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Horizon 2020 ERC Workshop

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Agenda

- Context
- Eligibility and what makes a good candidate
- Information and the Application process
- Evaluation: Process and criteria
- Applying: Issues for consideration
- Some real evaluation feedback
- Useful resources/links

Context

What can be funded?

"The fundamental activity of the ERC is to provide attractive, long-term funding to support excellent investigators and their research teams to pursue ground-breaking, high-gain/high-risk research …
… scientific excellence is the sole criterion on the basis of which ERC frontier research grants are awarded"

- The best "frontier research" proposals submitted by excellent researchers in the area of their choice
- Projects led by a Principal Investigator, usually supported by a research team
- Any subject

What are they?

- Starting Grants
  - Researchers who are 2 – 7 years post-PhD
  - Up to €1.5 m for five years (with €0.5m extra if justified*)
- Consolidator Grants
  - Researchers who are 7 – 12 years post-PhD
  - Up to €2 million 5 years (with €0.75m extra if justified*)
- Advanced Grants
  - Exceptional research leaders with 10 year track record
  - Up to €2.5 million 5 years (with €1 million extra if justified*)

*"start-up" costs for researchers moving from a third country to the EU or an associated country and/or the purchase of major equipment and/or access to large facilities.

Aims of ERC Schemes

Starting Grants

- Support excellent PIs at the career stage where they are starting their own independent research team or programme

Consolidator Grants

- Support excellent PIs at the career stage where they may still be consolidating their own independent research team or programme

- **Advanced Grants**
  - Support Senior/established researchers with a recognised track record of research achievements

For all schemes, PIs must demonstrate the ground-breaking nature, ambition and feasibility of their research proposal

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Am I eligible?

Am I a good candidate?

Am I Eligible?

For Starting Grants - 2 and 7 research years' experience from date of award of PhD

For Consolidator Grants - 7 and 12 research years' experience from date of award of PhD

Both measured to 1 January in the call year

Extensions for documented 'eligible career breaks' for the PI:

- Maternity leave (18 months per child*) and paternity leave (actual amount of documented leave taken) (taken before or after PhD)
- Long-term illness (over 90 days) of PI or close family member (after PhD)
- National service (after PhD)
- Clinical training (after PhD)

For Advanced Grants No specific eligibility criteria

* or actual amount of documented leave taken if greater than 18 months

Principal investigator

- The project is your idea
- You design it, assemble your team, lead it and are fully engaged in running it
- You must spend at least
  - 50% of your total working time on the grant (StG)
  - 40% of your total working time on the grant (CoG)
  - 30% of your total working time on the grant (AdG)
- You must spend at least 50% of your time in Europe

Am I a good candidate? – StG & CoG

Must already have shown

- Potential for research independence
- Evidence of maturity

  For example expectation that

  - StG applicants will have produced at least one important publication without the participation of their PhD supervisor
  - CoG applicants will have produced several important publications without the participation of their PhD supervisor
- Demonstration of promising track record of early achievements appropriate to their field and career stage, including:
  - significant publications (as main author) in major international peer-reviewed multidisciplinary scientific journals or in leading international peer-reviewed journals in their field
  - A record of invited presentations in well-established international conferences, granted patents, awards, prizes…
- Leadership potential

Am I a good candidate? - AdG

- Are you known as a leader in your field?
- Do you have an international reputation?
- Do you have a demonstrable 10 year record of achievement - usually including
  - 10 publications as senior author in major international peer-reviewed multidisciplinary scientific journals … and/or
  - 3 major monographs
- Other benchmarks – depending on your field could be
  - 5 granted patents
  - 10 invited presentations in well established internationally organised conferences
  - 3 research expeditions led by you
  - Member of steering committees of at least 3 well-established international conferences
  - International recognition through prizes, academic membership
  - Major contribution to launching careers of outstanding researchers
  - Recognised leadership in industrial innovation

Is my idea good enough?

