Introduction

Having just finished putting together my first EU Proposal, I thought it would be good to share some of the things I’ve learned. This is not a guide to writing a successful proposal. At this time, I don’t know if our proposal got accepted or even if it got good reviews. Plus, there are plenty of people and organizations who have much more experience and much better advice than I can give. Instead, this report is more an amalgamation of things that I learned, things that I didn’t expect to be important, and things that were more important than I originally thought. Who is this report aimed at? It is primarily intended for postdocs or others who have never written an EU proposal but think they want to (you). It may also be of interest to educators who want to get a feeling of what should be targeted when teaching about EU proposal writing. The report is organized into four sections:

1. Before You Start: discusses what I think is the necessary background to have before taking on an EU proposal.
2. Consortium: discusses dealing with the people and organizations who build the proposal with you.
3. Content: this won’t tell you what to put in a proposal, but it provides hints about what to focus on.
4. Coordination: an EU proposal isn’t about writing so much as it’s about herding, collecting, collating, mashing up, and communicating. This provides some thoughts on things to do to help in these activities.

Before You Start

There are three things, in terms of experience, that helped me in writing my first EU proposal:

1) Experience writing other proposals. In the past, I’ve written smaller proposals and have been part of writing more substantial proposals. This lets you know what a proposal should contain, how you should structure it, what’s important, etc. An EU proposal in the end is a blown up version of smaller proposals. Being part of the proposal
writing process lets you learn from other people’s experience and how they approach the problem.

2) **Budget the time.** You need to have some space because you’re going to have to spend significant time on the proposal. For example, I wanted to write a paper for a journal special issue and was not able to do so because I spent that time on the proposal. You need to be aware of this but so does your supervisor. An important step for me was to have a co-leader: another person in your department to prepare the proposal with. (Thanks Rinke!) Preparing the proposal together ensured that both of us had the ability to do other things and still know that the proposal was being taken care of.

3) **Have a clear idea.** Probably the most important thing to have before you start is a clear vision of your idea. In a couple of sentences express your idea. This is the proverbial “elevator pitch” you probably have heard about. But it’s important, you’ll be repeating it to a lot of people. The wording you use may change, how you express the idea may change, and how you realize the idea may drastically be modified but the idea should always remain clear. A good way to demonstrate this is to look at the objective written down at the beginning of the proposal writing and the one at the end. Here’s ours:

- **Start objective:** to develop a system for the automatic aggregation, archival, and curation of digital contextual material from the web.

- **End objective:** to ensure that knowledge communicated and produced through social media conversations about published material is preserved and no longer lost to European society.

The objectives don’t share many common words but they do share a common idea, all the information on the web that provides us a way to understand complex technical documents (like laws and science publications) is being lost, society needs to preserve it. A clear idea helps you to keep your bearings especially when dealing with the members of your consortium.

**Consortium**

One of the main difference between an EU proposal and other research proposals is that you have to assemble a fairly large number of institutions together around the proposal. In some proposals, you may have 2 or 3 partners max. In an EU proposal, you’re probably talking about 5 or 6 partners in the smaller (STREP) proposals. This is why this report is titled “putting together” and not “writing” your first EU proposal. A lot of what you have to do is bring together different groups and their contributions.

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4 I think it was beneficial to have a co-leader that was essentially at the same stage of career development. This means that both of you are in the same boat and there isn’t one person with all the answers.

