



Excellent Science

Funding Opportunities in the frame of European Research Council (ERC)



Research Support Office

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University of Aveiro
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About Research Support Office

MISSION

To stimulate, facilitate and reinforce UA participation in (European) Research Programmes and Activities.



To inform > dissemination of relevant, reliable and timely information

To explore > identification of opportunities which may offer new possibilities for UA and its researchers

To facilitate > support the researchers in the preparation of project proposals and in the implementation of research projects

Our Support

- Administrative support - general information on opportunities, official documents, signatures
- Advanced support - editing, reviewing, writing (of specific parts!) of the proposals (coherence, ideas, linguistic style, clarity of the text, alignment and framing with calls, team etc)
- Clarifications and articulation with management authorities
- Networking and Partner Search
- Review and validation of budgets (**MANDATORY !!!**)
- Strategic Counseling
- Verification of eligibility; conditions of participation

support

universidade de aveiro



theoria poesis praxis

research





Frontier Research
by the best
individual teams

Horizon 2020

Excellent Science

European Research Council (ERC)

Future Emerging Technologies (FET)

Marie Skłodowska Curie Actions (MSCA)

European Research Infrastructures

Industrial Leadership

Enabling and Industrial Technologies

Access to Risk Finance

Innovation in SMEs

Societal Challenges

Health, Demographic Change and Wellbeing

Food Security, Sustainable Agriculture, etc.

Secure, Clean and Efficient Energy

Smart, Green and Integrated Transport

Climate Action, Resource Efficiency and Raw Materials

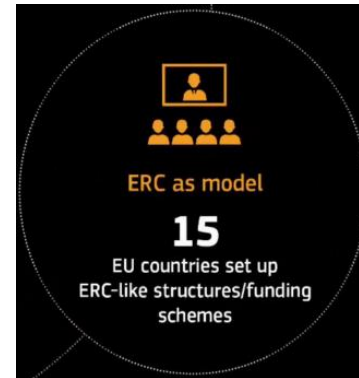
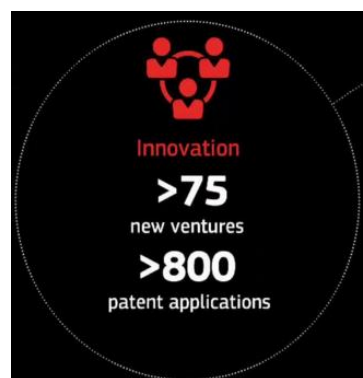
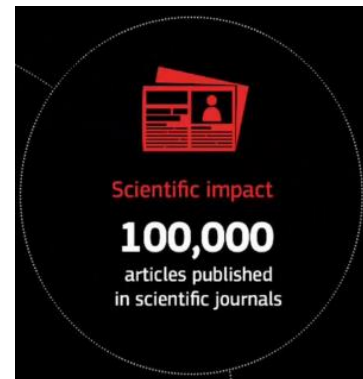
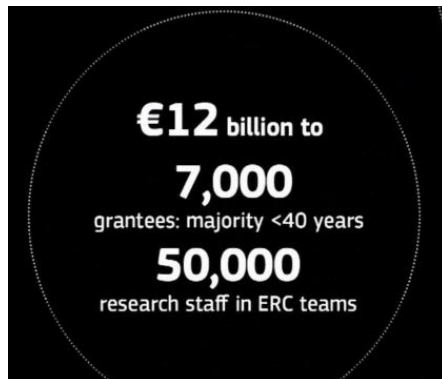
Inclusive, Innovative and Reflective Societies

Secure Societies

European Institute of Innovation & Technology (EIT) • Joint Research Centre (JRC)
• Spreading Excellence and Widening Participation • Science with and for Society

