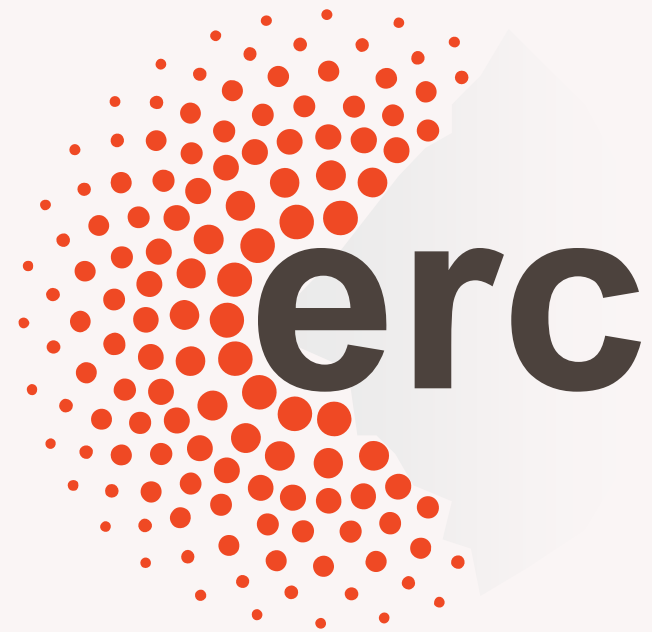


The European Research Council

Jack Metthey
Director

ERC/European Commission
RTD, Directorate S



The birth of the European Research Council

The ERC is:

- A logical development of the European Research Area
- Securely anchored in European legislation

... at the same time

- A revolutionary development

ERC, “Ideas” and FP7

- A new “institution”
- Which is also part of the “family” of FP7:
 - Co-operation
 - **Ideas**
 - People
 - Capacities
- Complementary to other FP7 support to targeted research (bottom-up vs. targeted research)

FP7 Ideas Programme

- **Creates ERC**

- **Provides funding**
 - **Budget (2007-2013) : € 7.51 bn**
(around 15% of FP7 budget)
 - **Average budget: € ~1 bn per year**

- **Sets overall objectives for research and operating principles**

Strategic Aims

Overview



Boost European excellence in frontier research

- by investing in the best researchers and ideas
- through competition at European level
- on the basis of scientific excellence as the sole criterion
- raising incentives towards quality and aspirations of individual researchers
- providing benchmarks and leverage towards broader (structural) improvements in European research

ERC Actors

The Scientific Council

Independent scientific governance

The Agency

Practical implementation and management of operations

The European Union

Providing the financial means

The ERC Board

Linking strategy and operations

Prof. Fotis Kafatos
President of the ERC



Prof. Helga Nowotny
Dr Daniel Esteve
Vice-Presidents of the ERC



Prof. Ernst-Ludwig Winnacker
ERC Secretary-General



Jack Metthey
Director of ERC DIS
(EC RTD Directorate S)



ERC Grant Schemes

Launch Strategy of ERC Scientific Council

- **Retain – Repatriate – Recruit**
- Favour “**brain gain**” and “**reverse brain drain**”
 - increase **competition, recognition and international visibility** for excellent individual scientists and scholars in Europe
 - **ERC Advanced Grant**: attract & reward established independent research leaders, up to 5 years, up to € 2.5 Mio.
- **Keep (young) researchers in Europe**
 - improve **career opportunities and independence** - especially for young researchers
 - **ERC Starting Grant**: attract & retain the next generation of independent research leaders, up to 5 years, up to € 2.0 Mio.

ERC budget

2007-2013

➤ Total (FP7 Ideas budget): € 7.51 bn

- ≈1/3 Starting Grants, ≈ 2/3 Advanced Grants
- Less than 5% for operational ERC management

➤ 1st Call

- StG only, € 300 Mio., call closed on 25 April 2007
- Budget allocated to three areas (for operational reasons)

➤ 2nd Call

- AdG only, Autumn 2007, € 550 Mio.

➤ 3rd call onwards:

- StG + AdG ≈ € 1.0 bn per year

ERC Grants

Who can apply ?

