Tips & tricks for writing successful EU Project Proposals

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Confidentiality Declaration: Evaluation work in Brussels is carried out under very strict terms of confidentiality. It is not permitted to reveal in which technical areas proposals were evaluated, or the details of any specific proposal evaluation. This presentation – while based on experience with real proposals – does not identify any real proposals or proposers. It deals only with the process, and lessons to be learned from this for new proposal writers. Any apparent link, direct or otherwise, with any real proposal or proposer is purely coincidental.
Presentation overview

I: EU research: What, why, who
II: The way the game works
III: The importance of first impressions & clarity
IV: How and where to develop and express your ideas
I: EU research:
What, why, who
WHAT: Commission-funded “Framework Programme” research

ESPRIT

Horizon 2020
FP7 Research Support: 4 building blocks

Cooperation
Theme-based, multi-partner cooperative research

Ideas
“Frontier research”
Funding for key groups
“European Research Council”

People
Supports researcher mobility / exchange

Capacities
Develop research infrastructure
Policy development
Science & Society
WHY: Motivation

Why are we writing this proposal?

- Just for the money?
- To further our existing technical research interests?
- To develop a completely new idea?
- To fund bug fixing and development of a product we sell?
- To make our product more innovative?
- For other “political” / organisational reasons?
- A mixture of the above
WHO: Just about anyone

- ≥ 3 partners
- ≥ 3 EU countries (or associated countries)
- Can also have partners outside Europe
WHO: Project Roles

- Project Coordinator
- Technical Manager
- Scientific Coordinator
- Workpackage leader
- Exploitation Manager

- Project Manager with international experience
- Scientist, Ph.D., postdoc
- University Professor, Senior Researcher
- "Businessman" (industry)
II: *EU research:*

The way the game works
Writing EU proposals is a tough competition and expensive – make the investment worth it!

<table>
<thead>
<tr>
<th>Instrument Type</th>
<th>Coordinator</th>
<th>Active participant</th>
<th>Passive Participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP/NOE</td>
<td>80 000 €</td>
<td>35 000 €</td>
<td>7 000 €</td>
</tr>
<tr>
<td>STREP</td>
<td>50 000 €</td>
<td>6 000 €</td>
<td>4 000 €</td>
</tr>
<tr>
<td>CA</td>
<td>25 000 €</td>
<td>6 000 €</td>
<td>4 000 €</td>
</tr>
</tbody>
</table>

Rough estimates only. Based on experiences at SINTEF. Costs include travel costs, and labour costs calculated at commercial rates.
Evaluation Process

Pre-check by commission staff

Commission briefs evaluators

Independent reading Evaluator 1

Independent reading Evaluator 2

Independent reading Evaluator 3

Consensus Meeting: Decide scores + comments

Final Panel Meeting: rank all proposals

Panel Meeting IP/NoE

Hearings

Panel Meeting (STREP etc.)

IP/NoE

other project types

(*possibly) revised scores
Who are evaluators?

Scientist:
Expert, *specific* technical knowledge

Generalist/
*businessman:*
Some technical knowledge
Types of evaluators

- **Good evaluators:**
  - Listen
  - Can express and defend opinions (include page number references in IAR)

- **Commission officials** informally “evaluate the evaluators” and intervene to get back on track

  - **“The sleeper”:** does not participate actively
  - **“The bully”:** does not listen – but talks a lot and insists we listen to him
  - **“The iron rod”:** does not necessarily say much – but is completely inflexible
“The gunman”: too negative; reduces scores on multiple criteria for same “crime”

“The optimist”: too positive/lenient; assumes all problems can be fixed during negotiations

“The mad professor”: ignores business and exploitation issues, evaluates like it is a paper for a conference

“The blind businessman”: ignores the scientific and technical side
Impact of Remote Evaluation: *Proposers*