- Ground breaking?
- Frontier research?
- At the edge of knowledge?
- Novel in approach or methodology?
- Unconventional? Innovative? Inventive?
- Exciting?
- Ambitious and beyond the state of the art?
- Cross disciplinary / interdisciplinary / multi-disciplinary?
- Clear, achievable, worthwhile?
- High risk / high gain?

Consider

- Are you ready?
- Is your idea good enough?
- Would your peer group think your idea was good enough?
- Could you improve your chance of success?
- Should you plan for a future call?
- Do you know how to write a good proposal?
- Do you know where support can found in the University?

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Application process

EU Programmes 2014-2020

- Search Topics
- Updates
- Calls
  - H2020
  - 3rd Health Programme
  - Asylum, Migration and Integration Fund
  - Consumer Programme
  - COSME
  - Internal Security Fund - Borders
  - Internal Security Fund - Police
  - Justice Programme
  - Promotion of Agricultural Products
  - Rights, Equality and Citizenship Programme
  - Research Fund for Coal & Steel

Calls for Proposals

Horizon 2020

Advanced search for topics
Calls for tenders on TED

- [ ] **Excellent Science**
  - [x] **European Research Council (ERC)**
  - [ ] **Future and Emerging Technologies (FET)**
  - [ ] **Marie-Sklodowska-Curie Actions**
  - [ ] **Research Infrastructures**
- [ ] **Industrial Leadership**
  - [ ] **Leadership in enabling and industrial technologies (LEIT)**
    - [ ] **Information and Communication Technologies**

Status [ ] **Calls with forthcoming topics** [x] **Calls with open topics** [ ] **Calls with only closed topics**

Sort by ( ) Call title ( ) Call identifier (•) Publication date Filter a call FILTER

Excellent Science
Call for proposals for ERC Starting Grant
ERC-2017-STG
Publication date:26 July 2016

Excellent Science
Call for proposals for ERC Advanced Grant
ERC-2016-ADG
Publication date:24 May 2016

Excellent Science
Call for proposals for ERC Proof of Concept Grant
ERC-2016-PoC
Publication date:22 September 2015

EU Programmes 2014-2020

Search Topics

Updates

Calls

H2020

3rd Health Programme

Asylum, Migration and Integration Fund

Consumer Programme

COSME

Internal Security Fund - Borders

Internal Security Fund - Police

Justice Programme

Promotion of Agricultural Products

Rights, Equality and Citizenship Programme

Research Fund for Coal & Steel

FP7 & CIP Programmes 2007-2013

Calls

Other Funding Opportunities

TOPIC : ERC Starting Grant

Topic identifier: ERC-2017-STG
Publication date: 26 July 2016

Types of action: ERC-STG Starting Grant
DeadlineModel: single-stage
Opening date: 26 July 2016

Deadline: 18 October 2016 17:00:00

Time Zone : (Brussels time)

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Call budget overview

Topic Description

+ More

Scope:

Objectives

Topic conditions and documents

+ More

Please read carefully all provisions below before the preparation of your application (for more detailed information, please refer to the Information for Applicants to the Starting and Consolidator Grant 2017 Calls and the Frequently Asked Questions - FAQs):

Submission Service

To access the Electronic Submission Service of the topic, please select the **type of action** that is most relevant to your proposal from the list below and click on the '**Start Submission**' button. You will then be asked to confirm your choice of the type of action and topic, as these cannot be changed in the submission system. Upon confirmation you will be linked to the correct entry point.

To access existing draft proposals for this topic, please login to the Participant Portal and select the My Proposals page of the My Area section.

Type of Action	Starting Grant [ERC-STG]	START SUBMISSION
Topic	ERC Starting Grant - ERC-2017-STG	

Guidance on proposal submission: H2020 ONLINE MANUAL

IT Guidance: HOW TO

Structure of the application

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Part A – Administrative and Summary Forms (completed on-line)

- Proposal Information (including abstract)
- Participating organisation and PI
- Budget (summary financial information)
- Ethics table
- Call Specific Questions

Part B1 – Proposal Details (use word template provided, upload as pdf)

- Cover page & proposal summary
- Extended Synopsis (5 pages)
- Curriculum Vitae (2 pages) + Funding ID (no page limit)
- Track Record (2 pages)

