

Proposal writing

Full exploit the free format of B1

General considerations

- [Success rate]+[resubmission restriction] = take it seriously!
- Writing an excellent proposal takes **time** and effort
- All retained proposals are excellent, but an excellent proposal can fail.
- Within the good ones, decisions are made in the margins
- Writing is a difficult task: when writing, actively try to be as clear and attractive as you can. And do **critically review your proposal**

Take advantage of the freedom of B1

B1. THE EXTENDED SYNOPSIS



On acronyms and titles

ACRONYM

- Pronounceable
- Catchy
- Evoquator of the science behind
- May be a short title!

FULL TITLE

- Meaningful
- ... but not too specific

On acronyms and titles

ACRONYM

- EXPAND
- ChinaCreative
- PANDA
- NANO**HEDONISM**

FULL TITLE

- Defining the cellular dynamics leading to tissue **expansion**
- From Made in China to **Created in China** - A Comparative Study of Creative Practice and Production in Contemporary China
- Phylogenetic ANalysis of Diversification Across the tree of life
- A Photo-triggered On-demand Drug Delivery System for **Chronic Pain**

ABSTRACT: the door

Possible structure

- Relevance
- Main objective
- Novelty
- Some hints of methodology
- Impact

Most common errors

- No novelty (highlighted)
- No impact
- Too wordy
- Too many info on the state of the art and not the idea itself
- Info on the PI, or not relevant info

B1: Extended Synopsis

- The Extended Synopsis should give a **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**.
- **References** to literature should also be included. It is important that this extended synopsis contains all relevant information **including the feasibility of the scientific proposal since the panel will only evaluate Part B1 at step 1**.

1. Research Project

Ground-breaking nature, ambition and feasibility

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)?*

*How much is the proposed **research high risk/high gain**?*

Scientific Approach

*To what extent the scientific approach is **feasible** (based on Extended Synopsis)?*

To what extent is the proposed research methodology appropriate to achieve the goals of the project (based on full Scientific Proposal)?

Feasibility

To what extent does the proposal involve the development of novel methodology (based on full Scientific Proposal)?

Ground breaking nature

To what extent are the proposed timescales and resources necessary and properly justified (based on full Scientific Proposal)?

Feasibility



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MAPPING EVALUATION QUESTIONS

	RELEVANCE	GROUND BREAKING NATURE	IMPACT	FEASIBILITY
State of the art	X			
Objectives	X	X	X	X
Methodology		X	x	X
Resources				X

Extended Synopsis

- Evaluators say:
 - Know the field
 - Not a continuation of your postdoc but built on your previous experience
 - Original and groundbreaking
 - Ambitious but realistic (not mad)
 - Hypothesis driven

How to show your proposal is relevant and goes beyond the state of the art

- Analyse the panel. Convince **them**.
- Know your field: state of the art must be perfect
- Novel methodology or approach
- New topic
- Interdisciplinarity

High risk/high gain

- Resolves an ancient scientific question
- Possible traslation to other fields
- Before and after picture/diagram/paragraph
- Complete new line of research
- You are aware of the risks

Feasibility

- The role of the host institution
- Your CV and track record (linked with the proposed methodology)
- Preliminary data
- Contingency plans, **risk analysis**
- Intermediate (worthy) results

Most common errors (when writing)

- Lack of clarity: where is the field?, have you contributed to this? How much?
- “the proposal is groundbreaking and original”
- Unclear methodology
- Too broad: overambitious or entering into “non-controlled” zones
- Too narrow: Not relevant or high risk/high gain
- State of the art too long, no space left to explain your project
- Too many and/or artificial collaborations

Extended Synopsys

SOME EXAMPLES



PROPOSAL 1 (PE): EXTENDED SYNOPSIS

- B1 structure:
 - 1 paragraph: Set the context, the open question and its relevance for the WHOLE domain
 - 2 paragraph: Focus on the particular approach (unique set of data)
 - 3 paragraph. State of the Art (Figure showing nowadays limitations)
 - 4 paragraph. More of the state of the art: open questions (again)
 - Table with 5 objectives (impact: before/after)
 - 5 paragraph: Aims of the project
 - Methodology: two distinct tools
 - Tool1 (state-to-the-art technique, slightly new approach)
 - Tool2 (developed by the PI)
 - Work Plan: very briefly
 - References: 20-25, some of the PI

PROPOSAL 2 (PE): EXTENDED SYNOPSIS

- State of the Art
 - Relevance
 - Figure with the concept idea
- Objectives (5)
 - Impact beyond the state of the art (3 points)
- Methodology (quite extensive, clear ideas on how to address the issues)
 - Device 1
 - Device 2
 - Software 3.
- Very few, up-to-date references

PROPOSAL 3 (LS): EXTENDED SYNOPSIS

- Background
- Preliminary data
- Hypothesis and specific aims
- Experimental Plan
- Final paragraph (HI mentioned)
- 40! references, some by the PI

PROPOSAL 4 (LS): EXTENDED SYNOPSIS

- State of the art:
 - Relevance of the problem
 - Established as a new line of research from the posdoc stage
- Impact
- Methodology
- Feasibility