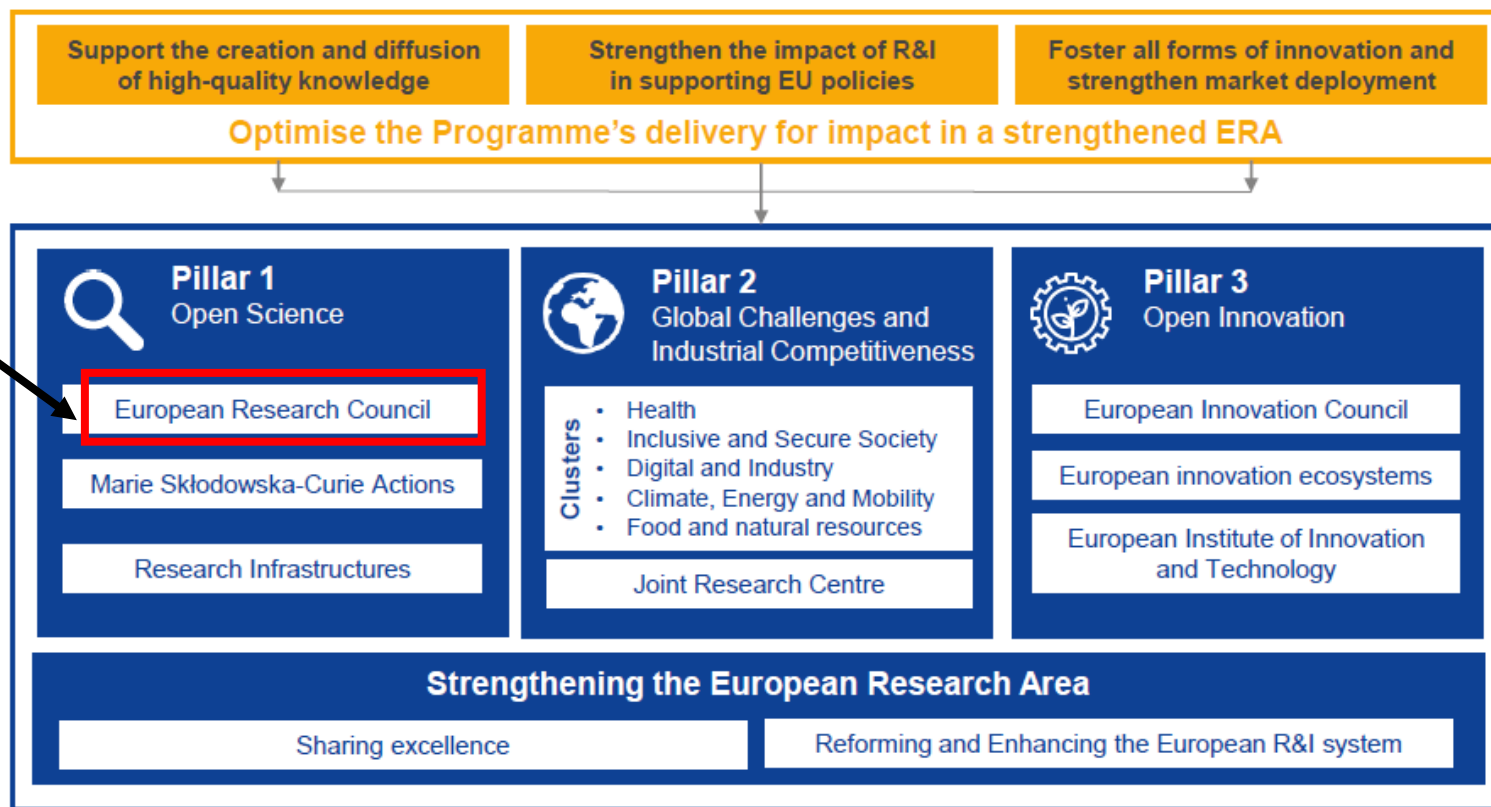


Facts and figures





Beyond Horizon 2020 – Horizon Europe (2021-2027) (94B€)



16,6 B€

(vs 13 B€, 2014-2020)



Why to apply? (1)

- ERC offers independence, recognition & visibility
- to work on a research topic of own choice , with a team of own choice ('bottom-up')
- to gain true financial autonomy for 5 years (6 for Syn)
- to negotiate with the host institution the best conditions of work
- to attract top team members (EU and non-EU) and collaborators
- to attract additional funding and gain recognition- ERC is a quality label
- Independence and freedom of research is fundamental



Why to apply? (2)

Disappointing, but ...

- Had productive years
 - Partially by following my ERC plan
- Got a position at KTH, Sweden, 2014
 - Complimented for clear research plan
- Got grant from Swedish Research Council 2015
 - Ideas from ERC proposal help

Lesson: Applying for ERC grants is a good chance to think ahead and get feedbacks.