5 Yes, I did go on a vacation during the proposal writing. Luckily, the apartment we stayed at had Wi-Fi.

6 Members of a consortium are called partners in EU-proposal-lingo.

7 There’s lots of EU proposal lingo. Don’t worry you’ll be throwing around terms like STREP, workpackages, man-months, and overheads in no time. Also, if you haven’t done a STREP you shouldn’t be thinking about an IP.
To put it simply, your consortium is important. These are the people who (hopefully) you’ll be working with for 2 or 3 years. Furthermore, the right people will contribute in a timely fashion to the proposal writing. Finally, a good consortium will help convince the EU that the work you’ve outlined can actually be done and be done well. Putting together a consortium is probably one of the trickier aspects for someone who is not an established researcher because you’ll know less people outside of your current research area. This is where all the networking you do at conferences helps and why it is so important to attend things outside of your field. EU projects usually require partners that have complimentary expertise not overlapping expertise. Social networking is important! Three things can help here:

1. Have a co-leader. Working with someone else lets you expand your network especially if you work in different areas. In our case, Rinke had expertise in AI and Law and I had it in e-science this let us approach different social networks to find partners.

2. Other people in the department. We were able to ask other people in the department who had expertise in different areas and were more connected and they were willing to point us in the right direction.

3. Your other consortium partners. Once you have one or two partners on board, they will also be able to help find possible partners.

When approaching partners it is vital that you have collateral. Collateral is material that explains the project, what part of the EU call it is aimed at, and what the role of the partner is in the proposal. Think extended abstract. The collateral should be compact and precise. It should also be tailored to the partner or you should highlight what the particular partner is supposed to do. This is one of the things that I didn’t do well. I sent out a generic proposal and pretty much every time a potential partner came back with the question “what exactly is our role?”. One thing to do is to specify the general parameters for a partner but don’t be too specific. They will come with their own ideas about what they can do in the role. This ensures that state of the art research is happening. For example, we knew that we needed a partner that had expertise in natural language processing to extract information from blogs. The partner that signed up added an extra twist by introducing opinion mining to the role.

One thing to be careful of is not to get side tracked by potential partners. We had a one potential partner take a while to respond to overtures and after responding was noncommittal. This was not because they were bad guys. They were just being polite. In the end, they didn’t come on board but waiting for them cost us time. Do not be
afraid of moving on if you don’t hear positively from a partner after they are approached. We should have moved on to other potential candidates earlier. A partner that responds quickly and positively is one that is going to contribute and is someone you want to work with.

Partners may have alternative ideas of what the proposal is about. This is to be expected because everyone comes from a different research angle. You have to be careful of these other agendas as this can fragment the proposal. You need to be able to stick to your clear idea. The point here is that you need to be able to express your idea perhaps in their vocabulary and also you may need to extend the implementation of the idea to incorporate these other perspectives. In our case, several partners wanted to extend the breadth of the proposal to also incorporate contextual information not available on the web, I thought this was too broad and would make the focus of the project too diffuse. But because their proposal, we were able to create a clear distinction between our project and other related work.

For hashing out conflicting views, getting on the same page and structuring the work, nothing beats a face-to-face meeting. This was recommended by several people. I initially thought it would be nice to do but not really that important. We are in the age of the internet and telecons, a F2F shouldn’t be critical. I was wrong! The face-to-face absolutely helped the proposal. Getting everyone in a room let us focus on the proposal without distractions. It let everyone get to know each other. It solidified the idea and the roles of each of the partners. Most importantly, I believe the investment in time made the proposal “real” to the participants. Especially for a beginner in EU proposal writing, a face-to-face meeting is essential.

To reiterate, your consortium is important. It cannot wait to the end of the writing process. It’s the first thing you should do and one of the key parts of putting together the proposal.

Content

The content really comes out in the Concept and Objectives section of the proposal. This is where you discuss the vision of the project, the problem it addresses, and how the partners and the proposed research come together to address this problem. One quick aside, pick a good project name early. Once you have a project name you stuck with it. I thought I could change our name to something different but once it gets into usage it’s really hard to change. There are two areas to address with respect to the content of the proposal: how to convey the problem and solution and how to convey that the proposal is feasible.
Conveying the problem and solution

One thing that I didn’t realize was how important the EU Call is. They have outlined the problem at a high-level for you. The proposal just needs to fit into that frame. I was surprised about how blatant you should be in addressing the call. Reuse the call words. Quote directly from the call. Address systematically the call points. Rinke went through and made sure we did this and it helped show how the proposal addressed the calls issue. Also make sure you read all the call not just your objective. Finally, representatives at the EU will give you feedback on any initial material you have. Their advice will probably come down to: how do you address the call? Beyond focusing on the call, here are three things that I learned to help convey the idea.

