

MANAGEMENT AND ANALYSIS OF EUROPEAN PROJECT PROPOSALS IN THE FRAMEWORK PROGRAMME 7

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Abstract

From the good practices of European project proposers comes the necessity to approach project writing for The Framework Programme. The common errors made by consortia that submitted project proposals within the FP7-2008-ENV-1 call are analysed in this paper. The analysis was made on more than 400 Evaluation Summary Reports, for every evaluation criterion, according to both the participant's and evaluator's guide. The result of the current analysis was used to draft the pre-screening tool intended for the National Contact Points (NCP), in order to support coordinators that submitted project proposals in subsequent calls approached on theme 6 – Environment, including climate change, of the Framework Programme 7.

Keywords: common errors, projects, research, Framework Programme 7, National Contact Points

JEL Classification: O32, O39, Z19

INTRODUCTION

The European Union's research Framework Programme is one of the most important pan-European cooperation frameworks used by the Union to implement its scientific research policies. The first Framework Programme was carried out between 1984 and 1988¹ with a feeble budget of the European Union at the time².

¹ http://en.wikipedia.org/wiki/Framework_Programmes_for_Research_and_Technological_Development#cite_note-0

² http://ec.europa.eu/research/rtdinfo/special_fp7/fp7/01/article_fp709_en.html

The importance of the Union's Framework Programmes is indisputable, EU's approximately 7 billion Euro contribution generating a GDP increase in 2030 by 200 billion Euros/year¹.

Romania has been participating in the Framework Programmes since 1994 (FP 4 at the time). Financing participants from Romania was possible only for the international cooperation programme (Cooperation with third countries and international organisations²). Nevertheless, Romania's participation was possible in the other respective programmes as well, but research units did not get financing from the EU.

In this context, starting with Framework Programme 5, Romanian participants got the same treatment as their counterparts from the EU member states, given that Romania was granted certain facilities when paying its contribution to the Programme's budget. 1997 (the year which preceded the actual initiation of the Framework Programme 5) and 1998 were years in which Romanian research institutes, universities and companies³ began to have access to pan-European Programmes and Frameworks for cooperation in science and technology (EUREKA and COST) and the legislative framework (for the payment of contribution and the support of Romanian participants) developed even in 1999, a year after the start of the Framework Programme 5⁴.

For the Framework Programme 6 (2002-2006), the basic regulatory document that regulated the participation to the Programme and supported Romanian participants was the Government Decision no. 368 of April 2nd 2003⁵.

¹ Muldur, U., et al., "A New Deal for an Effective European Research Policy," Springer 2006 ISBN 978-1-4020-5550-8

² <http://ec.europa.eu/research/intco/intco2.html>

³ Ordinance no. 5/20.01.1998 regarding Romania's accession to the Hannover Declaration of November 6, 1985 concerning the EUREKA initiative, Government Decision no. 164/05.05.1997 to stimulate Romania's participation in the European Research-Development and Innovation Programme EUREKA, published in the Official Monitor no. 83.07.05.1997, bill regarding Romania's accession to the General resolution adopted by the Conference of European research ministers in Brussels, 22-23 Nov. 1971, related to the European Cooperation in Science and Technology COST, published in the Official Monitor no. 37/29.01.1998

⁴ Decision 1043/17.12.1999 regarding the approval of the payment of Romania's contribution to the Framework Programme's budget V and to the V Euratom Framework Programme's budget in order to approve the financial support given to Romanian participants, published in the Official Monitor no. 635/27.12.1999

⁵ GD 368/2 April 2003 to approve the payment of Romania's contribution to the budget of the sixth Framework Programme of the European Community for research, technological development and demonstrative activities and to the sixth Framework Programme of the European Atomic Energy Community's budget (Euratom), as well as to approve the financial support given to Romanian participants, including for measures to stimulate their participation, published in the Official Monitor no. 238 of 8 April 2003

Starting with 2007, the 7th Framework Programme¹ began for the first time in the EU history, lasting 7 years and not 4 like its predecessors, with a structure of 4 specific programmes, namely: Cooperation, Ideas, People, and Capacities. The specific programme “Cooperation” supports activities in the following thematic areas: (1) Health, (2) Food, Agriculture and Fisheries and Biotechnology, (3) Communication and Information Technologies, (4) Nanosciences, Nanotechnologies, Materials and New Production Technologies, (5) Energy, (6) Environment and Climate Change, (7) Transportation (including Aeronautics), (8) Social, Economic and Human Sciences, (9) Space, (10) Security².