General Features

- **The PI may be of any age and nationality** and may reside in any country in the world at the time of the application
- Research must be conducted in a public or private research organization (Host Institution/HI) located in one of the EU Member States or Associate Countries
- **Portability:** It is expected that the PI establishes and concludes the funded research project in association with the original host. However, the ERC grants allow PIs to transfer their projects from one host to another in the course of the project.
- Research teams are headed by a single Principal Investigator (PI) + additional team members (6 members average) - it is neither a network, nor a 'research consortium'

The candidate

- Past History (Doctoral/Postdoctoral/Pi)
- When is the right time to apply?
- Institution/Support
- Confidence/Believing

The ERC supports individual Principal Investigators. Support for consortia is provided by other calls under Horizon 2020.

The proposal/project (1)

In Any field of research!

- interdisciplinary nature which cross the boundaries between different fields of research
- Pioneering , addressing new and emerging fields of research
- introducing unconventional, innovative approaches and scientific inventions

The proposal/project (2)

- The idea
- Novelty
- Importance
- Feasibility
- Am I the right person to ask (and answer!) this question?
- Am I the best person to ask (and answer) this question?

Key Words:

High-gain/high-risk

Groundbreaking nature

Ambition

5 types of grants / applicants

Starting Grants

are designed to support excellent Principal Investigators at the career stage at which they are starting their own independent research team or programme.

(>2 and ≤7 years after
PhD

prior to 1 January 2019

Cut-off dates:

PhD awarded from 1 January 2012 to
31 December 2016 (inclusive))

Consolidator Grants

(>7 and ≤ 12 years after
PhD

prior to 1 January 2019

Cut-off dates:

PhD awarded from 1 January 2007
to 31 December 2011 (inclusive))

Advanced Grants

designed to support excellent Principal Investigators at the career stage at which they are already established research leaders with a recognized track-record of significant research achievements in the last 10 years

Synergy Grants— enable 2- 4 PI's (competitive track records as appropriate to their career stage) and their teams to bring together complementary skills, knowledge, and resources in new ways, in order to jointly address ambitious research problems.

Proof-of-Concept bridging gap between research – earliest stage of marketable innovation lump sum of €150,000 **for ERC grant holders**



Indicative Timetable – WP2019

	<i>Starting Grant</i>	<i>Consolidator Grant</i>	<i>Advanced Grant</i>	<i>Synergy Grant</i>	<i>Proof of Concept Grant</i>
<i>Call identifier</i>	ERC-2019-StG	ERC-2019-CoG	ERC-2019-AdG	ERC-2019-SyG	ERC-2019-PoC
<i>Call Opens</i>	14/09/2018 September 2019/2020 ?	24/10/2018	21/05/2019	14/09/2018 September 2019/2020?	16/10/2018
<i>Call closes (cut-off dates for PoC)</i>	17/10/2018	07/02/2019	29/08/2019	08/11/2018	22/01/2019 25/04/2019 19/09/2019





StG - The Candidate

- 1. Up to five publications in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided).*
- 2. Research monographs and any translations thereof;*
- 3. Granted patent(s);*
- 4. Invited presentations to internationally established conferences and/or international advanced schools;*
- 5. Prizes, awards, academy memberships.*



The grant:

- up to a maximum of EUR 1 500 000 (5 years)
- Possibility of additional EUR 500 000



CoG– The Candidate

- 1. Up to ten publications in major international peer-reviewed multi-disciplinary scientific journals and/or in the leading international peer-reviewed journals, peer-reviewed conferences proceedings and/or monographs of their respective research fields, highlighting those as main author or without the presence as co-author of their PhD supervisor (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided).*
- 2. Research monographs and any translations thereof;*
- 3. Granted patent(s);*
- 4. Invited presentations to internationally established conferences and/or international advanced schools;*
- 5. Prizes, awards, academy memberships*



The grant:

- up to a maximum of EUR 2 000 000 (5 years)
- Possibility of additional EUR 750 000



Advanced Grants – Profile /Recognised Track Record

*1. Up to ten representative publications, from the last ten years, as main author (or in those fields where alphabetic order of authorship is the norm, joint author) in **major international peer-reviewed multi-disciplinary scientific journals** and/or in the **leading international peer-reviewed journals** and **peer-reviewed conference proceedings** of their respective research fields (properly referenced, field relevant bibliometric indicators may also be included); preprints may be included, if freely available from a preprint server (preprints should be properly referenced and either a link to the preprint or a DOI should be provided).*