Part B2 – Research Proposal (use word template provided, upload as pdf)

- Research Proposal (15 pages)
- State-of-the-art and objectives
- Methodology
- Resources (including project costs)

Annexes

- Host Institution statement of support (provided by the Institution)
- PhD Certificate, and (if applicable) evidence of extensions (as .pdf)
- Ethics review table (if applicable)

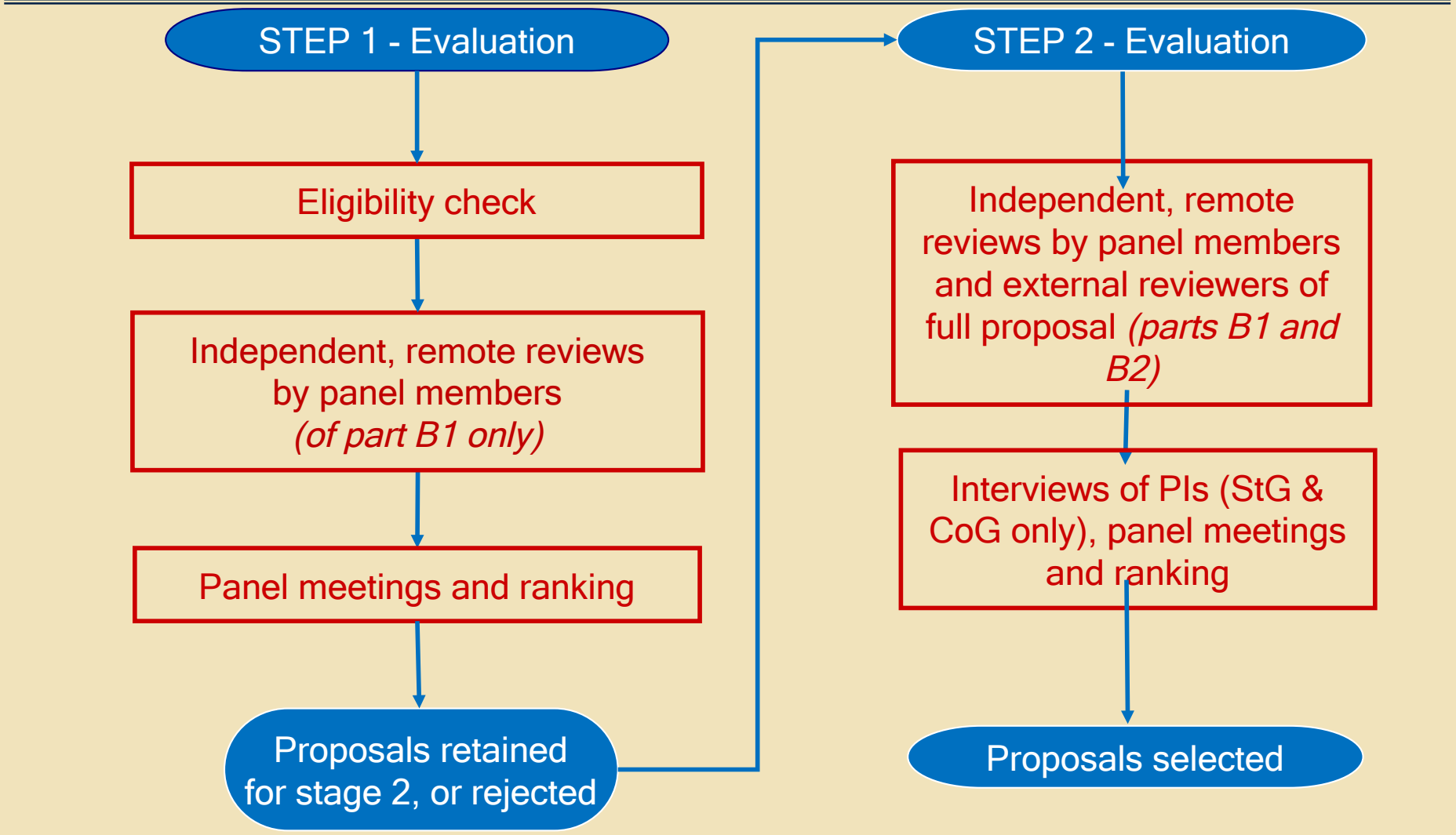
Advice at this stage

- Read the documents
- Use the templates
- Follow the ERC guidance to applicants
- Use in-house expertise
- Understand the evaluation process and criteria and write your application with these in mind
- Give yourself enough time
- Check out the ERC database of funded projects: https://erc.europa.eu/projects-figures/erc-funded-projects
- Talk to existing grant holders
- Get others to review and advise!

Evaluation process

Evaluation criteria

Evaluation process



Evaluation criteria

- Excellence of Principal Investigator
  - Intellectual capacity, creativity, commitment
- Excellence of Research Project
  - Ground breaking, scientific approach, potential for impact

PI: Evaluation Criteria

Intellectual capacity, creativity and commitment

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Intellectual capacity and creativity

- To what extent has the PI demonstrated the ability to **propose and conduct ground-breaking research**?
- To what extent does the PI provide **evidence of creative independent thinking**?
- To what extent have the achievements of the PI typically gone **beyond the state-of-the-art**?

Commitment

- To what extent does the PI demonstrate the level of commitment to the project necessary for its execution and the willingness to devote a significant amount of time to the project (min 50% for Starting and 40% for Consolidator, 30% for Advanced) **and** min 50% in an EU Member State or Associated Country)

CV - (2 pages max)

- **Academic record**
- **Research record**

Tips

There is a template CV, but you may adapt this – but best not to!

Remember to clearly explain any research career gaps so that they can be fairly assessed by the evaluation panels

- **Concise 'Funding ID'**
  (complete the compulsory table, not part of 2 page limit)
  - **Current research grants** and their subject
  - **Ongoing applications** for work relating to the proposal

