On Top of the Consortium

Keeping the Control of Consortium Building in ICT R&D Programmes

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Abstract— Research projects in the engineering domain are often performed in partnership between Academia and Industry. Some kinds of funding presuppose a specific blend and participation of different partners in the projects. The initiator of a project, the prospective consortium leader, thus has to take on board a selection of organizations to meet the requirements from the funding program or funding body. One usual way is to ask "old friends", partners you know from previous collaboration, but sometimes it is not sufficient to get a well-balanced consortium with sufficient competence and/or country representation. On the European level, there are many attempts to help the proposers to build a consortium, often named "brokerage event", "proposer´s days" or the like. These often seems to encourage large consortia, both in principle and in practice. Large consortia can possibly help to be more complementary and well balanced, but there is no evidence that the quality of the project performance or result is better.

The encouraged process can be described as a "snow ball" method. New partners arrive more or less spontaneously, and in their turn bring more partners to the consortium. Often, groups of partners who already know each other tend to join a developing consortium cluster-wise, either by country or by research or competence area. From the funding program or funding body, consortia are also encouraged to merge with each other, which gives the process of building a consortium another level of complexity. An advantage of this model can be that partners with previous experience join the consortium, group-wise.

An opposite approach is to be open, but to stay in control of the consortium building process. This can be done by giving successive tasks and instructions to the interested partners, without any promises, and just successively incorporate new partners in the consortium. This strategy is a structured semi-open selection process for the consortium, paired with the development of the proposal.

We state the hypothesis that the "standard" mechanisms might lead to large consortia, loss of control and possibly bad performance, and that a more restricted method can lead to sufficiently sized consortia, help the consortium leader to keep the control, and possibly lead to better quality of performance. To learn more about this, we have interviewed a number of experienced project managers to find out how they perform consortium building in practice. We have also been interested in learning more about how they examine new research partners before inviting them to a research cooperation proposal or project.

Keywords — Consortium building, selection of partners, timeliness, successive tasks, committed partners, productive partners

I. INTRODUCTION

Mälardalen University and the School of innovation, design and engineering, hosts a major research center with focus on embedded systems: Mälardalen Real-Time Research Center (MRTC). Together with a couple of other groups it constitutes the established research direction Embedded Systems (ES) with 25 full professors, 50 other PhD seniors, 70 PhD students, organized in 6 research areas and 14 research groups. The center is running about 60 research projects, an industrial graduate school and some other projects [16]. Since 5 years there is also a project management office (PMO) there, called Division of Research coordination (RECO) [15]. The task of RECO is three folded: 1. Pre-award: scouting for new funding and new consortia and support the application process, from counseling to actually writing the proposal and coordinate the application process. 2. Post-award: Responsibility for the project model, with focus on the planning period, writing, scrutinizing and finalizing agreements and contracts, including administrative start-up meetings, in some cases also supporting report and finalization of the project. RECO also overlooks the total project portfolio. 3. RECO also rents out project management competence and resources in large and complex projects. RECO-staff is included in the management of several projects, in some cases as project managers, in other cases as sub-project managers or specialists (dissemination, law, project management etc.).

One of the major focuses of RECO is the creation of the consortia for projects where this is needed. MRTC is part of European projects in ITEA2 [14], ARTEMIS [9] and FP7, and has also submitted proposals in Horizon 2020, in MSCA (Excellence), ICT (Industrial leadership) and the JTI ECSEL. Also ITEA3 and CELTIC PLUS [10] are currently addressed. ECSEL [12] is a joint undertaking, which means that it is an agency under the European Commission whose calls are directed by three industrial platforms, ARTEMIS being one. ITEA and Celtic-plus also are constituted by industrial platforms or communities, even if the actual funding is done coordinated by national agencies, under the umbrella of EUREKA. These communities assist with consortium building events in conjunction with the opening of the call. At these events the candidates can post their project idea on the web site, and during the event they can present their project idea,

with a poster or with a pitch talk, accompanied with a power point presentation. Upon presentations, industry and academic representatives cluster themselves around the proposals, either just announcing their interest, waiting for the initial initiator to take action or taking part in an intense development on the spot. In some of the cases, as in ITEA- and ARTEMIS-events, there is a structure to foster project proposals. After the pitch talks and the clustering of interested parties, there are breakout sessions that will report back to the plenum after some hours how the proposal and the consortium has developed. Usually there are two or three cycles of breakout sessions and back-reporting. In some cases the arranging community is very active and asks groups to join forces, criticize the proposals and so on. MRTC has been part of several proposals and projects of this kind, since 2008. RECO has been the coordinator of the marketing and consortium building activities, and it has resulted in several projects.

This is thus our background as practitioners in this field. The authors of this paper has during the elapsed years, established a profound experience and a wide network. Out of our experience we draw two major concepts, or approaches - the *"snowball methodology"* and *"A structured semi-open methodology"*.