2. Research monographs and any translations thereof; 3

3. Granted patents; 5

4. Invited presentations to internationally established conferences and/or international advanced schools;

5. Research expeditions that the applicant Principal Investigator has led; 3

6. Organisation of international conferences in the field of the applicant (membership in the steering and/or organising committee); 3

7. Prizes, awards, academy memberships;



**Major contributions to launch careers of outstanding researchers
Leadership in industrial innovation or design**

No PhD needed!

The grant:

- up to a maximum of EUR 2 500 000 (5 years)
- Possibility of additional EUR 1 000 000

ERC – Synergy Grants - Profile

- Groups applying for the ERC Synergy Grant must be made up of **a minimum of two and a maximum of four Principal Investigators and, as necessary, their teams.**
- One of the Principal Investigators must be designated as the **Corresponding Principal Investigator.**
- Applications are expected from **a group of innovative and active Principal Investigators with competitive track records as appropriate to their career stage** and each must present as part of the proposal an early achievement track-record or a 10-year track-record whichever is most appropriate for their career stage).
- One of the Host Institutions can be a legal institution established outside the EU or Associated Countries



The grant:

- up to a maximum of EUR 10 000 000 (6 years)
- Possibility of additional EUR 4 000 000

PoC

→ Aim is to bring ERC-funded ideas to a pre-demonstration stage for potential:



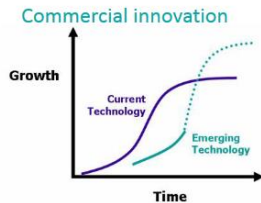
Financial profit



Licensing to new or existing company



Venture-funded start-up



new product, process, service or method of production, or form of organisation or methodology



Social innovation

a social venture, ICT-based non-profit social network, web-based platform, organisation, new grass-root organisation

a new principle, piece of legislation, social movement, intervention, new form of participation or some combination of them...

... but also

a new product, production process or technology

Proposal Submission

→ Administrative Proposal Submission form

Information on PI, host institution, budget

Including Ethics Review Table

Filled on line

→ The Research Proposal, Parts B1 and B2

Uploaded and submitted PDF files

The minimum font size allowed is 11 points. The page size is A4 (with single line spacing). Side margins should be at least 20 mm and the bottom and top margins at least 15 mm

→ Host Institution Binding Statement of Support

→ Ethics review self-assessment (if applicable) and supporting documentation

[registration on Funding and Tenders Portal](#) needed!

(Submission by the PI)

ERC – Proposal – Part B1

Showcase the innovative methodology and theory, the main question and research Questions

Show the components of the programme and how they contribute to the whole

→ Extended Synopsis: max. 5 pages

references do not count towards the page limits

Concise description of the scientific proposal; needs to show the ground-breaking nature of the research project and its feasibility

→ Curriculum Vitae: max. 2 pages

→ Funding ID: no page limits

→ Track Record: max. 2 pages

Publications, prizes, awards, contributions to other's careers, invited talks...

Evaluated on step1

ERC – Proposal – Part B2

Oh no, your paper exceeds the maximum number of pages allowed! What do you do??

TIPS AND TRICKS

FOR KEEPING YOUR PAPER WITHIN THE PAGE LIMIT

Shrink font size to limits of human perception

If a minimum font sized is imposed, use a font that is 0.2pt smaller. They won't notice, will they?

Take out excessive details of your methodology

Let's face it, nobody really cares (and if they do, why help your competition?)

Border size Rule-of-thumb:

If there is paper exposed, it can be filled (Nature, and other journals, abhors a vacuous submission). If limit exists, apply 0.2pt rule.

Use Max. Abbrev. in Ref. Sec.

Spelling out the journal names will only make it easy for people to look up your competitors' papers.

Rewrite entire paper to make it more concise and easier to understand

Yeah right. Prodigious verbiage establishes your superior intelligence. Also, who has the time?





