to the best matched expertise - including from any other panel
- By abstracting as appropriate from it’s topical interest
- Hence by accommodating I.D. proposals within it’s indicative budget

Complemented by a ‘safety-net’ approach

- In the form of the ‘extra’ budget
- Which may or may not act as an ‘affirmative action’ approach
Inter-disciplinarity: mechanism for the ‘extra’ budget (example 2008 Advanced Grant)

Meeting of Panel Chairs
- Agrees on common working definition of inter-disciplinarity
- Selects candidate ID proposals into the ID budget list
- Leaves ‘unworthy’ candidates in panel reserve lists

25 panel-ranked lists, ID proposals identified

Main list, inside panel indicative budget, to granting

Reserve list, ID proposals are candidate for ID budget

Main list, inside ID budget, to granting
Why this mechanism?

The group of panel chairs is the correct forum to come to a coherent position on a working definition of interdisciplinarity

- One should not leave that to individual panels

It is essential that the panel chairs **select from the candidate** ID proposals, that is they have the right to refuse

- This discourages tactical moves by the panels

The panel chairs can concentrate on the ID aspects

- What makes this proposal valuable in terms of new research directions?
- Rather than question the prior review or re-review
The ERC Starting Grant was a very high-volume operation

- Raising questions of quality versus quantity
- Resource-expensive in terms of scientist’s time

![Graph showing relationship between volume and quality of judgement between human discretion and automatic process with a forbidden zone.](image)
On efficiency

The challenge is to maximise the efficiency of the reviewer’s work

• E.g. by limiting their exposure to ‘no-chance’ applications
• E.g. by proposing automatic processes that are fair by default

Examples:

1. Consolidation by panel chairs of 20 panel-ranked lists into 1: a ‘bureaucratically fair’ algorithm was proposed and unanimously accepted

2. Early elimination of ‘no-chance’ proposals: a tool based on publication records is proposed for the AdG review; it may also improve coherence of decision-making.
Conclusions

Apologies for having strayed as regards the scope of the session

The proposed ‘Core principles of peer review’: a good and useful set of principles, with which ERC processes are broadly compliant

But how to advance such principles? By legislation, collaboration or competition?

ERC’s first Starting Grant review cycle successfully completed: some 300 grants on the way

ERC’s first Advanced Grant review cycle just taking off
Thank you for your attention