(Early Achievements) Track Record
(2 pages max)

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- **Publications**
  - in major international peer-reviewed multi-disciplinary scientific journals
  - and/or in leading international peer-reviewed journals and/or
  - peer-reviewed conferences proceedings
  - research monographs of their respective research fields

    - Highlight
      - 5 representative publications and
      - those without the presence of your PhD supervisor as co-author
      - (10 if AdG)
    - Also indicate the number of citations (excluding self-citations) they have attracted

- **Granted patent(s)**

- **Invited presentations** to peer-reviewed, internationally established conferences and/or international advanced schools

- **Prizes and Awards**

General advice – PI criterion

- Sell yourself!
- Remember the Funding ID section in the CV is important
- Make sure you address the full requirements of the track record, and consider what makes you stand out
- Clarify specific points to strengthen your application and give additional relevant details
- Explain anything that is country specific
- The evaluators will review the PI on the basis of their experience and information the PI provides on the application form!
- If you refer to journal impact factors, state which one you are using
- Add a link to your website, and then keep your website UP TO DATE!

How to score highly for the PI criterion? Advice from successful applicants….

- Fill the Track Record with evidence about your achievements – panels are more likely to give an ambitious project the go-ahead if they 'trust' the PI, and are convinced of your credibility as an excellent researcher/project leader
- Avoid understatement / modesty and 'sell' yourself as an excellent researcher
- Quote positive reviews of your work, highlighting esteem for your research from others in your field
- Provide specific details of prizes, citation data for publications, project management experience, papers at conferences, mentoring of students…
- If possible, provide evidence of international influence and activities
- Try to explain how you are exactly the right person to undertake this particular project, at this specific moment in time
- Refer explicitly to the criteria used in the call documents