Cost Category			Total in euro
Direct Costs ²	Personnel	PI ³	
		Senior Staff	
		Postdocs	
		Students	
		Other	
	i. Total Direct costs for Personnel (in euro)		
	Travel		
	Equipment		
	Other goods and services	Consumables	
		Publications (including Open Access fees), dissemination activities, etc.	
		Other (please specify)	
	ii. Total Other Direct Costs (in euro)		
A – Total Direct Costs (i + ii) (in euro)			
B – Indirect Costs (overheads) 25% of Direct Costs ⁴ (in euro)			
C1 – Subcontracting Costs (no overheads) (in euro)			
C2 – Other Direct Costs with no overheads ⁵ (in euro)			
Total Estimated Eligible Costs (A + B + C) (in euro)			
Total Requested Grant (in euro)			

The project cost estimation should be as accurate as possible. Significant mathematical mistakes may reflect poorly on the credibility of the budget table and the proposal overall. The evaluation panels assess the estimated costs carefully; unjustified budgets will be consequently reduced. The Total Estimated Eligible



Evaluation - Panels

ERC Evaluation process (StG, CoG & AdG) Panel structure: 3 domains and 25 panels

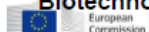


European Research Council
Established by the European Commission

Each panel :
Panel Chair and
11-15 Panel Members

Life Sciences (LS) - 9 panels

- LS1 Molecular & Structural Biology & Biochemistry
- LS2 Genetics, Genomics, Bioinformatics & Systems Biology
- LS3 Cellular & Developmental Biology
- LS4 Physiology, Pathophysiology & Endocrinology
- LS5 Neurosciences & Neural disorders
- LS6 Immunity & Infection
- LS7 Diagnostics, Therapies, Applied Medical Technology & Public health
- LS8 Evolutionary, Population & Environmental Biology
- LS9 Applied Life Sciences & Non-Medical Biotechnology



Social Sciences and Humanities (SH) - 6 panels

- SH1 Individuals, Markets & Organisations
- SH2 Institutions, Values, Environment & Space
- SH3 The Social World, Diversity, Population
- SH4 The Human Mind and its Complexity
- SH5 Cultures & Cultural Production
- SH6 The Study of the Human Past

Physical Sciences & Engineering (PE) - 10 panels

- PE1 Mathematics
- PE2 Fundamental Constituents of Matter
- PE3 Condensed Matter Physics
- PE4 Physical & Analytical Chemical sciences
- PE5 Synthetic Chemistry & Materials
- PE6 Computer Science & Informatics
- PE7 Systems & Communication Engineering
- PE8 Products & Process Engineering
- PE9 Universe Sciences
- PE10 Earth System Science

<https://erc.europa.eu/document-category/evaluation-panels>



Evaluation – EXCELLENCE!!!

Evaluation of *excellence* at two levels:

- **Excellence of the Research Project**

- ✓ Ground breaking nature
- ✓ Potential impact
- ✓ Scientific Approach

- **Excellence of the Principal Investigator**

- ✓ Intellectual capacity
- ✓ Creativity
- ✓ Commitment

Score A

Fully meets ERC
excellence criterion

Recommended for
funding (if sufficient
funding is available)