Romania’s participation in the sixth Framework Programme can be considered satisfying by “normal standards”, but there are clear signals that we are far from making the most of existing resources. The results and the scientific productivity from both public and private Romanian research-development institutions in terms of publications and patents are not satisfying, according to international documents and this is probably the main reasoning behind difficulties in identifying international partners or European consortia in which Romanian organisations can participate. It can be said that Romania’s participation in the Framework Programme 6 was better than the one in the Framework Programme 5; this improvement may be the result of the improved research infrastructure, but also of the general participation framework, including the legislative one created during the Framework Programme 5, because scientific research is a field where every improvement or change has only a long term impact (results). If we were to compare Romania’s participation to that of South-East European states, we can estimate that Romania’s participation was acceptable, with a high potential for improvement.

1. Management and analysis of identified errors in the European project proposals within the Framework Programme 7

The analysis of errors made by consortia that have submitted project proposals in response to calls for project proposals launched within theme 6 – Environment (including climate change) was made on almost 400 Evaluation Summary Reports (ESR) drafted by independent evaluator boards, within the FP7-

¹ Decision No 1982/2006/EC of the European Parliament and of the Council of 18 December 2006 concerning the Seventh Framework Programme of the European Community for research, technological development and demonstration activities (2007-2013), Official Journal of the European Union, L 412/1, 30 December 2006

² According to art. 2, paragraph 1. of Decision No. 1982/2006/EC

ENV-2008 call as part of the Work package no. 3 (WP 3) of the project “Environmental NCP cooperating to improve their effectiveness” financed by the General Research Direction of the EU Commission through the Grant Agreement 212494¹.

Every ESR was analysed and a table in which all observations were centralised was created (major errors mentioned by evaluators). The table contains a series of data regarding:

- The no. of the proposal (as it was identified in the brick issued by the Direction I of the General Research Direction)
- Activity Code: Activity Code, as it is mentioned in the work schedule of theme 6 of FP7-ENV-2008-1²
- Funding Scheme: The financial tool type, namely: Collaborative project (large or small and medium size), CSA (Collaborative and Support Action)
- Proposal Number: it is automatically assigned when the proposal is submitted through the EPSS system³
- Acronym: The acronym of the project proposal, as it was chosen by the submitting consortium
- 1st criterion – the first criterion used in the evaluation (technical-scientific quality)
- Mark 1 – mark obtained in the first criterion
- 2nd criterion – the 2nd criterion used in the evaluation
- Mark 2 – mark obtained in the second criterion
- 3rd criterion – the third criterion used in the evaluation
- Mark 3 – mark obtained in the third criterion
- Total – The total mark is the sum of the three marks given to each criterion
- Qualifier – qualifier given to the proposal

The evaluating groups of experts of the European Commission have an extremely vast experience in their area of expertise. The board is made of 3-5 people who get together at the European Commission’s request (consensus meeting). During this meeting for and against arguments are discussed, presented by every evaluator in the individual session reports. Many evaluators have become successful proposes during European research programmes. The questionnaire used was similar to the one used to collect NCP experiences, also built on the structure of a collaborative scientific research project. The questionnaire was sent to all the partners in the project and most partners sent feedback. Just as the NCP (National

¹ <http://www.env-ncp-together.eu/>

² European Commission C(2007)5765 of 29 November 2007

³ EPSS – Electronic Proposal Submission System

Contact Point) questionnaire, this one is not built on sociologic grounds and it did not intend to collect opinions or to carry out specific studies, it only intended to collect good practices. The results of this questionnaire were included in the project proposal elaboration tool.

One of the evaluation criteria for FP 7 project proposals is related to the quality and efficiency of the implementation and the management (criterion 2), with 33.3 % of the total mark. It is crucial that this segment be made under the best conditions. Unlike the evaluation criteria: *Scientific and/or technological excellence relevant to the topics addressed by the call* and *Potential impact through the development, dissemination and use of project results*, which clearly pertain to researchers' scientific and technical competence, project management is "another job" scientists do not have the necessary qualification for. The necessary competence to draft the management portion of a project and to implement the project is totally different from scientific competence. Part B of the proposal contains the details of the proposed project – what is necessary, the way it will be put into effect, what partners will be involved and what results will be obtained. Part B is the document which is evaluated by the experts' board and that is why the presentation of the evaluation criteria for collaborative projects is useful.