- Individual Research Teams:
 - headed by a single “**Principal Investigator**” (team leader)
 - of any nationality
 - if necessary, including additional team members.
- The “Principal Investigator” has the freedom to choose the **research topic** and the power to assemble his/her **research team** meeting the needs of the project.
- Teams can be of **national or trans-national** character.

Evaluation Criteria

Scientific Excellence is the sole criterion

1. Potential of Principal Investigator
2. Quality of research project
3. Research Environment and Resources
 - Referees and panels evaluate and score criteria under Heading 1 and Heading 2 numerically which will result in the ranking of the projects:
 - 0-5 points, in increments of 0.5
 - Threshold 8 / 10
 - Criteria under Heading 3 will be considered as "pass/fail" and commented but not scored

ERC Starting Grant

Budget Allocation

- ERC covers **all fields of science, engineering and scholarship**
- For operational reasons the ScC agreed on **3 main research domains**:
 - **Physical Sciences & Engineering**
 - **Biological & Life Sciences**
 - **Social Sciences and Humanities**
- The **first call budget for ERC Starting Grants** has been **pre-allocated to these areas** as follows:
 - **45% - 40% - 15%**

ERC Starting Grant

20 peer review panels in 3 domains

Area 1: Physical Sciences, Engineering Sciences, Universe and Earth Sciences (8 panels)

Area 2: Biological and Life Sciences (7 panels)

Area 3: Social Sciences and Humanities (5 panels)

- Each panel consists of one Panel Chair and 10-12 panel members
- Panel Chair oversees evaluation process for the proposals assigned to his/her panel in collaboration with the ERC staff
- The Panel Chair gives high level stamp of credibility and visibility to the whole evaluation process

Starting Grant Panels

Interdisciplinary, forward-looking constitution

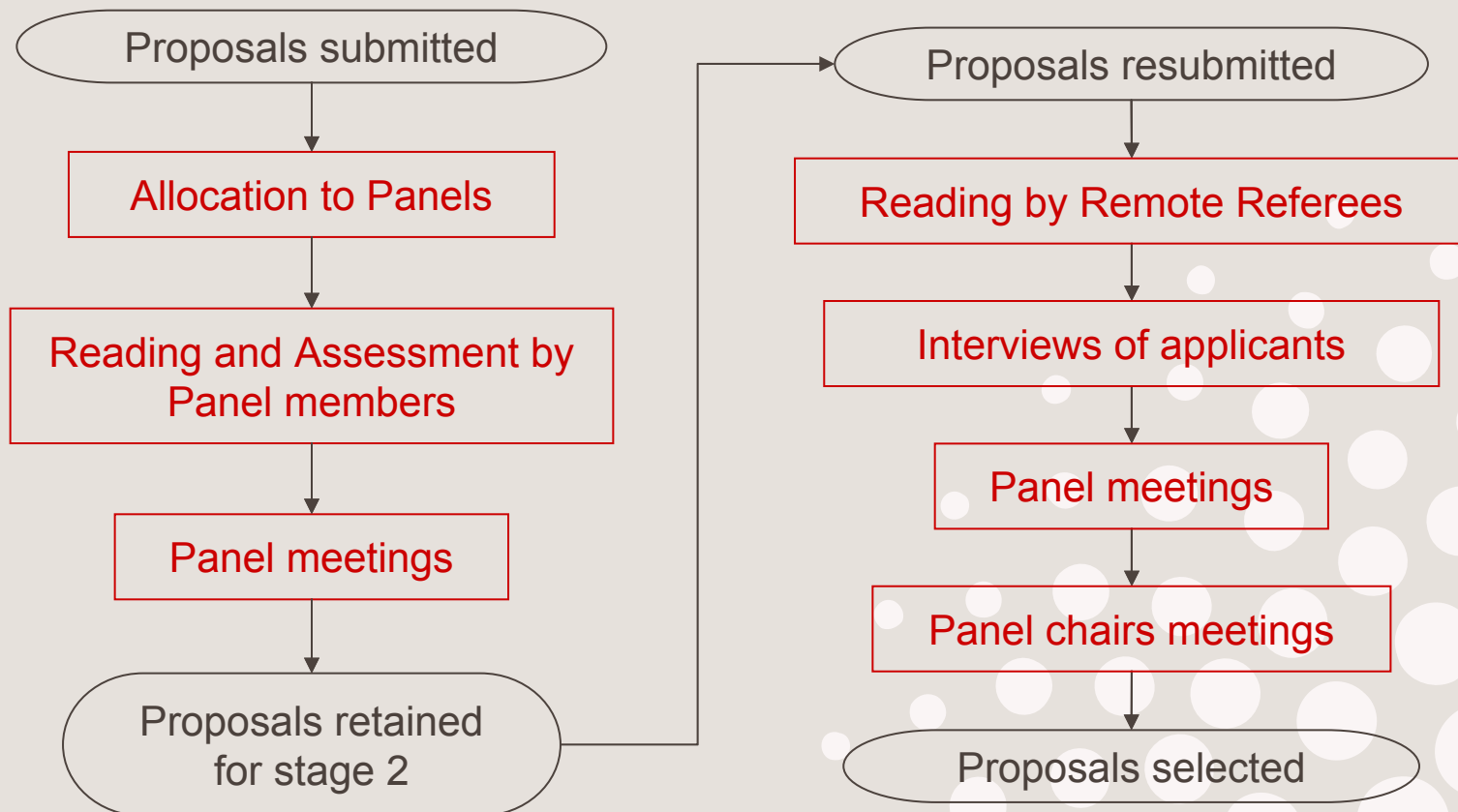
Examples for the ERC Panel Structure and Keywords

