

5th Int. Conference on

Emerging e-learning Technologies

and Applications

The High Tatras, Slovakia September 6-8, 2007

WHY IS IT SO DIFFICULT TO PREPARE A PROJECT PROPOSAL FOR EU FP7 COLLABORATIVE RESEARCH PROGRAMME? CAN E-LEARNING HELP?

Zdeněk Brož

Private Consultant, Pod Penzionátem 845, Dobřichovice, Czech Republic Tel/Fax: +420-257712485, zbroz@quick.cz, http://web.quick.cz/zbroz/

Abstract. "To be or not to be a project coordinator" is a question a scientist has to resolve if he/she wants to participate at the EU FP7 Collaborative Research Programme. Such a situation happens for example if his original research idea suits well to the particular call for proposals. However, sometimes, the scientists try to persuade friends or anyone else to serve as a Project Coordinator. They will usually promise to become an ordinary Project Participant, Work Package Leader and/or will assist extensively with the project proposal preparation. I will give some reasons why it is so difficult to write the RTD project proposal and why it is very unpopular to become a project coordinator. Also I will demonstrate the methods and techniques I am using in order to simplify and speed up the project proposal preparation if I were in a position of the consultant or a member of the team preparing the project proposal.

Keywords: Applications, Research and development, Resources, Skills, Tools.

1. INTRODUCTION

The EU RTD Framework Programmes (FPs) have a rather high rating among the scientists all over the Europe, therefore the position of the coordinator is a privileged one. If newcomers to FPs wish to become coordinators they need information how much time it takes to prepare a cooperative research project proposal and what is the actual coordinator's workload during individual stages of the project running. Of course, that depends very much on the FP7 specific programme, the project type, the number of participants and many other matters. Unfortunately, information derived from experience with domestic grant systems is rather misleading and of no help.

The most of National Contact Points (NCP) from old EU member countries, the project proposal evaluators and also some experienced scientists know in detail the past history of FPs. Of course, there are not too many scientists or research administrators from universities and research organizations that would have a personal experience with more than just one cooperative research project proposal preparation, participation coordination for each individual FP. It is caused by a low number of the so called opportunity windows (calls for proposals) available during a five or seven year's long life-span of FPs and also because of a rather low rate of success during the evaluation. However, one participation for each FP is enough to become sufficiently informed to understand main changes and challenges available at each new FP. A particularly well informed are the members of the EU FP Programme Committees and experts participating in a preparation of the Work Programmes.

My own experience with European projects dates back to FP4 and namely to the start of FP5 (1999) when the Czech Republic became an associated country to FP5 and I have started to work as NCP at the Technology Centre ASCR (TC) - the Czech NCP organization.

The FPs has changed very much since that time but there is not enough time to discuss here a complicated structure of the current FP7. Therefore, I will concentrate just on two of the most important instruments of FP7, namely the "Small and Medium ..." and "Large scale Collaborative Research Projects". These names have replaced the former titles "Specific Targeted Research Project (STREP)" and "Integrated Project (IP)". Of course, the basic "philosophy" of the Programme Cooperation and its 10 thematic areas (Health, ICT, Transport, Environment etc.) is still the same, but rules, propositions and individual Work Programmes have been modified to a great extent. The important change at the FP7 is the retaining of just one model of the project financing, the Full Cost Model (FC). As usual all changes are a result of the objective ,,to simplify a project proposal preparation, submission, evaluation. administration, financing and a folow-up".

Next, I will present information chronological way, starting from the call for proposal announcement and ending at proposal deadline, which activity takes usually 3 to 4 months. I will discuss namely the timing of the project proposal preparation because the well known "lack of time" in preparation is the most frequent cause of the proposal failure during evaluation. I will also mention steps that follow if the proposal is selected for financing. These are the consortium agreement preparation, the contract negotiation, the grant contract agreement signing and the project start-up followed by the kick-off meeting. The main target audience of the paper are potential coordinators of STREPs and IPs, but it can hopefully help to ordinary FP participants to understand what information, when and why are their coordinators asking for.