Table 1 present's evaluation criteria categories proposed by evaluating experts of the Framework Programme 7.

Table 1. Categories of evaluation criteria for FP 7 project proposals

S/T Quality "Scientific and/or technological excellence (relevance for the topic specified in the call)"	IMPLEMENTATION "Quality and efficiency of implementation and management"	IMPACT "Possible impact through dissemination, development and use of the project's results"
The concept's strength and the quality of the objectives. The progress beyond the actual state-of-the-art of the field. The quality and effectiveness of the S/T methodology and the associated work plan.	The correctness of the management structure and procedures. The quality and the relevant experience of individual participants. The global quality of the consortium (including complementarity and balance). The correctness of the assignment and justification of resources about to be used (staff, equipment, etc.)	The European (and/or international) contribution to the foreseen impact mentioned in the work programme in the respective topic/activity. The correctness of the dissemination and/or project result exploitation measures, as well as intellectual property management.

Source: <http://www.env-ncp-together.eu/>

One of the most common problems for project proposers is the lack of experience in writing the proposal for the Framework Programme. Despite the quality of the researchers, preparing the proposal requires a lot of time and resources. A high number of researchers cannot present their ideas in an appropriate manner and make a proposal easy to read and understand by the evaluators. This means it is imperative that NPCs be capable of supporting the writing of the proposal by providing feedback on the content and quality of the proposal.

Proposals submitted for collaboration projects within FP 7 follow rather strict directions regarding the content, length, etc., but within these directions proposals have a high level of freedom in terms of developing arguments and the reason why the EC should finance the project.

In the 400 *Evaluation Summary Reports* common elementary errors were identified:

- The proposal is written in the same style of a scientific work
- The use of colours – the proposal will be printed in black and white and important information can be bolded
- The proposal is not convincing in relation to the open call
- The objectives are unclear
- The page limit is not kept
- The proposal covers the call's requests only partially
- The objective is not clearly defined, the results are not clearly described
- There are many problems regarding objectives (the explanations are either too complex or too short)
- The proposal seems to be a product development project and not an activity containing a high research risk
- The project proposal means that the activity has already been carried out and financing is actually for commercialisation
- The technological aspects ought to be explained more thoroughly and revised before submitting the project proposal
- Certain methodological aspects must be clarified and detailed
- Innovation is fairly limited (in terms of concept, methodology, technology used or the solution used in the project)
- The work plan and WPs must be revised because their description is not clear or presents several weak points; the calendar must also be detailed

- The management structure and procedures must be detailed and revised because all management tasks are focused on a single partner
 - The management work package is missing
 - The management structure is too complex
 - An advisory council is necessary or its role must be clarified or detailed
- For **good practices**, the following elements can be identified:
- Explain the abbreviations – use a glossary of abbreviations if necessary
 - Use summary boxes
 - Use diagrams as long as they are relevant and easy to understand
 - Keep the proposal within the page limit assigned to each section. If there is no page limit, it is recommended that you keep the text as concise as possible since evaluators rarely see excessively long documents as favourable
 - Create an exact, verifiable and professional content. Avoid denigrating statements and statements which are not supported and with no added value
 - Use British English – or at least take it into consideration – make sure that the entire document has a single version of the language. Do not use jargon, slang or similar languages
 - Make sure that the Acronym, the Strategic objective, the Tool and the page number appear on every page
 - Ask a non specialist to read your proposal. If that person understands what you intend to do, it will be a good observation
 - Ask a person speaking a native language other than English to read your proposal because your evaluator is rarely a native English speaker
 - Describe the current state-of-the-art of the scientific field approached in the project proposal
 - Emphasise any other activity financed through EU funds (previous or current). If necessary, describe how the project is different from existing (or previous) ones or is better than these
 - Indicate clearly the existing shortcomings at present in the approached scientific field which may hinder the achievement of clear results and fulfilment of the project's objectives
 - The number of WPs depends on the magnitude and complexity of the project, but there generally ought to be 5 or 6 WPs plus a management one and a dissemination one
 - The project must have a beginning phase

- Make sure that the PERT and GANNT diagrams are consistent with the proposed programme described in the text and tables
- Make sure that the man-hours for every partner and WP are credible without being under/over-sized
- The implementation section should describe:
 - How the project will be managed
 - What the decision making process is
 - How the consortium will communicate
 - How quality will be assured
 - How conflicts will be solved
 - How legal and ethical obligations will be met
- The proposition must describe clearly and convincingly the skill quality of the key people in the project