- **SH1: Individuals and Organisations**: economics, management, demography, geography, urban and environmental studies
- **PE8: Earth System science**: physical geography, geology, geophysics, meteorology, oceanography, climatology, ecology, global environmental change, biogeochemical cycles, solar planets, natural resources
- **LS5: Evolutionary, population and environmental biology**: evolution, ecology, animal behaviour, population biology, biodiversity, biogeography, marine biology, ecotoxicology

ERC Starting Grant Timeline

Call closure	25/04/07
Remote evaluations (stage 1)	May-June
Panel meetings (stage 1)	June-July
Invitation for stage 2	July
Letters of rejection	August
Submission deadline (stage 2)	17/09/07
Panel meetings & Interviews	October-Nov

ERC Submission, Evaluation and Selection Process



ERC Starting Grant

Peer Review Evaluation (stage 1)

■ Prior to panel meeting

- Remote assessment of the outline proposals
- Because of the high numbers, additional **Panel Evaluators**
 - Selected by Panel Members and Scientific Council member → same high level as Panel Members (about 600, different numbers in the various panels)
 - Involved in remote assessment
 - Do not participate in panel meetings
- Remote evaluation results in joint compilation of individual assessment reports and in a preliminary ranked list per panel

■ Panel meetings

- June/July 2007
- Panel Members discuss proposals with average score above 8
- Number of applicants invited to proceed to stage 2 will be approximately double the number of grants available

ERC Starting Grant

Peer Review Evaluation (stage 2)



- **Submission of full proposal by applicants**
- **Remote assessment**
 - By Panel members and Referees (specialists)
- **Interviews of stage-2 principal investigators**
 - Interview of at least 20 minutes
 - Starting with a short overview of the project
 - Followed by questions / answers related to criteria
 - Interview result are an additional element in subsequent considerations
- **Panel meetings**
 - Panel members decide on the final scoring
 - Ranked lists per panel
- **Panel chairs meeting**
 - Ranked lists per domain

ERC Starting Grant Feedback



Evaluation Report is sent to each applicant

- Final decision of panel
- Comments by the panel
- Comments by individual reviewers, referees, panel members/evaluators

Annex 3: Sample of an Evaluation Report (ER)

ERC EVALUATION REPORT Stage 1

Call reference	ERC-2007-SIG
Activity	ERC-SIG
Funding scheme	ERC Starting Grant
Panel name	PE4 – Material and Chemical Sciences
Proposal No.	067432-1
Acronym	HOLL
Title	A novel method in holographic lithography at the nano-scale