A. The "think big-concept, all are welcome!" – an unstructured snowball methodology

Both ARTEMIS and ITEA promote the assembly of very large and complex projects, often involving more than 100 person years, 8-100 partners and a (public) budget of between 0.4-42 MEURO. The average project has 25 partners and 9 MEURO total budget [9]. The strategy is to "think big" to gain "impact" and even if it is not primarily the size of the consortium that is meant, it is still an underlying message, that the larger, the more impact. "The ARTEMIS mantra 'think big' doesn't mean that all projects have to be huge ones like the ARTEMIS CESAR project (Cost-efficient methods and processes for safety relevant embedded systems), which has about 58 partners and about €68 million of investment, it means thinking about the impact that the project will have [17]." The dimension of the projects poses several challenges for its management. Hence, it is not likely that all staff from two partners ever meet in the project. The policy of promoting large and complex projects is also reflected in the support for proposal that is available in the ARTEMIS consortium building events. At the break out session all interested potential partners are welcome. There is no mechanism to allow the consortium leader to sort out undesired partners. Worst scenario is to walk off with 30-40 interested organizations, all of them expecting to be part of the proposal. Limiting the consortium is a difficult task.

The funding of ARTEMIS/ECSEL is a blend of European contribution and contributions from each national innovation agency [11], ITEA is a Eureka cluster, where the total funding is national [14]. Each national agency has its own criteria and rules for payment. Most countries ask for an industrial project leader, and a specific budget ratio between industry and academia. That means that one prospective academic partner often has to find one or two other partners from the private sector to be nationally eligible in his or her own country. This means that the consortium will grow at least one extra round, without any real chance for the consortium leader to control the development.

One specific problem is also that large chunks of partners or sub-clusters can fall away, including valued partners, when some sub-clusters cannot create eligible national consortia, or when some countries choose not to fund a specific project, or otherwise run short on budget - or frankly stop to support the funding scheme.

In the end the consortium is very large, constituted by a large variety of industrial and academic organizations. There is likely also a chunk of "sleeping partners"; not very productive or contributing partners. Even if this is apparent already during the proposal process, it is hard to cut off partners that already have become an integrated part of the project. Even larger is the risk that these partners will act as proud flesh in the project, demanding but not contributing.

As practitioners in this field, MRTC and RECO have experienced "the snowball strategy" several times. To take the lead and propose a topic and gather a consortium is not an easy task in a very open environment.

B. A structured semi-open methodology

As an alternative to the "snowball strategy", we have performed a more structured process, which fosters narrower, smaller and (as we think) better consortia. Objectives for this is to gather a large group of interested potential partners, but through the process select the most desired ones.

As an example from last year; in the first step we proposed our project at a consortium building event, early in February 2014. In this case we presented the project orally in a five-minute pitch talk, together with 50 other presenters in a plenum session. We also presented a poster. The project was also posted on the web a couple of weeks ahead. The result was a list of 37 interested individuals, representing 31 different organizations, where 4 were large companies or industries, 6 SMEs, 12 institutes and 9 universities, from 14 countries. The "usual" process would be to use the breakout sessions to form an initial outline of the proposal, and start assembling the consortium.

But for us, the next step was to contact the 37 people large group after two weeks. The message was that we planned to form a consortium out of the group of interested partners. They were all given the task to describe 1) Their own organization, 2) What their contribution would be and 3) If they would be willing to lead any task. They got a three-week deadline. The result was a detailed list of potential partners, but the list had been shortened to 10 potential partners, whereof 1 from industry, 2 from SME, 3 from institutes and 4 from universities, from 10 countries. We believe that the action sorted out the better half of the list, those who actually were responsive to joint actions.

At the end of the day eligible country consortia are needed in this kind of call, therefore next step was to ask the 10 interested potential partners to provide national rules for the call (if known), and also propose additional potential partners from their own country *if needed*, with respect both to national

rules and the direction of the proposal. The potential partners had one week to suggest partners and another week to get the same kind of information from these new, suggested partners. At this stage at least one country left, but also one new entered. The result was a detailed list of potential partners, but the list had been extended to 26 potential partners, whereof 5 from industry, 8 from SME, 7 from Institutes and 6 from universities, from 10 countries.

Thereafter we selected three core partners, from three different countries (Denmark, Italy and Portugal), however the Italian company couldn't commit at this stage. The core team worked out a "write up" and selected partners and partner countries, mostly from the set of already interested partners, but also some totally new, that fitted into the project. Now the first revision of the consortium was Sweden, Denmark and Portugal, plus Norway, Netherlands and Germany. Also Austria was asked to join. A message was issued for all interested organizations that they were currently not included, but that they might be taken into account at a later stage. At this stage Italy re-entered into the consortia, while Austria, Netherlands and Germany fell away. Eventually our consortium consisted of partners from 21 organizations in six countries.

We have established this way of work, to find better ways to establish new European research consortia. First we identify *la tête de la course*, as a core team, and then we pick the breakaway specialist out of the bunch of the peloton - using sports idiom. In this "marathon methodology" we try to select the best of those who want most, to form a winning team. Now our question is whether this also is in accordance with the strategy of the most successful coordinators.

II. STATE OF THE ART

We have focused on size, method of gathering a consortium and the formulation of objectives to find out where the obstacles and opportunities are hiding in the consortium building process of multi partner R&D projects. Some efforts have been done to understand the mechanisms.