2. PROJECT PROPOSAL

General

A preparation of the project proposal is a difficult and tedious long-term effort. Its extent can be measured e.g. by numbers of pages recommended for a project composed of 10 Work Packages (WPs) and prepared by a consortium of 15 participants, see Tab. 1. However, the most important advice is "to follow closely the Guide for Applicants" where both the content and structure of the project proposal are precisely defined. The project proposal itself consists of two parts, namely the Forms A and the Part B. The Annex 4 of the Guide is a template of the Part B and it contains very useful recommendations.

Forms A

All Forms A have to be filled out at the Electronic Project Submission System (EPSS). Form A1 contains a project title, its acronym, keywords, information about the coordinator, a preliminary list of participants and the project abstract with 2000 characters at maximum. Form A2 contains information about the organization and the names of responsible and contact persons. The Form A3.1 contains the budget data of individual project participants and the last Form A3.2 is a budget summary generated automatically by EPSS itself. Each participant has to fill out just Form A2 and in order to access EPSS he/she will use the username and password obtained from a coordinator. The coordinator has: (i) to form a consortium setup and to add, remove or change the order of participants if necessary; (ii) to fill out Forms A1, A3.1; (iii) to fill out some parts of the Form A2 for each participant. The access of the coordinator to EPSS portal is secured by a special username and password.

Part B

The template for Part B can be downloaded from EPSS in a form of the Rich Text Format (RTF). Its content is the same as given at Annex 4 of the Guide for Applicants (PDF file). Tab. 1 shows a list of content of Part B, consisting of the headlines of chapters, subchapters, tables and charts. The four columns at the right side of Tab. 1 characterize a type of individual content items. Moreover, for a purpose of comparison, there are also introduced the questions that have to be answered by the evaluation experts. You can observe that the wording of questions follows closely the headlines of chapters and sub-chapters of Part B. A more detailed description of the evaluation process is beyond the scope of this paper. I will only add here that STREPs are evaluated by 3 experts, while the Integrated Projects by 5 experts. If the evaluated IP is introduced on the list of projects selected for financing then its coordinator could be invited to Brussels for a special hearing. When the evaluation process is completed all the coordinators will receive from the Commission a two page long Consensus Report that is prepared during the so called consensus meeting by the evaluation experts. It is a general practice that negative answers will come one month sooner than the positive ones.

3. GANNT CHART

A purpose of the Gannt chart at Part B

As follows from Tab. 1 the Gannt chart forms a part of the subchapter 1.3 and represents the timing of WPs and their components (Tasks, Deliverables and Milestones) in a graphical way. Its main objective is to interpret the proposal content in a more understandable way. Moreover, it forms the introductory part for other tables like the List of WPs, WP Descriptions, Deliverables, Milestones, Pert diagram etc.

In general, the scientists are not used to collect data, construct and utilize Gannt charts in their ordinary research practice. The most difficult part of it is to plan the scientific endeavour with duration of 3 or 4 years and a delayed start-up of approx. another 12 months. However, a good quality Gannt chart is a clear message to evaluators indicating good managerial abilities of the coordinator. It helps namely when different proposals have similar scientific or technological qualities and the "non-scientific" indicators (Implementation and Impact) affect the evaluation result very much. In fact, the overall marking of the project proposal is based from the two thirds of the total mark on the content of chapters 2 and 3 of the Part B (see Tab. 1).

A purpose of the Gannt chart here

The Gannt chart here is both the object of the description and (at the same time) the instrument describing the timing of the project proposal preparation (Fig. 1). The Gannt charts can have different levels of detail and complexity. They can be produced using a special software (e.g. Microsoft Project) or can be prepared as a ordinary Excel sheet and copied into the Word document file, what is the case used here.

At Fig. 1 there are shown three different Gannt charts characterized by different time periods. The first one describes the overall project duration without any detail (WP) introduced at all. The second chart is a timing that starts at the date of the call for proposals and that has two different ends according to the decision of the evaluation committee. The last Gannt chart (C) describes those usual four months available for the project proposal preparation. Those 4 months are divided into 16 weeks and the proposal preparation workload is divided into three distinct stages (WPs). Equally well we could continue further on and to zoom just at the last week, the last day, hour or even at the very last 10 minutes before the deadline. Later on we will present how much time it will take to make some operations like conversion of the Word document to PDF, to upload Part B and submit a project to the EPSS portal.