Aiming for …

- [PI] has an outstanding ability of creative independent thinking and exceptionally strong track records of proposing and conducting ground-breaking research. This is indicated by the fact that he has published a large number of very influential papers in world leading academic journals and has led many cutting-edge research projects
- The PI has an impressive track record of publications and extensive professional experience
- The PI is one of the few researchers who are experts in the full breadth of this domain
- One cannot fail to be struck by the number of their former doctoral students who are now holding tenure-track positions and professorships, several of them being ERC grantees
- The PI has an outstanding, international reputation and an excellent record of training scientists.
- The panel was impressed by the standing, achievements, track record and leadership of the PI. They have successfully pioneered new ideas, built new institutions and attracted the best collaborators. Their achievements have been recognised at the highest levels
- The PI has an impressive organisational ability as demonstrated by leading several large scale projects

Avoid …

- From the CV it is unclear what the involvement has been in the training and advancement of young scientists. The volume and impact of publications is also comparatively low
- Fairly good CV, but not competitive at this level
- Good potential of this PI. However, the bulk of this person's research has been directed towards improving existing systems, rather than developing new ideas or concepts
- The PI has group leader experience but the papers are not impressive
- The PI's top ten publications are not recent
- The PI did not mention supervision of doctoral or post-doctoral students
- The PI's grants are modest considering their seniority and their publication record
- The PI's recent efforts do not appear to be up to the standard of earlier work both in quality and quantity
- Total citation count is not yet outstanding

Research Project: Evaluation Criteria

Ground-breaking nature, ambition and feasibility

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Ground-breaking nature and potential impact of the research project

- To what extent does the proposed research **address important challenges**?
- To what extent are the **objectives ambitious and beyond the state of the art** (e.g. novel concepts and approaches or development across disciplines)?
- To what extent is the proposed research **high risk/high gain**?

Scientific Approach

- To what extent is the **outlined scientific approach feasible** bearing in mind the extent that the proposed research is high risk/high gain (based on Extended Synopsis – B1)?
- To what extent is the proposed **research methodology appropriate** to achieve the goals of the project (based on Scientific Proposal – B2)?
- To what extent does the proposal involve the **development of novel methodology** (based on Scientific Proposal)?
- To what extent are the **proposed timescales and resources necessary and properly justified** (based on Scientific Proposal)?

The Research Project

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Part B1 (Section 1a) Extended Synopsis (5 pages)

Concise presentation of the scientific proposal, with particular attention to the ground-breaking nature of the research project and the feasibility of the outlined scientific approach

- Describe the proposed work in the context of the state of the art of the field
- Include references

Part B2 (Section 2) Scientific Proposal (15 pages)

Detailed descriptions of the project's aim, planning, execution, and required resources

- State-of-the-art & Objectives
- Methodology
- Resources (incl. costs)

General Advice - Research Project criterion

- Consider what excites you about the research and convey this
- Think about your audience - explain UK-specific terminology
- Explain how the research will open new horizons or opportunities
- Provide a clear, concise work-plan which gives details of the intermediate goals
- Explain what each team member is doing (and their background/ recruitment profile)
- Make the application a pleasure to read: use data and graphs, visualise your ideas
- Clearly explain how you will manage and disseminate your project
- Justify the resources you need for your research proposal and ensure the resources are appropriate

Advice from successful applicants …

- Convey passion and make clear the way in which you think the proposal breaks new ground and is innovative. What is your vision for 'frontier research'?
- Balance your vision with a strong, confident plan and good project structure
- Use the ERC's terminology **explicitly**
- Strike a balance between showing the experts in your field that you know your stuff, and engaging the non-experts
- Structure your proposal to address, in order, each of the evaluation criteria in the call documents
- The proposed research could be "safely adventurous", i.e. containing an important idea with a big long-term goal, but also being practically feasible
- Should convey the message that the project can be delivered, but also make an effort to "sell the dream" of an exciting piece of research
- Part B1 must be accessible and enthuse a range of evaluators, and should present a convincing case that the project is worth funding

Recurring feedback from successful applicants

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- Projects with risky/new methodology are welcomed, so long as there is a good reason for trying it and a potentially high reward
- Communicate a longer-term vision of where the project could lead
- Seek to establish a new interdisciplinary field of study at the junction of two related disciplines
- 'No virtue in economy' in applying for an ERC grant - explain why the reviewers should award you significant funding for your project
- How will your project be an important contribution to the research area you have selected, and what will its scientific impact be?
- Ensure the project fits with ERC aspirations - i.e. it is ambitious and innovative, and different to a national funding application
- Provide measurable milestones, but make clear that you will be flexible
- Outline a step change in your field: "*this ground-breaking project will deliver radically new approaches….*"

