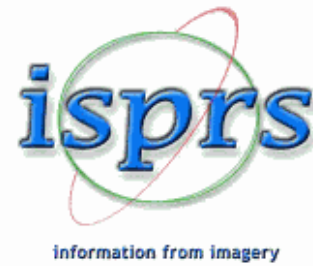


International Society for
Photogrammetry and Remote Sensing



Preparing a Project Proposal

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Content

1. What is a Proposal
2. Types of Proposals
3. Contents of a Proposal
4. Evaluation Process
5. Do's and Dont's

What is a Proposal?

- A proposal is a written document to a sponsor
- The purpose of a proposal is to persuade the reader to do something, in most cases to sponsor a project or to provide some funds.
- The sponsor may be public or private
- Sponsors may be:
 - National Science Foundations.
 - Charitable Foundations. e.g. Bill and Melinda Gates Foundation.
 - Space Agencies or National Mapping Agencies.
 - Industry
 - Your own institution.

Types of Proposals

- The sponsor determines the type and the purpose of funding
 - Fundamental research (returns expected in 25 years – outcome uncertain)
 - Applied research (returns expected in 15 years - outcome predictable)
 - Development (returns expected in 5 years - outcome expected)
- Practical execution of a task (returns expected on project completion)
- Fundamental Research is mostly funded as a grant with no obligations (“NSF provides funds on merit, not on need“)

Types of Proposals

- Applied Research, Development Projects and Practical Implementations are usually funded as a contract with delivery obligations.
- Public Grants or Contracts are more regimented in form or purpose; applications usually require prescribed forms. The length of proposals should follow the guidelines.
- Private Grants (or Contracts) are usually satisfied with a shorter “letter of proposal”.

Contents of a Proposal

Internet references from the US are:

- www.foundationcenter.org
- www.mtsu.edu
- <http://research.microsoft.com>
- www.research.umich.edu
- www.nsf.gov
- www.tgci.com
- www.wpi.edu
- www.wpi.edu
- www.mcf.org
- www.cs.uiowa.edu
- www.scn.org
- <http://grants.library.wisc.edu>
- www.professionalpractice.asme.org
- www.gsa.gov/fdac/queryfdac.htm
- www.jmu.edu

Contents of a Proposal

Non-US Internet References:

- <http://scottish-enterprise.com>
- http://ec.europa.eu/research/fp6/index_en.cmf?p=0_doc
- www.funding.aau.dk/eufund.htm
- www.mdx.ac.uk
- www.education.monash.au
- www.biu.ac.il

Contents of a Proposal

- The web recommendations all have a similar recommendation for the preparations for and the contents of a proposal for a governmental grant or contract
- **Follow the instructions in the call for proposals.**
- Preparation:
 - Step 1: write for application forms and guidelines if not available on the Internet
 - Step 2: call a past grantee
 - Step 3: call a past reviewer
 - Step 4: contact the program officer

Contents of a Proposal

Proposal Writing:

- Introduction - who are you
 - goals
 - prove your credibility
 - state the problem
- Problem Statement and Need
 - demonstrate your understanding
 - focus on project
 - relation to larger problems
 - importance of project
 - feasibility to solve the problem
 - aim to be reached

Contents of a Proposal

Proposal Writing:

- Objectives - specify the end product (specific, measurable, practical, logical)
- Methods - data collection, use
- Evaluation - referees
- Budget
- Abstract

Contents of a Proposal

A letter proposal for a private sponsor may not need any forms. It should contain a similar (shorter) outline:

- Part 1 Summary - self identification
 - uniqueness
 - sponsor expectations
 - budget
- Part 2 Sponsor Appeal - why to approach this sponsor
- Part 3 Problem
- Part 4 Solution
- Part 5 Capabilities - demonstrate credibility
- Part 6 Budget
- Part 7 Conclusion
- sign by „heavy weight person“, multiple application is expected, but notify

Evaluation Process

As a rule all applications are reviewed by a group of experts.

Why are proposals rejected?

Problem Statement 58% - problem not important

- problem too complex
- only of local significance
- premature

Approach 75% - methods unsuited

- description too nebulous
- not thought out

Investigator 55% - not sufficient experience

- unfamiliar with literature
- poor publication record

Other 16% - resource assessment unrealistic

Dos and Don'ts

- Do:
 - add interesting technology components to proven ideas
 - know how to fit into past and current projects
 - involve a team
 - proof read the submission thoroughly
- Don't
 - say little is known or done
 - think you know everything
 - confuse objectives with actions
 - define objectives you do not wish to achieve
 - use abbreviations
 - focus on the „cutting edge“
 - request funding for basic operations

Useful hints

- Make everyone believe the quantitative improvement is needed, then, that we will achieve it.
- What happens if we do not do this? Suggest that the research is vital for further development in the area. Introduce fear into the mind of the reviewer that the consequences of not funding the project are too hideous to contemplate.
- Be quantitative – look through your proposal and replace any word ending in –ly with a fact (for example, “we will improve things greatly” – meaningless, but: “We will reduce the margin of error by 50%” – better).
- Use graphics/figures/charts.
 - Place one on each page inside a box, with a legend that explains both what the figure shows and how it fits into the proposal.
 - The structuring of these must be arranged so that if the reviewer did nothing more than look at the graphics and read the legends then they would still understand what you were proposing and why it was important.
 - a picture is worth a thousand words.
- Be clear and concise at all times, avoid generalisations.

Summary

- Be daring, take risks, try to inject a sense of excitement into the proposal. Sponsors need to convince government that their portfolio is innovative and relevant.
- Be sure to study the research council's mission statement and ensure that key words from that statement get into the proposal.
- Open the proposal with a clear and concise statement of what you are trying to achieve, write this in an attention catching way.
- Conclude with a statement saying why the funding body cannot refuse to fund this project.
- Make sure that the case is made for every item of funding which is requested.