PROPOSAL 5 (SH): EXTENDED SYNOPSIS

- 3 first paragraphs: nowadays paradigm, open question, reasons (and challenges) for the gap.
(relevance is embeded here, as PI is challenging the established paradigm)
- Objective 1: MAIN QUESTION, core of the project
- Objective 2: question 2, step forward to obj.1.
- Objective 3: better methodology
- Work package 1
- Work package 2
- Work package 3: because of the risk analyisis, sort of plan B
- Sites choice justification
- Risk analysis (again): preliminary data, alternatives sources
- References: 20 (a couple by the PI)

PROPOSAL 6 (SH): EXTENDED SYNOPSIS

- Introduction
 - Aim: Extend the pilot developed by the PI at US
 - Box with the theoretical framework of the proposal
 - Relevance of the problem (social)
 - Context (state of the art)
 - HI paragraph & collaborations (US)
- Objectives: 1 main aim & 4 objectives
- Methods
 - Study design
 - Assessment
 - Figure with the scope of the study
- Risk assessment and feasibility (team profile, risk of data)
- Impact
- References: 12 (3 from the PI)

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Methodology		X		X
Resources				X

State of Art, Objectives, Methodology and Resources

B2. THE SCIENTIFIC PROPOSAL



B2 Structure

- a) State of the Art and Objectives
- b) Methodology
- c) Resources (cost table)

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Methodology		X		X
Resources				X

State of the Art and Objectives (3)

State-of-the-art

- ¿Qué no se sabe todavía?
- ¿Qué queda por hacer?
- ¿Por qué es importante saberlo/hacerlo?

Claridad de objetivos

- Número razonable ($1 < \text{obj.} < 5$)

- Introducción: Relevancia del proyecto, estado actual del tema, que aporta vuestro proyecto, por qué es novedoso, y que se podría conseguir si se tiene éxito: Impacto en el campo específico y en campos transversales: Multidisciplinaridad
- Objetivos concretos

Methodology (9)

- DG: Equilibrio: **Viabilidad** \leftrightarrow **Repercusión**.
Demostrar conocimiento sobre el tema. Elegir bien las referencias. Alternativas en caso de que alguna de las diferentes etapas no funcionen. Anticipar posible problemas y como resolverlos. Describir metodología desde el principio hasta el final.
- Work packages
- Milestones

Methodology (from NIH checklist)

Experimental Design

- This IS one of the most common places where the text is insufficient. This is NOT just a place to tediously list group sizes, detailed methods, etc. This IS the place to demonstrate your ability to think knowledgeably and logically.
- DEVELOP your aims; of all the sections this may well be the part of the grant upon which you spend the most time.
- One method that often works is to divide this section into subheadings after each specific aim is restated, as follows: Specific Aim #.
 - *Rationale*: how does this design relate to your hypotheses? What is your reasoning (IN DETAIL)?
 - *Methods*: list general approaches first, explaining why the methods you propose are the best available for your questions. (Caveat: If you realize that you do not have the best, most direct methods for your questions, you need to rethink your aims or incorporate collaborators or new preliminary data showing feasibility with the necessary techniques.) **Don't forget to address statistical analysis.
 - *Anticipated results*: you need to spend a great deal of thought as to potential outcomes and their likelihood. Explain how you will interpret the different outcome scenarios and how these results relate back to your hypotheses. This is an opportunity to demonstrate creativity and enthusiasm for the data to be obtained, and show that they will be competently addressed.
 - *Problems and pitfalls*: be honest with yourself. If this section feels horribly uncomfortable, it is because you are probably trying an experiment that is not feasible. All experiments have pitfalls, but extraordinarily large pitfalls are likely to be unreasonable; hence, this section should serve as a reality test. Explain the pitfalls, and how alternate approaches will be used to overcome them if they occur. Do not think that avoiding mentioning a pitfall is a good strategy - it usually doesn't work. The reviewer will very likely notice the pitfall and believe that you are not aware of it, decreasing confidence in your ability to manage the data.

Preliminary Results

Preliminary Results

- Draw as much as possible on your past productivity; emphasize how your previous work leads up to the present proposal or at least demonstrates feasibility of methods to be used.
- DO NOT show preliminary results that are not of high quality -- this is your chance to represent yourself.
- Show detailed numbers and representative raw data where necessary, especially if this is work that is unpublished.
- Make sure that the major methods to be used in the proposed work are reflected by preliminary results. (If you do not have expertise or preliminary results with a technique, make sure you list a solid, experienced consultant or collaborator and include a letter agreeing to the collaboration.)
- Put time and effort into preparing **METICULOUS figures, graphs, or tables;** this is your chance to demonstrate rigor and organization that will increase the reviewer's confidence that you can carry out the project.

Resources (3)

Cost Category			Total in Euro
Direct Costs ¹	Personnel	PI ²	
		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), 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 ³ (in Euro)			
C1 – Subcontracting Costs (no overheads) (in Euro)			
C2 – Other Direct Costs with no overheads ⁴ (in Euro)			
Total Estimated Eligible Costs (A + B + C) (in Euro) ⁵			
Total Requested EU Contribution (in Euro) ⁶			

Resources

- 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 requested contribution should be in proportion to the actual needs to fulfil the objectives of the project.
- **For the above cost table, please indicate the % of working time the PI dedicates to the project over the period of the grant: %**
- Specify briefly your commitment to the project and how much time you are willing to devote to the proposed project in the resources section. Please note that you are expected to devote at least 50% of your total working time to the ERC-funded project and spend at least 50% of your total working time in an EU Member State or Associated Country.