4. PROPOSAL PREPARATION STAGES

WP1 Preparatory stage

The first Work Package at Fig. 1 is divided into two distinct tasks. The first one (T1.1) incorporates the

download of the call document files from the CORDIS portal http://cordis.europa.eu/, a search for similar projects at previous FPs, a search for partners, a search for a policy and other support documents and also a contact with NCPs and/or the Project Officer. The task ends with the Deliverable D1 (see Tab. 2), while the milestone M1 (see Tab. 3) is the first decision point that should provide an answer to the question "to continue or not with the project proposal preparation as a coordinator". The task T1.1 is a suitable short-term task for PhD students or postdocs. If they prove to be capable they can become the members of the team preparing next steps of the project proposal. In fact, the grant award would affect their life to a very great and positive extent. The content of T2.1 and D2 does not need any further explanation, while the milestone M2 implies a decision whether to use or not a help of an external consultant, when and to what extent. At the end of the first month there should be provided a brief text describing the project idea and a simple WP structure. However, the text should not disclose sensitive information and be ready for an open distribution to anyone.

WP2 Consortium building stage

The objective of this stage is to prepare and realize a meeting of participants, the activity that needs an exchange of many e-mails with potential project consortium participants. The mailing itself is a time demanding task and a proper strategy should be prepared for it. The text of the first invitation letter could differ according to whom you are mailing it, whether to your scientific friends or to the yet unknown potential participants. If the answer is a positive one, the next letter could contain following items: (i) Memorandum of Understanding or the Non-disclosure agreement, (ii) a request of CV of the organization, research group and scientists - see subchapters 2.2 and 2.3 at Tab. 1, (iii) participant involvement and ask for comments relating the WP structure, (iv) Person Months and budget, (v) WP leadership matter etc. There will be built up gradually (i) "a project core group" composed of the WP Leaders, (ii) alternative lists of the ordinary project participants. Everything mentioned above should be directed to preparation of the meeting of participants organized at the coordinator premises. The meeting should be organized also as an important social event that can help to form an active group of people wishing to prepare a joint project proposal and work together for next several years. You should ask your organization head for a support.

WP3 Proposal writing stage

This last stage is a self explanatory one using Fig. 1 and tables of Deliverables and Milestones. I would like to stress here the importance of "external evaluation" of Part B by persons "external" to the consortium and sometimes even not involved in the scientific field itself. The consortium partners can also ask their domestic NCPs to read and comment on those "non-scientific" parts of Part B (Chapters 2 and 3). Namely the NCPs are very experienced ones in a given area.

Tab. 2. Deliverables list

Tau.	Z. Den	verables list
D1	W2	State-of-the-art
		Brief description of the project idea suitable
D2	W4	for mailing to participants, contacts with
		NCP and/or Project Officer etc.
		MoU, CVs, WP leadership, PMs and project
D3	W9	cost, a core group build-up, meeting agenda
		preparation
		Minutes of the meeting (Consortium setup,
		draft of the abstract, WP structure, plan of
D4	W11	next activities and individual participants
D4	WII	involvement, questionnaire for data inputs,
		Letter of Intent, IPR, Consortium
		Agreement, "external evaluators" etc.
D5	W13	Budget preparation and its updates
		Part B and A3.1 upload to EPSS, the
D6	W13	partners and "external evaluators" asked for
		comments
D7	W14	Part B upload to EPSS, partners and
D/	VV 14	"external evaluators" asked for comments
		Download of all Forms A and Part B from
D8	W16	EPSS and mailing the files to participants
סט	VV 10	and to a representative of the own
		organization

Tab. 3. List of milestones

Tuo. 5. Eist of inflestones									
M1	W2	Decision to become a coordinator							
M2	W4	Decision to use an external consultant							
M3	W11	Confirmation of the coordinator, agreement of plans prepared for proposal preparation							
M4	W13	Approval of the project budget							
M5	W13	Decision to keep or modify WP structure							
M6	W16	Final submission of a proposal to EPSS							

The Gannt chart shown at Fig. 1C describes an optimum case of the project proposal preparation workload distributed evenly to all four months available. The actual practice is a different one as shown in Fig. 2, taken from an article published in the Czech language [1].