You now have 4 types of audience to write for instead of just 2

<table>
<thead>
<tr>
<th>Expert/ slow read</th>
<th>Expert/ fast read</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalist/ slow read</td>
<td>Generalist/ fast read</td>
</tr>
</tbody>
</table>
What is the single most important factor in writing a successful proposal?
III: EU research:

The importance of first impressions & clarity
You have many competitors. But lots of them are “non-starters”

First 3-4 pages of ”Objectives”:

Form first impression

Seems excellent 5%

Scan remainder to confirm/deny impression

Prepare to document main strengths

Undecided 60%

Prepare to assess criterion by criterion

No chance 35%

Scan remainder to confirm/deny impression

Prepare to identify and document concrete reasons for weaknesses

* Concrete results?
  * Is it innovative?
  * Do they have a credible plan for how to do it?

Should be same as Part A!

Prepare to document main strengths

Deny

Deny

Confirm

Confirm
First Impressions 1:

Proposal Abstract – Clarity of Idea
First Impressions: Proposal abstract

- Vital to allow evaluators to rapidly understand and position your proposal
- Usually used by rapporteur in giving summary of project at panel meeting → can be crucial for ranking
- An experienced evaluator can often make a good guess at a proposal’s score based on the abstract alone, because:
  - With experience, there are all sorts of signs that show up in the abstract
  - **Clear idea** → easy to write abstract; **Muddled idea** → hard to write abstract
**EXAMPLE: real numbers from an evaluation**

**Score discrepancies:**
Difference between Joe’s individual evaluation and final consensus score in panel

<table>
<thead>
<tr>
<th>From full reading of proposal (4 proposals)</th>
<th>From quick reading of abstract (14 proposals)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 points or less:</td>
<td>25%</td>
</tr>
<tr>
<td>1.5 points or less:</td>
<td>75%</td>
</tr>
<tr>
<td>2.0 points or less:</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td>78%</td>
</tr>
</tbody>
</table>

*Total possible score: 15 points*
IV: EU research:

How and where to develop and express your ideas
Anatomy of a Proposal

Chapter 1
• Objectives & results
• Advancement with respect to state of the art
• Risks
• Project structure, deliverables and workpackage descriptions

Chapter 2
• Management and decision making procedures
• Description of consortium

Chapter 3
• Impact
Work in parallel on the different dimensions of proposal development.

- Core scientific/technical idea: Vague vs. Clear
- Budget: Maybe know approx. total vs. Takes account of all partner rates and wishes
- Consortium: Incomplete/unbalanced vs. Complete/balanced
- Project Proposal: Assume it will be OK vs. Potential conflicts addressed
- IPR/business aspects: Too vague or too specific/dominant vs. Drives technological development and enables exploitation
- Application area: From idea to proposal: axes
DIMENSION: Core scientific/technical idea: How good is your idea?

- Originality
- Motivation: bridges a “gap” between what exists and what is needed
- Clarity

Count for nothing if not inspired by and consistent with

Commission Work Programme
Should a proposal contain a good reference list?

- A proposal is not an academic paper or a thesis!
- It is more of a sales document
- To many evaluators, it only matters that references look plausible
- To some evaluators, references don’t matter at all
- To some evaluators, references are crucial
- Not just academic references, also:
  - industry journals/magazines
  - popular press
  - policy documents
EXAMPLE: Objectives vs. Results

Objective: To develop a new, faster compiler for C++

Result: New, faster compiler for C++

Objective: Enable practical adoption of iterative development methods, involving frequent re-compilation of programs

Result: New, faster compiler for C++
Objective: "The project will allow car journeys to be made with 20% less fuel consumption than is typical today"

Does this project deliver:

- A **car** with a more fuel efficient engine?
- Detailed **design documents** for a new type of engine - but leave it up to others to actually manufacture the engines/cars?
- **Reports** surveying the latest research in the area - but leave it up to others to produce engine designs and still others to manufacture the car?
DIMENSIONS: Application area/business:
What is the impact of your proposal?