Evaluators propose that:

- The proposal should not be too technical, given that the evaluators will not necessarily belong to the same scientific field. However a balance should be kept between a “realistic proposal” and “progress of science” or “very innovative” or “offers too much for a research project and this budget”. The evaluators will have a reasonable scientific and technical experience in the field, which is why the proposal should not be at a too high level, but high enough to convince that the proposal will add value to the respective field, to the consortium and to EU as a whole.
- Consistent, well written proposals which correspond to the guideline standards and ease the evaluator’s work must take into account the marking system and adapt the proposal so that the evaluator can mark it as easily as possible
- Project proposals that exceed the maximum length specified in the Applicant’s Guide will be evaluated negatively
- The project idea must fit the call – refer to the text of the call, as well as to the estimated impact described by the EU in the thematic work schedule
- The project must have a substantial research content that presents clearly the scientific and technological advancement beyond the current stage
- A convincing argument is that what you propose in the project is beyond the current state-of-the-art in the scientific field approached

- A proof that the proposer knows the newest discoveries in the respective scientific field and that the proposed project will contribute to knowledge in that field
- The development of adequate methods and methodologies that solve (a part of) the lack of knowledge in the field and that allow the project's objectives to be met
- Links between the work schedule of the project – not just a review of the literature in that field but with a clear coherence and consistency with the rest of the proposal
- A rational plan for implementation
- A description of alternatives that can be taken into consideration
- Adequate phases and points of control
- The system is designed accordingly
- An evaluation of the technical risk and interventions
- A concise and complete description of the project's management structure and procedures, adequate in terms of the project's magnitude and complexity
- People highly qualified for key projects in the project's management – multinational collaborative projects are complicated and experience is required from the project manager in order to manage it efficiently
- A convincing description of the fact that communication streams will be efficient

From the identification of frequent errors in European projects it is noticeable that these are related to: the quality of research works, the correlation of the project's objectives with those presented in the topic for which the proposal was drafted, the strategies of approaching research works is not the necessary one for a project of this type and dimension, activity packages are not well structured, the scientific level of the scientific research activities is not necessary for a project of this type and dimension, the proposed resources are not adequate for implementation, management procedures are not detailed and cannot be evaluated accordingly, human effort is underestimated, the consortium which implements the project is unbalanced, the partners' responsibilities are not justified. For these errors, good practices from the experience of authors and experts evaluating FP 7 projects are proposed.

2. Possible risks in European programme financed projects

A series of risks associated with this type of projects is taken too little into account by applicants, with unfortunate consequences, from losing financing to exceeding the budget.

Risks occur ever since the initial conception of the project, usually generating denial of financing (Vasile E, 2010): the non-harmonisation of the project's objectives with those of the financing programme; wrongfully chosen target groups; an erroneous budget construction; inappropriately quantified benefits; project team without the qualifications or experience required by the financier.

Risk in projects can be defined as the level of exposure to an event that may occur to the detriment or the benefit of a project or an activity of the project. It can be described as a combination between the probability that the risk occurs and the consequences in terms of a loss or a gain as a result of the risk's occurrence. Risk is an inherent component of all the activities of a project, regardless of the simplicity or complexity of the activity. That is why the dimension or the complexity of an activity is not always an adequate measure of the potential risk's level. Nonetheless, dependence is direct, in most cases complex activities having higher risks associated.

The success of an activity of the project means that that activity is feasible technically and in terms of its scheduling and can be carried out with the established budget and within the established deadline. The risk of the project is an uncertain event or a condition which, upon its occurrence, can have a positive or a negative impact on the objective of the project. The risk has a cause and, once occurred, an impact.

The risk of the project includes both threats to the project's objectives and opportunities to improve these objectives. This risk has its origin in the uncertainty which is present in all projects regardless of their magnitude or complexity.

Risks may be known variables, namely risks that have been identified, evaluated and quantified and for which plans have been elaborated. At the same time, risks may be unknown variables, namely risks that have not yet been identified or are impossible to predict.

It is obvious that the magnitude of the risk depends mainly on the dimension of the project itself.

As for small projects, there usually is not too much risk. Risk involves problems that can occur in the future. Since small projects do not usually have a long life, there are not too many occasions for future problems. If the project

manager knows the future risks, they can apply the risk procedures for intermediate projects. Intermediate projects: when the project is defined, a complete evaluation of the project's risks is also carried out. The project manager can create a first version of the project's risks based on information they have and then they can send it to team members for additions, modifications and comments. Another technique is summoning all parties interested in the project and discussing potential risks during a facilitated meeting.