Fig. 2. Timing of one project proposal preparation [1]



Both left and right ordinates describe a number of hours per day and the total number of hours spent on the proposal preparation since the beginning of my involvement. The upper x-axis shows number of days since the start and the bottom x-axis shows number of days available till the deadline. The meeting of participants took place at day numbers 19 and 18, while

the day number 10 marks a complete change of the logical structure of WP. The partners received Part B for comments 2 days before the deadline. You can see that the proposal preparation was squeezed in three weeks and no time had been available for comments of "external evaluators". Instead of that, we had to seek information how much time is necessary to submit a project proposal to the EPT system (the predecessor of EPSS), see Tab. 4.

Tab. 4. Time duration in minutes

No	Item	Minutes
1	Registration of a project	60
2	A3.1 Budget data upload from keyboard	60
3	Acrobat PDF Maker conversion of Part B	10
4	Acrobat Distiller conversion of Part B	1
5	Part B PDF file upload to EPT	1-2
6	Final submission of the project to EPT	1-2

6. EXCEL FILE AS A TOOL FOR A PROJECT PROPOSAL PREPARATION

The project proposal preparation is a difficult task also because of a continuos inflow and update of a huge amount of data. There are two main sources of data, namely those (i) obtained from participants and (ii) generated during the course of the proposal preparation. All the data have to be transferred to proper and multiple places at Forms A and Part B.

To solve the problem with frequent data updates and their subsequent transfer to multiple places I am using a "centralised system of some data inputs" at the pre-defined sheets of the Excel file. The ordinary Excel sheets are interlinked to those "master ones". For example, from one data entry there can be updated automatically the other sheets like WP Description tables, List of WPs, the Gannt chart data, Deliverables and Milestones. Using the tools of Excel you can easily regroup Deliverables and Milestones according to their delivery month and then export a resulting table into the document Word. It can be done quickly if you are under the time pressure.

7. QUESTIONS WITHOUT ANSWERS

I have three main reasons why to replace the proposed template title "Discussion" by the above "Questions without answers". They are, namely (i) a lack of space here, (ii) a lack of some answers, (iii) a belief that a reader will try to find the answers by himself. Below I have divided the question into two distinct groups:

A. How many document pages a coordinator has to read before he/she can start with a proposal preparation? How much time is it needed to prepare a project proposal? What is the usual workload distribution among the coordinator, WP Leaders and ordinary participants? How to optimize a composition of the coordinator's team? How to distribute the proposal preparation workload among the senior scientists and doctorands? What kind of a support can a coordinator expect from the NCP

organization? What can he/she expect from his/her mother organization, e.g. the university or research institute? How is it possible to combine the ordinary duties of a coordinator like teaching with so demanding task of a proposal preparation? Is there available a list of the support measures the coordinator needs? Who can profit the most if you are a coordinator? What should be the organization policy towards the overhead money? How should the organization motivate a scientist to become a coordinator?

B. What are the indicators of a quality of the project proposal? How to describe and treat risks and contingency plans at Part B? What is a suitable mix of CVs and a description of the roles of scientists, research groups and organizations in the project proposal presented at so limited space? What are the indicative figures of EU grant contribution for STREPs and IPs? How to deal with subcontracting and travel costs that are the sensitive project cost items? How to differentiate among the four main project activity types like RTD, Demonstration, Project Management and Other? What are the reasonable figures of Person Months and Project costs of the Management activity? How to proceed with the Consortium agreement preparation? How and when to start to discuss the IPR (Intellectual Property Rights) matters? What to answer if some people are prompted to rate the FP as intentionally difficult, complicated, unfriendly and a hostile one? What questions are missing? Can E-learning help?

8. REFERENCES

[1] Brož, Z.: How to write project proposals to EU FP6 – Experience of a private consultant. ECHO-Information about the European research, development and innovations, Vol. 3/2004, pp. 19-20. Publisher: Technology Centre AS CR, printed version ISSN: 1214-7982, on-line version ISSN: 1214-8229 (in the Czech language).

THE AUTHOR



Zdeněk Brož, PhD: Original profession is a research in chemical engineering (www.icpf.cas.cz, 1961-1993); secretary/advisor to the President of the Czech Academy of Sciences (www.cas.cz, 1993-1996);

Deputy Director of TC ASCR (www.tc.cz, 1996-2001) involved in SMEs incubation, COST administration, National Contact Point of the EU RTD FPs of ENVI, INCO and INTAS. After the retirement, involved in various activities as the project proposal consultancy, administration and management of European projects, e.g. FP6 IST SSA ATVN-EU-GP Project (www.atvn-eugp.pl/) at the Centre for Administration and Operations ASCR, v.v.i. (www.cas.cz, 2005-2006).