Score B

Meets
some but
not all the
ERC
excellence
criterion

Will not be
funded.
Restrictions
apply

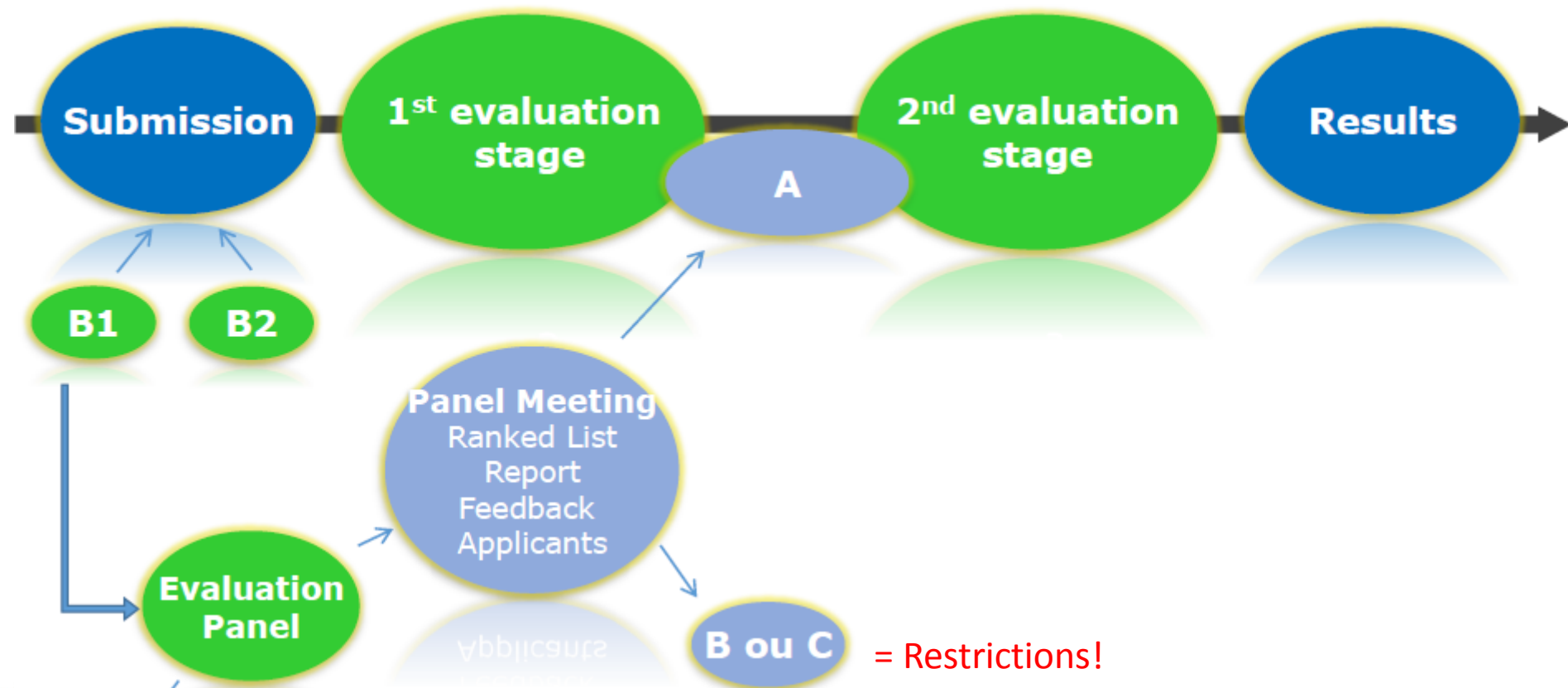
Score C

Not of
sufficient
quality to
pass to step
2

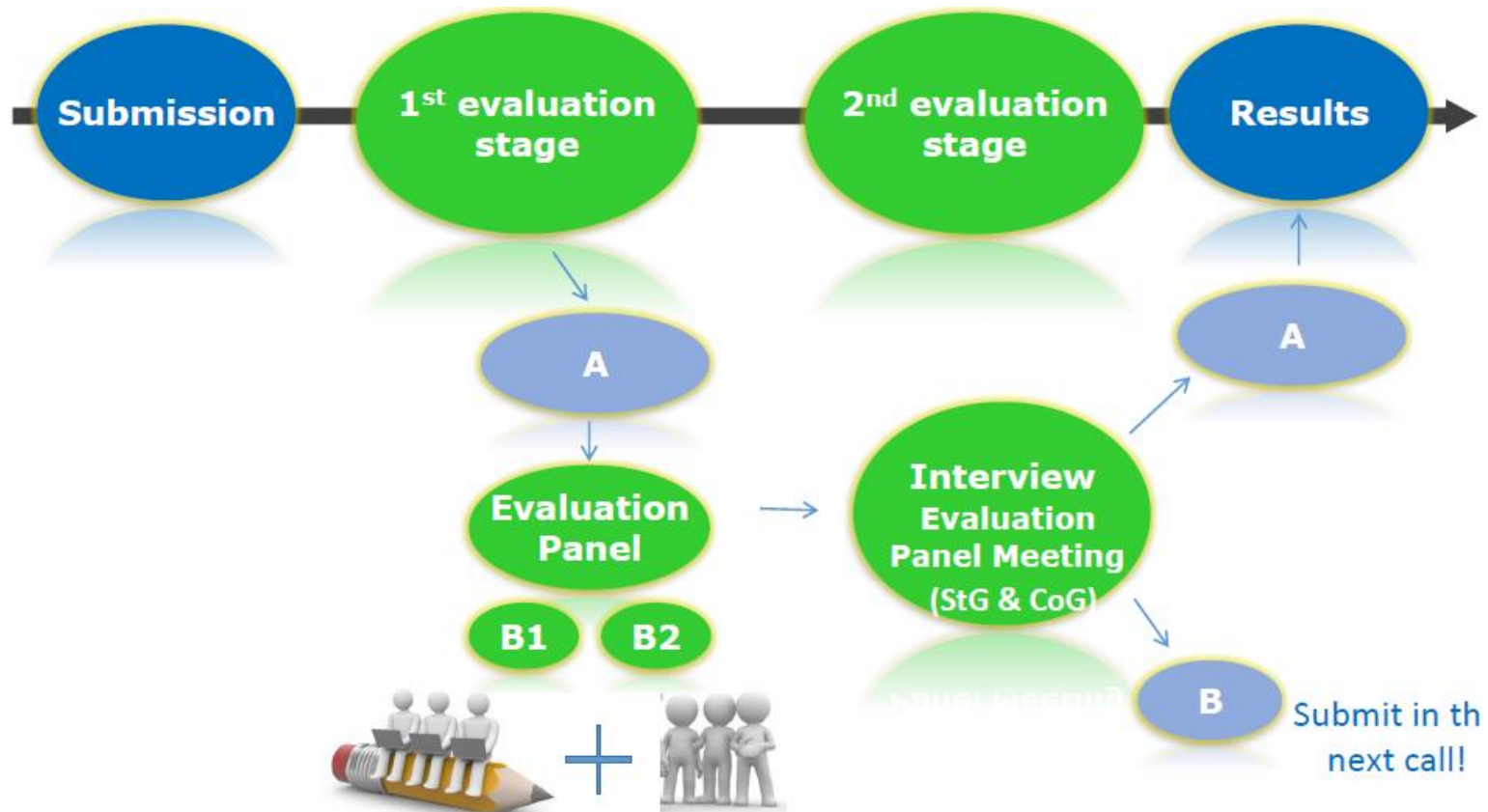
Restrictions
apply



Evaluation –Step 1

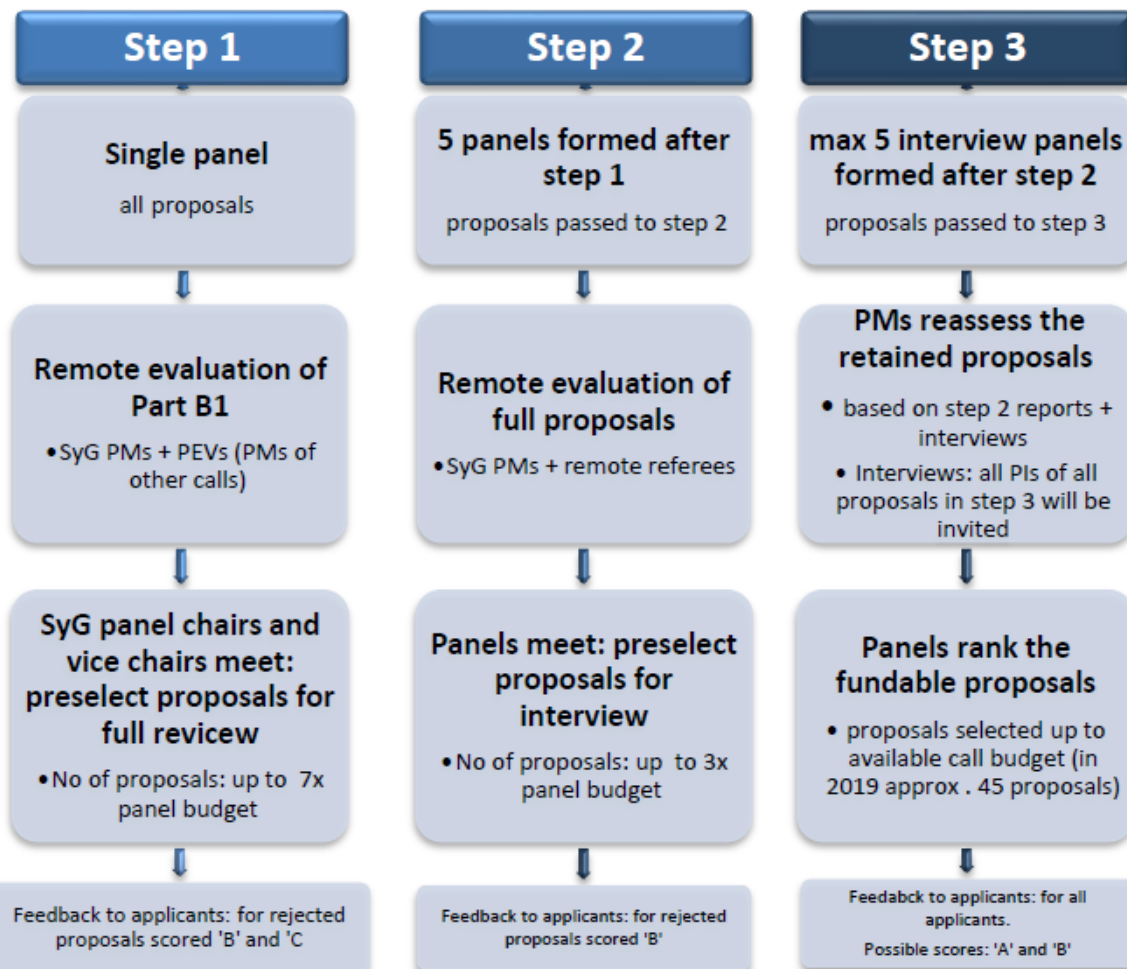


Evaluation – Step 2



<https://erc.europa.eu/sites/default/files/document/file/ERC-2016-AdG-results-sh.pdf>

ERC – Evaluation –Process - Syn



- Groundbreaking nature
- Synergetic aspects
- Ambition
- Feasibility
(research project)
- Intellectual capacity
- Creativity
- Commitment
(of the PIs)



ERC – Evaluation –Process – PoC

Single Step

**Evaluation Criterion 1
Excellence (Innovation potential)**

Evaluation criterion 2 - Impact

**Evaluation criterion 3. Quality and
efficiency of the implementation
(Quality of the proof of concept plan)**

Proposals which fail 1 criterion will not be ranked