Address the questions What? Why? How? Why You? explicitly. We didn’t do that until towards the end of the proposal preparation period and WOW did it help crystalize everything. Following a suggestion, we even explicitly wrote these at the beginning of the proposal. Using this technique removes redundancy and ensures that the proposal answers these questions in the reviewers (and your) mind.

Show don’t just tell. We created two pictures that showed the architecture of our proposed system as well as an example of the flow of data in our system. This helped clarify in our mind the entire relationship of all the component parts. We also were advised to include numbers and pull quotes from authoritative sources. After doing so, I realized how much additional weight these gave to the proposal. Saying that scientist are blogging is one thing showing it by quotes from Scientific American is another. Saying that there are many science blogs is one thing showing that 19% of blogs discuss science is another.

Use examples. During the preparation period, I had an email exchange with a partner about what was expected from their technology. We were talking in the abstract and past each other. To help work out the issue, I came up with a simple example describing the approach in practice. The example helped resolve the issue. Then it was suggested to include the example in the proposal. We fleshed it out and included it. It made a tremendous difference as it helped bind all the various parts of the approach together. Secondly, it was really amazing how that example let our external readers better understand how the approach would work in practice. It makes everything more concrete and helped us tell a story. An example is something that I wish I had done much earlier in the writing process. Additionally, we included several real-world examples to justify the need for our approach. For example, we wanted to show that what

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10 EU calls are long! Plus, the Cordis website is a complicated to say the least. It’s worth downloading the material and going through it. Usually the part of the call that impacts you is only 10 or so pages long.

11 If you want to get into storytelling for marketing take a look at Seth Godin’s books.
we were aiming to archive consisted of many different media types. Through a screen shot of a web page we were able to show that it not only included text, but also video and images. A compelling example is worth the effort.

Conveying feasibility

The EU obviously wants to fund things that actually happen. This is one of the reasons they put emphasis on exploitation and dissemination\textsuperscript{12} i.e. getting the results of the project out there. Another thing I’ve been told they look at is the organization of the project. Focusing on the organization is also good for you because it lets you have that all important overview of the project. A couple of things that I learned. One is to balance your workpackages in terms of effort. If you have two evaluation workpackages these should be the same amount of effort. If you have two research workpackages, again the same amount of effort. This parallelism helps in devising the budget and with your project lifecycle. Speaking of which, I think the project lifecycle is important to think about early as it helps scope what you can do. Finally, it was suggested to us to make the milestones in the project line up across the workpackages. This helped more than I expected it to because it allowed all the workpackages to connect together. Originally, every workpackage had its own set of milestones which made it difficult to see how they fused together to create an end product. Finally, do a rough gantt chart.\textsuperscript{13} This will help you see how all the partners, workpackages, deliverables and milestones fit together. Based on the chart, you can start adjusting the parts of the proposal (e.g. workpackage length, deliverable months, etc.) to ensure that everything respects the project lifecycle. Having good organization helps convey the feasibility of the project to both yourself and the reviewers.

Coordination

As previously said, what really distinguishes an EU proposal is the number of groups involved, which means coordination is absolutely essential. Here are some things that stuck out for me in terms of coordination.

*Have a co-leader.* This gives you someone in person to talk about the proposal. It ensures that you can tackle more than one task at once. It also lets you discuss things before saying anything rash.

*Respond fast.* I found that being on email (almost constantly) was extremely helpful in moving the project forward.\textsuperscript{14} Different partners may be working on your proposal at different times and may need

\textsuperscript{12}I didn’t write this section so don’t have much advice about it except to say that I should have paid more attention to it earlier.