The risk for big projects is similar to the one for intermediate projects by taking into account two additional elements: the use of quantitative risk analysis techniques (in addition to qualitative techniques) and the elaboration of a contingency plan in order to document the consequences on the project if the risk plans fail and the risk actually occurs.

The higher risks, however, occur in implementation.

Financial risks. Frequently there is the situation of projects which, although having respected all indications of the financier regarding budget preparing, are based on a faulty financial forecast, where necessary resources are undervalued, which leads to either the impossibility to develop the project, or to a negative balance of the project.

Human resources risks. They refer to the lack of technical qualifications necessary for the organization in question for a high-quality implementation, due to a wrong analysis of human resource involved in the project or of requirements imposed by each activity (external consultants, partner organizations, etc.). This includes risks associated to the project team, which sometimes does not have enough skills to manage all project stages under optimal conditions.

Technical risks. The quality of the project's final results, either a product, a building or a course, is not the same as the one projected in the project. It frequently happens that the technical conditions established in the project, for instance, those related to acquisition of materials or equipment, not be met for various reasons, which implicitly change the quality of the project as a whole.

External risks. Currency risks, changes in tax policy or administrative procedures, delayed returns have visibly hindered development of Romanian projects financed through European funds and have been less taken into account by the beneficiaries in preparing the initial documentation.

CONCLUSIONS

The following conclusions are drawn from the facts presented in the paper:

Formulating and submitting a proposal for financing in the Framework Programme 7 is an extremely laborious activity, the competition for financing is tight and only the best proposals will be on the short list for financing. Evaluation of proposals by the EU is rigorous and project proposals must be enlisted in **all** the published fields (topics) in order for their financing to be considered. An excellent scientific proposal can fail due to its defective management procedures or because the effects (impact) have not been described thoroughly.

In this regard, it is important that we remember how evaluators will only take into consideration facts written down in the actual proposal. Therefore, if the proposal does not prove certain points it will not be taken into consideration even if they are generally well known.

The key messages that proposers must receive and that will help them formulate the proposal are:

- Proposals must be in compliance with all the eligibility requests in terms of the consortium, budget and any other additional criteria for call eligibility.
- Part B is the document evaluated by the board of experts and requires special attention. The section/page number limits should be met stringently.
- The project idea must be pertinent to the topic mentioned in the call and its effects should be those desired by the EU and mentioned in the topic's text.
- The project must have substantial research content; its scientific progress must be clear and verifiable beyond the current state-of-the-art of the field approached.
- There are risk elements in the project (this being the reason why public funds are necessary), but it should not be so risky as to lead to low chances of success. There should be a balance between the levels of risk associated with the project and its potential benefits.
- The proposal must indicate clearly the current shortcomings of the field impeding the fulfilment of the objectives set by the project and the way these gaps will be filled through the proposed methodology.
- The evaluator will expect to see a credible programme for the fulfilment of the proposed project's objectives, being neither too simplistic nor too complex. This must include a description of the alternative options taken into consideration and why the proposed approach is the best one, as well as an evaluation of technical and unforeseen risks.

- The proposal must underline the management's experience and quality and to clearly explain the way progress will be monitored, in what way the management structure is efficient and will be implemented, with responsibility communication lines accepted by all the partners.
- The consortium should represent an international level organisational team in order to approach the project's objectives and it should be clear that only the consortium has the critical mass necessary to obtain a successful result.
- The budget must be well balanced and the expenses' key elements must be well justified.
- The impact must be carefully explained at various levels: scientific, environmental, economic, social and political of the field – and specific arguments supported by numbers and marketing must be presented.
- The proposal must include a credible and thorough description of the way results that come from the project will be disseminated for interested parties (stakeholders) and the way these will be exploited within and outside the consortium both during the project and afterwards.

As a result of the existing national reports and analyses, it was found that participation in the Framework Programme 7 was not adequate, which is why Romanian organisations need to increase their implication in this type of programmes in terms of financial motivation, as well as in terms of access to advanced technology and current scientific results, taking into account frequent errors in writing European projects, why evaluators want to read more than the good practices in the project management field.

That is why the creation of a truly united European Research Space is essential, in which all public or private actors can act freely, create alliances and reach the critical mass necessary to compete and cooperate in the global scene.

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