Project Proposal Writing

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1. What is a Proposal?

The purpose of a proposal is to persuade the reader to do something, in most cases to a sponsor to grant or to provide some funds.

A proposal is a written document to a sponsor

The sponsor may be public or private

Public sponsors in the US are: the National Science Foundation (NSF), in Europe the EU Programs under Framework 6, and the National Research Councils in many countries (e.g. NRC Canada, DFG Germany, British Council, etc.)

1. What is a Proposal?

Private Sponsors are mainly Foundations:

In the US there are 43 000 Private Foundations, awarding 8B\$ annually. These are established by about 1/3 of the 2.5M US Corporations.

There is a US Federal Law, that 5% of the market value assets or interest income, whichever is higher must be turned over to non-profit organizations.

The conditions for a grant are of course up to the sponsor under the legal constraints

2. Types of Proposals:

The sponsor determines the type of the purpose

of funding

- Fundamental research (returns expected in 25 years outcome uncertain)
- Applied research (returns axpected 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")

2. Types of Proposals:

Applied Reserch, Development Projects and Practial Implementations are usually funded as a contract with delivery obligations

Public Grants or Contracts are more reglemented in form or purpose; applications usually require prescribed forms. The proposals should be between 15 and 100 pages long

Private Grants (or Contracts) are usually satisfied with a shorter "letter proposal".

2. Types of Proposals:

The Internet contains many references for writing project proposals, most of which are from the US, which even start at fund raising or the finding of a sponsor.

Of interest is a school library project in the US States, for which grant applications must be made by school districts, and their success is based in the quality of the application: (www.schoollibraryjournal.com) New York obtained 1\$ per student California 37\$ per student Oklahoma 70\$ per student Alaska 132\$ per student

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

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

The web recommendations all have a similar recommendation for the preparations for and the contents of a proposal for a governmental grant or contract:

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

Proposal Writing:

- 3.1. Introduction who are you
 - goals
 - prove your credibility
 - state the problem

3.2. 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

Proposal Writing:

3.3. Objectives - specify the end product (specific, measurable,

- **3.4. Methods** data collection, use
- 3.5. Evaluation
- to improve project

practical, logical)

- 3.6. Budget
- 3.7. Abstract

A letter proposal for a prvate 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 Part 3 Problem Part 4 Solution Part 5 Capabilities Part 6 Budget Part 7 Conclusion - why to approach this sponsor

- demonstrate credibility

sign by "heavy weight person", multiple application is expected, but notify

4. 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
- methods unsuited
- description too nebulous
- not thought out
- not sufficient experience
- unfamiliar with literature
- poor publication record
- resource assessment unrealistic

Approach 75%

Investigator 55%

Other 16%

5. Do's and Dont's:

Do: - add interesting technology components to proven ideas

- know how to fit into past and current projects
- involve a team
- proofread 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"
- reuest funding for basic operations