Tab. 1. Project proposal structure, content and evaluation questions. Number of pages of a project proposal with 10 WPs and 15 participants.

Type	ID	Title		RTD	PMs	Budget	Timing	Pages					
1	A1	Abstract 2000 characters		~			>	1					
us 4	A2	Participant information (2 Pages per Participant)		~				30					
orı	A3.1	Budget (1 Page per Participant)				✓		15					
1	A3.2	Budget Summary				✓		1					
	1.	Scientific and/or technical quality, relevant to the topics addressed by the	call	Scientific and	d/or technologi	cal excellence		20					
	1.1	Concept and objectives		Soundness of	concept, and qu	uality of objecti	ves						
	1.2	Progress beyond the state-of-the-art		<u> </u>	ond the state-of-								
	1.3	S/T methodology and associated work plan		Quality and end plan	ffectiveness of t	the S/T methodo	ology and assoc	ciated work					
		Gannt chart (timing of WPs and their components)		✓			>	2					
		Table 1.3a Work package list		✓	~		>	1					
		Table 1.3b Deliverables List		~			>	2					
		Table 1.3c WP descriptions (max. 3 Pgs/WP)		~	~		>	30					
		Table 1.3d Summary of staff effort		~	~			1					
		Table 1.3e List of milestones		✓			~	1					
		Diagram Pert or similar		✓			~	1					
rt B	2.	Implementation		Quality and efficiency of the implementation and the management									
Part B	2.1	Management structure and procedures		Appropriateness of the management structure and procedures									
	2.2	Individual participants		Quality and relevant experience of the individual participants									
	2.3	Consortium as a whole		Quality of the consortium as a whole (including complementarity, balance)									
	2.4	Resources to be committed		committed (bu	ess of the alloca udget, staff, equ	ipment)		sources to be					
	3.	Impact		Potential impact through the development, dissemination and use of project results									
	3.1	Expected impacts listed in the work programme			Contribution, at the European and/or international level, to the expected impacts listed in the work								
	3.2	Dissemination and/or exploitation of project results, and management of			ess of measures s, and managem			xploitation of					
	4.	Ethical Issues		✓				1					
	5.	Consideration of gender aspects		✓				1					
		Number of pages Form	ıs A:	47	Part B:	96	Total:	143					

Fig. 1. Gannt charts of three different periods of the project life

A. 7	Year								
ID	Task	Y1	Y2	Y3	Y4	Y5			
1	Project proposal preparation, evaluation, consortium agreement, negotiation etc.								
2	Collaborative research project running (a duration of STREP / IP is 2 to 4 years)								

B. T	iming from START to KICK-OFF meeting	Month															
ID	Task	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16
1	Project proposal preparation																
2	Evaluation																
3	Decision from the European Commission								NO	YES							
4	Consortium agreement preparation								8	\odot		V					
5	Project negotiation								END								
6	Grant agreement signature by participants																
7	Project Kick-off meeting											$\left\ \cdot \right\ $		7		>	

C. Timing from START to DEADLINE of a call for proposals		Wh	10?								We	eek							
ID	WP/Task	С	P	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16
1	WP1 Preparatory stage	~																	
2	T1.1 Information collection	~			D1	M1													
3	T1.2 Project idea and draft of the WP structure	\					D2	M2											
4	WP2 Consortium building stage	~																	
5	T2.1 Communication with participants, set-up of a "core group"	\										D3							
6	T2.2 Meeting of participants preparation and realisation	~	>											D4	M3				
7	WP3 Proposal writing stage	~	>																
8	T3.1 Project registration at EPSS, Forms A1 and A2 filling	~	>																
9	T3.2 Project budget, Person Months, Subcontracts etc.	~														D5	M4		
10	T3.3 Part B Version 1 and A3.1 - 1st submission to EPSS	~	>													D6	M5		
11	T3.4 Part B_Version 2++, 2nd submission to EPSS	~	>														D7		
12	T3.5 Final editing of Part B and submission to EPSS	~																D8	M6