Aiming for …

- This is an extremely well-presented proposal which offers a coherent and persuasive claim to “ground breaking” status. The ERC Advanced Grant competition is highly competitive and the records of applicants are often impressive, but this application is nevertheless exceptional
- The proposal is well-written, with clear aims and well-defined strategies
- The topic is innovative and stimulating, and demonstrates highly imaginative thinking. The proposal is very well written, highly confident and impressively grounded in extensive and wide-ranging literature. It is theoretically grounded, well-structured and methodologically sound.
- The extent of the foundational work that the PI has completed is impressive
- The panel was very impressed by the scope, rigor and timeliness of the project
- I was impressed by the detailed planning of the organisational side of the project
- The timescale is ambitious, but the research programme appears feasible in view of the applicant’s expertise, networks and experience.
- The proposal contains a good description of the state-of-the-art and the advancements offered by the project.

Avoid …

- The research is incremental and represents a direct continuation of the present research of the PI
- The exact problem that is being addressed is unclear
- It is not fully explained why four postdoc researchers are needed for this purpose and why the goal cannot be achieved by two research assistants
- The panel was concerned by a general lack of specificity in the project which often read more like a discussion document than a detailed research proposal for five years of focused study
- There is not enough interdisciplinary collaboration to make a truly top-class ERC proposal
- There were serious concerns about the PI's limited engagement with extant literature
- The digital aspects of the proposal are poorly specified
- The budget is completely exaggerated and unjustified
- The proposal does not convey the idea of a systematic programme, but rather a collection of open questions
- The proposal does not include a minimal work plan and there is no timetable. It is not clear from the proposal what the consecutive steps and work packages are

Writing the application

The non-science bits

- Budget
- Open Access / Data
- Ethics

Finance information

- **Direct costs:** up to 100% of eligible costs
- **Indirect costs:** Flat rate of 25% of (most) eligible direct costs
- Overall level of grant offered determined by peer review panels

Direct eligible costs

Expense necessary for the research, management, training and dissemination activities of the project

Costs must be:

- Actual
- Incurred by the beneficiary during the project
- According to usual accounting and management principles
- Used solely for project objectives
- Recorded in accounts
- Exclusive of non-eligible costs

Open Access requirements

- Open Access mandatory
  - Manuscripts resulting from ERC-funded work that are accepted for publication during or after the funding period should be deposited in at least one appropriate repository
  - Open Access is to be provided through this chosen repository
  - Obligations also apply to monographs and/or books with the same maximum delay of six months
  - No formal Open Access obligation for review articles (not project 'foreground')
  - Open Access fees should be budgeted when submitting the application
- Open Data: voluntary
  - ERC grants automatically covered by Open Data provisions unless specifically opt out

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/open-access-dissemination_en.htm

Ethics

- All awarded Horizon 2020 projects are submitted to an Ethics review
- At application stage proposals must identify potential ethical considerations
- Mandatory ethics table:
  - Answer “Yes” or “No” to all questions
  - If an answer is “Yes”, cross reference to relevant page in Part B2
- Guidance is in the ERC Information for applicants
- If any questions are answered “Yes” additional information and documentation is required: the Ethics Self Assessment annex
- All submitted projects are subjected to a pre-screening and then, if necessary, looked at by ethics panel
- About 40% of ERC project proposals are cleared on ethical issues by the pre-screening. 60% screened by experts. On average 10% of this 60% is withheld for full ethical assessment

Consider – final thoughts …..

- Know your field inside out
- Choose and clearly define an unmet need
- Think inter-disciplinary
- Think latest technology, if appropriate
- Try to emulate the leaders in your field
- Aim high
- Discuss and consult
- Make sure you are ready and if not …. Prepare well for the future

Good luck !