- if 3 experts fail 1 criterion, the proposals will not be considered

Proposal X	Criterion 1	Criterion 2	Criterion 3
Expert 1	Fail	Pass	Pass
Expert 2	Fail	Pass	Pass
Expert 3	Fail	Pass	Pass
Expert 4	Pass	Pass	Pass
Expert 5	Pass	Pass	Pass



Restrictions to submission

Call Applied		Can't apply to
2017 Starting, Consolidator, or Advanced Grant	Rejected on the grounds of a breach of research integrity	2019 Starting, Consolidator, Advanced, and Synergy Grant
	C at Step 1	2019 Starting, Consolidator, and Advanced Grant
2018 Starting, Consolidator, or Advanced Grant	Rejected on the grounds of a breach of research integrity	2019 Starting, Consolidator, Advanced, and Synergy Grant
	A, or B at Step 2	No restriction
	B at Step 1	2019 Starting, Consolidator, and Advanced Grant
	C at Step 1	
2018 Synergy Grant	Rejected on the grounds of a breach of research integrity	2019 Starting, Consolidator, Advanced, and Synergy Grant
	A, or B at Step 3	No restriction
	B at Step 1 or 2	Synergy Grant
	C at Step 1	2019 Starting, Consolidator, Advanced, and Synergy Grant

Tips and Hints

It takes time having a good proposal (and it is a process!)

Start working soon

(in good portuguese “não deixes para amanhã o que podes fazer hoje)



**There are support structures that can help
(contact them...timely...!)**

Thank You & Contact Us!!!

Vice-Rector Research, Innovation and 3rd Cycle

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Useful Links and Documents

European Research Council (ERC)

<http://erc.europa.eu>

To subscribe to ERC newsletter and news alerts

<http://erc.europa.eu/keep-updated-erc>

Participant Portal

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

<https://vimeo.com/117398570>

https://erc.europa.eu/sites/default/files/document/file/Info_for_Applicants_StG-CoG-2018_draft_19072017_pre-publication.pdf