PANEL MARKS

1. Principal Investigator: Potential to become an independent research leader. Quality of research output: Has the Principal Investigator published in high quality peer reviewed journals or the equivalent? To what extent are these publications ground-breaking and demonstrative of independent creative thinking and capacity to go significantly beyond the state of the art? Intellectual capacity and creativity: To what extent does the Principal Investigators record of research, collaborations, project conception, supervision of students and publications demonstrate that he/she is able to confront major research challenges in the field, and to initiate real productive lines of thinking?	4 / 5
2. Quality of the proposed research project. Ground-breaking nature of the research: Does the proposed research address important challenges in the field(s) addressed? Does it have suitably ambitious objectives, which go substantially beyond the current state of the art (e.g. including trans-disciplinary developments) and novel or unorthodox approaches? Potential impact: Does the research open real and important scientific/technological/scholarly horizons? Methodology: Is the outlined scientific approach (including the activities to be undertaken by the individual team members) feasible?	3.8 / 5
Total mark	7.8 / 10
Has the proposal passed the threshold (8/10)?	No

PANEL COMMENTS

This evaluation report documents the final decision by the ERC evaluation panel. The panel bases its appraisal on the individual assessments by specific panel members and evaluators, whose comments are reproduced below.

The panel has reviewed these assessments and, while not necessarily subscribing to each and every opinion expressed, finds that in their totality they provide a fair and positive assessment of the proposal. The panel shares this impression that the proposal is generally of good quality.

However, in the context of the strong competition and the limited availability of funding, the proposal did not find sufficient support and endorsement from the panel members to be retained for the second stage of the evaluation.

The panel has therefore decided to award the final marks as given in the table above.

1st Call ERC Starting Grant

Massive response

Domain	Number of proposals	% of proposals	% of budget pre-allocated*
Life Sciences	3,396	37,0	40
Physical Sciences & Engineering	4,408	48,1	45
Social Sciences & Humanities	1,363	14,9	15
Total	9,167		

*Indicative budget established by ScC (Work programme 2007)

ERC Starting Grant

Statistics

Some preliminary statistics are available:

- average requested grant size: 1 M€
- Female/male applicants: 30/70%
- Mostly from single institutions:

No. of Inst.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	17	22
No. of Prop.	8011	578	268	124	74	41	20	20	12	6	3	2	4	1	2	1

- Broad distribution of time for PI after PhD:

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005
%	1.7	8.7	13.6	14.6	15.1	15.0	13.6	12.4	4.2

1st Call ERC Starting Grant

Constitution of Individual Teams, “Age” of PI

Proposals mostly involve single institution

- 87% of proposals involve 1 institution
- 7% of proposals involve 2 institutions
- 2% of proposals involve 3 institutions

⇒ **The concept of “individual teams” has been well applied.**

Time after PhD

- 84% of PIs received PhD between 3 and 8 years ago

1st Call ERC Starting Grant

Geographical distribution of applications

<u>Cluster</u>	<u>PI residence %</u>	<u>Host Institution location %</u>
EU-27	88.9 (8207)	92.2
12 new Member States	8.6 (796)	8.8
7 EU-associated or candidates countries (CH, HR, IL, IS, NO, RS, TR)	7.9 (715)	7.8
Overseas	3.2 (244)	0
	100*	100*

* Based on the total of 9167 submitted proposals (before eligibility check)

ERC Advanced Grant

Consequences from 1st call experience

- **Call for ERC Advanced Grants put forward**
 - ↳ Call in autumn 2007, deadlines in early 2008
 - **Reduce over-subscription**
 - ↳ Track record will become important
 - **Adjusted panel structure**
- ↳ For discussion/decision-making at the next **Scientific Council** and **ERC Board** meetings

ERC Advanced Grant

1-stage submission / 2-step evaluation



1st step: Evaluation of CV with special emphasis on excellent track record (papers published in journals of high impact, highly cited publications, monographs, invited talks at established international conferences etc.) & “Extended Synopsis”

⇒ **Top proposals (over threshold) proceed to 2nd step**

The over threshold list can go down to the point that cumulative budget is ~ 2-3x of the call budget

2nd step: Evaluation of Full Proposal



Thank you !

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