The “promised land” – future impact/exploitation

Steps needed

Milestones along the way

Project ends – impact/exploitation starts
**EXAMPLE: ANIKETOS: Steps needed**

- indicate whether they are activities that will take place *during* or *after* the Aniketos project itself (shown in column “When” as “D” or “A” respectively).

**Table 1. Steps needed to bring about the impact**

<table>
<thead>
<tr>
<th>Goal</th>
<th>Steps needed to achieve</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall goal:</strong> Aniketos results continue to develop after termination of the project, and are adopted widely.</td>
<td>The detailed steps below, taken together, contribute to achieving this.</td>
<td>(D+A)</td>
</tr>
<tr>
<td><strong>Ensure that Aniketos results are widely known in the software and service engineering community to which they are targeted.</strong></td>
<td>The steps described in detail in section <em>Error! Reference source not found. “Error! Reference source not found.”</em> will bring about widespread general awareness of Aniketos.</td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Maintain and extend Aniketos dissemination (such as the website), incorporating mechanisms such as Wikipedia, where many practitioners go when they search for definitions and overviews.</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Identify a small group of potential adopters of Aniketos results, and arrange meetings/seminars/training events with them, to raise initial interest and get initial feedback on what will be important in a wider exploitation strategy.</td>
<td>D</td>
</tr>
<tr>
<td><strong>Potential and current users of the Aniketos approach can obtain expert help on how to use it effectively.</strong></td>
<td>Develop commercial seminars/courses (aimed at practitioners <em>and</em> at decision-makers in management).</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Use project case-studies as part of these courses.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Offer advanced consultancy services in effective use of Aniketos results. Initially, the case studies from the project will be used as part of the expertise behind this; as time progress previous experience on consultancy will enrich this.</td>
<td>A</td>
</tr>
</tbody>
</table>
How do you distinguish between:

“vision”,
“objectives”,
“results”
“impact”?
Clarifying/separating your ideas: answering questions

Chapter 1

<table>
<thead>
<tr>
<th>Proposal Part</th>
<th>Question Answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision</td>
<td>WHY+WHO – far future</td>
</tr>
<tr>
<td>Background - Objectives</td>
<td>WHY+WHO – near future / during project</td>
</tr>
<tr>
<td>Results</td>
<td>WHAT – during project</td>
</tr>
<tr>
<td>Approach – WP descriptions</td>
<td>HOW – during project</td>
</tr>
</tbody>
</table>

Chapter 3

<table>
<thead>
<tr>
<th>Impact</th>
<th>WHY + WHO + WHAT + HOW – after project</th>
</tr>
</thead>
</table>
DIMENSION: Consortium Building:
EXAMPLE from a real proposal

1. IST Conference Den Haag
   Nov 2004
   30 second presentation

2. Information Day
   Brussels
   Jan 2005
   2 slides

3. Capgemini meeting
   Utrecht
   Feb 2005
   Detailed discussions

4. Consortium meeting
   Warsaw
   Feb 2005
   Start writing

5. MIDAS Proposal
   Submitted
   March 2005

- IP on “Semantic-based knowledge and content systems”

- Phone conferences with approx. 8 other research institutes/universities.
- IP or STREP?
## Build primarily by ROLE