\textsuperscript{13}I sketched a gantt chart on some notebook paper. It’s faster than using a program.

\textsuperscript{14}With smart phones this is pretty much possible.
responses to complete their sections. Being on email ensures that they can continue if they want feedback or have questions.\(^5\) It also means that you are always on top of what is happening and don’t have to catch-up. Another part of responding fast is the ability to use the phone. Most of us, especially in the tech side of the world, use email. But there’s nothing better to clear up issues, get answers fast, and have more detailed discussions than the phone. Don’t be afraid to call!

*Provide timely overviews.* One of the things that helped more than I expected were timely overviews of where we stood. This took the form of two documents: one a complete collation of the contributions of all of the partners and the second, a man-month budget spreadsheet. Both of these things I started doing more towards the end of the preparation period and again they helped keep everyone on the same page. The man-month budget spreadsheet gives the cost for one month of work for each partner and then shows how the work is divided among the various partners per workpackage. What this spreadsheet allows you to do is gauge the cost of the project and easily redivide work and project cost. It also allows partners to see where they stand in terms of what they want to get out of the project. The other part is just integrating the work of the different partners in a larger document. You need to be clear about when that integration occurs\(^6\) but it should be frequent. This lets partners provide comments back to you on the whole document. Your job is to integrate all these comments. This is a lot of work but also keeps you in control of the overall document and ensures cohesion in it.

*Do the heavy lifting.* You will have to do heavy lifting in terms of writing and integration. Be prepared for this. I spent an Easter weekend writing a state of the art section even with contributions from all the partners. Putting things together requires time and it’s your proposal so you will have to do it. It’s better to know this up front so the people around you will understand.\(^7\)

*Get outside commentary.* We got two people from our department not actively involved in the details of the proposal to read it at various stages. This helped tremendously as it gave fresh eyes to the proposal and helped us clarify and refine our writing and thinking. This absolutely should be done. Finally, near the end we put together an advisory board for the project. An advisory board consists of renowned experts who will help advice the project if it gets funded. This is helpful in two ways. One, a good advisory board is helpful for validating the proposal to the EU. Two, when we were able to sign up a top flight advisory board, I felt like extremely positive about proposal.

*Avoid the forms.* We were lucky enough to be able to employ an

\(^5\) One thing I didn’t think was necessary but turned out to be very important was a mailing list. There are usually so many partners that if you try to keep everyone on a cc list someone gets left out. Additionally, it makes it easier to keep in the loop on conversations happening between other partners.

\(^6\) Something I messed up on a number of occasions.

\(^7\) Not only your colleagues but also family and significant others.
outside firm to help prepare many of the mundane aspects of the proposal. If you’re able to this, I would highly recommend it especially for a beginner. There’s already enough work to do without having to figure out the EU’s EPSS system as well as what all the A3 forms should look like. This was of great help to us. Additionally, our local finance office gave us detailed assistance with understanding the budget issues with EU proposals, which is not straightforward.\textsuperscript{18} Introduce yourself to your local financial office even before you start writing the proposal.

\textit{Conclusion}

Writing an EU proposal requires time and diligence and even if you complete one it’s not clear that it will get funded. Obviously, it’s not something to do on a whim.\textsuperscript{19} However, printing out the final proposal and weighing it in my hand gave me a sense of accomplishment as a researcher because it provided some vindication that my idea was worth working on. Preparing the proposal taught me not only about organization but also about several different research areas that I didn’t know much about before. For me, it was a worthwhile endeavor. I hope writing down what I’ve learned can help you if you decide to take the challenge on. Let me know if it did\textsuperscript{20}.

\textit{Acknowledgements}

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\textsuperscript{18} It’s amazing to see how much it actually costs to employ a person.

\textsuperscript{19} Note, that’s how it started for me.

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