<table>
<thead>
<tr>
<th>Category</th>
<th>Partner Name</th>
<th>Profile</th>
<th>Main Role in MIDAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinator</td>
<td>SINTEF</td>
<td>Leading research institute with specialist technical expertise in mobility. Highly experienced in coordination of EU projects.</td>
<td>Technical and administrative project co-ordination.; coordinate Architecture work.</td>
</tr>
<tr>
<td><strong>Industry:</strong> Commercial Mobile Service Provision</td>
<td>Capgemini</td>
<td>Major European systems integrator, represented in the consortium by group specialising in the development and sales of mobile solutions.</td>
<td>Use MIDAS middleware to develop proof-of-concept applications. Lead work on exploitation.</td>
</tr>
<tr>
<td></td>
<td>Appear Networks</td>
<td>Prize-winning SME whose business is mobile platforms and their use to create innovative, context-aware services.</td>
<td>Provide expertise on mobile platforms.</td>
</tr>
<tr>
<td>??</td>
<td>Leading European mobile operator.</td>
<td></td>
<td>Provide mobile operator’s practical view. Lead key work on establishing connectivity and info sharing.</td>
</tr>
<tr>
<td><strong>Industry:</strong> End-user domain competence</td>
<td>51pegasi</td>
<td>SME staffed by a group with long experience of providing technology at major sports events.</td>
<td>Provide requirements for proof-of-concept applications; validate results produced</td>
</tr>
<tr>
<td>??</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Basic research competence</strong></td>
<td>Warsaw University of Technology</td>
<td>Poland’s leading technological University, with both academic experience and practical experience in developing mobile services.</td>
<td>Lead the research component of the work on representing and responding to changes in context.</td>
</tr>
<tr>
<td></td>
<td>University of Oslo</td>
<td>Bring highly relevant results from Norwegian national project designing architecture and middleware for mobile solutions for emergency teams.</td>
<td>Lead the research component of the work on connectivity and information sharing.</td>
</tr>
</tbody>
</table>
“Quality and relevant experience of the individual participants”

About one page per partner, answering:
- Type of organisation / how they make money
- *Specific* skills / technologies brought to the project by the *department that will do the work*
- Role in the project
- Interest in project results
- Short background of key staff to work on the project

Mostly irrelevant information about the company as a whole - just a standard company description
Commission contact always useful

Extract from email from Commission Project Officer:

... I can remind you perhaps, that proposals ... must address generic networking issues and provide innovative new solutions to significant problems, even when exemplified by a sporting or emergency context. The application itself should not be the centre of gravity of the proposal.

Best regards

Andy Houghton

IST Brussels

MIDAS advice:

- Always consult Commission officials!
DIMENSION: Budget: How to agree

- For typical focused research project: about 2.5 – 3M euro
- Funding rules complicated – but set to get simpler
- Start by planning resources (PMs) so that:
  - Resource usage consistent with complexity
  - “Balanced” – avoid WPs with very high/low effort
  - Resources assigned to partners according to skills – not “sharing the cake” equally
“Mobilisation of Resources”:
Project workplan

➔ Evaluators are looking for:

* **Balance** between partners on responsibilities, effort, funding

* **Balance** between cost categories (beware of excessive travel or equipment costs)

* A bit more information about costs/effort than commission template formally demands

* Clear who does what

* Clear that no partner has too many / too few WPs (about 3 WPs per partner is about right)

* Clear that no WP has too many / too few partners (about 3 partners per WP is about right; exception for "Dissemination", where everyone should take part)
Financial Conditions
Will be simplified in Horizon 2020

- 75% financing
  - SMEs, Universities and Research Institutes

- 50% Financing
  - Industry

- 100% financing:
  - Everyone, for management and dissemination/exploitation

- ... of personnel and running costs with no profit element
V: Concluding thoughts
How to become a reviewer/evaluator

MUST: Register as an ”expert”:
http://ec.europa.eu/research/participants/portal/page/experts

- Done it before
- Your CV shows:
  - a good match with very specific technical area
  - generalist competence
- You are “visible” to commission officials (project coordinator, active at project reviews, attend commission events, …)
- You inquire discreetly

- Done it before – but too recently
- Your department submitted a proposal in this area
- You have evaluated before – but turned out to be an “optimist”, “gunman”, “bully” etc.
Leading an EU project can be fun!
You must be motivated and approach the job in a wholehearted way!

Quick Quiz: Spot the mistake!
Thank you for your attention!

joe.gorman@sintef.no
More Information

- Commission official information on calls etc:
  
  www.cordis.europa.eu/fp7