There is an assumption that the larger a project is, the more complementary the resources of different partners can be, on the one hand, but perhaps large consortia are not efficient - large projects are not good *per se*. "The general picture emerging is that increasing scale, as it interacts with various dimensions of project uncertainty and scope, tends to lower the positive effect of resource complementarity and learning, and to magnify the negative effect of transaction costs [8]." Spanos suggest that the "cognitive distance among partners" – a concept established by Nooteboom - explains the surprising observation. "Cognitive distance poses both a problem and an opportunity for collaboration, in that a large distance provides the potential for novelty and creativity (i.e. to learn something new) but at the same time makes understanding more difficult between the parties involved [6, 8]." In large, multi partner projects with lots of insecurity or undecided objectives, the cognitive distance might make more problems than opportunities.

The research project thrives also in another environment than development projects. "In terms of requirements, the research project often starts from a discussion about the framework of what will be done, in contrast to development projects where real customer requirements and expectations on outputs are discussed [5]." This is also the distinction between goal-oriented and goal-seeking projects, established by Halldin [4]. In most cases the start is taken in a community of prospective partners with the same kind of problem and perspective. As Huljeni points out "in the research project a participant can drastically influence the project goal [5]." This also means that when a project consortium changes during the writing of the proposal, also the goal might change. In joint research the "relationship business" in industry-academia collaborations is important. Grünbacher & Rabiser concludes "that universities need to devote resources to manage this relationship, while the industry partners need to carefully select the people serving as point of contact in joint projects with academia." They also point at "the long-term collaboration of companies with academic institutions" as crucial for the relevance of the research [3]. This actually support a community oriented approach of consortium building, and might also imply objective-seeking projects.

In a Malaysian study it is found that most of the collaborations were "individually initiated" - based on several and deep contacts [2]. So the question might be were to start. In the community or in the task? Arranz and Fdez de Arroyabe advocate that it is important first to "define the objective and then selecting the partners according with this objective." Then to plan the project, how to reach the objectives, in a process with following components: "the stages to implement the project, the planning of stages and feed-back, and lastly, which partner will have to carry out each activity." The allocation of tasks among partners according to their technological knowledge, know-how and expertise, is fundamental [1]. This is an example of processes where the task and the objectives comes first, a goal-oriented process.

So there is obviously a tension between the size and composition of the community in which the project should be performed, and the objective that is targeted by the consortium.

Rubin formulated a seven-stage process by which new consortia are being formed and six strategies that motivate firms to join consortia (pooling, acceleration, sharing, blocking, linking, and multi-path) [7]. The three first of the seven steps relate mostly to the subject and focus of this article – the consortium building process. The first stage is a period of "entrepreneurship and core member recruitment", when a firm or a person recognizes a premise for the enterprise, which included both an "appeal to the interests and objectives of member organizations and [---] a rationale for combining resources." In the next step the "expansion and formulation of membership", the core group identifies additional members. Clear criteria and conditions of membership are needed at this stage (ideally, but Rubin found that this often not was the case). In the third phase, "leadership, liaison, and linkage" the collaborative competence to organize and manage the

consortium has to be elaborated. Rubin also found that most consortia satisfied the high requirements of qualifications with a leadership team rather than one single individual. Thus the need of a strong chief executive could be combined with technological expertise and mediation skills. These stages may look a bit different in the perspective of applying for public funded R&D-projects, but they are still adequate to describe the major phases of the process.

In a figure Rubin displays "six generic collaborative strategies [---] consortia may become engaged in":

Types of Collaborative Strategy

Form of Relationsship			
External orientation	***Largely Cooperative***	***Blend of Cooperative/ Competitive***	***Largely Competitive***
Tech Driven	Pooling	Multi-Pathing	Sharing/ Exchanging
Market Driven	Accelerating	Linking	Blocking (up or out)

There is a horizontal scale from cooperative to competitive and a vertical scale of drive forces (market and technology). The six possible positions in the collaboration schedule combines different values on the scales, from pooling resources in the field that combines "largely cooperative" and "Tech Driven" to "Blocking" out, in the field that combines "market driven" and "Largely Competitive".

In an industry-academia context some of these positions may not be taken, and different organizations or partners in a consortium might take different positions. Academia and industry have mainly complementary goals, but different firms in a consortium can actually be competing. But also depending on the scope of the collaboration, even competitors can collaborate in a cooperative manner, if the desired results are mainly pre commercial, or if results and products can be split in an efficient consortium agreement.

III. QUEST

Joint project under the European frame programs is partly also the context of this article, but we will primarily address projects with other kind of funding and with other terms and conditions, as ARTEMIS (now part of ECSEL), ITEA2 and Celtic Plus (part of the Eureka-program). The complexity derives from that the consortia are composed by different kinds of organizations, partly universities and partly commercial industries and firms – and especially the funding is partly coordinated national funding.

Given our experience from many brokerage events, consortium building processes and projects, we thought that a more informed process might produce better consortia. We state the hypothesis that the "standard" mechanisms might lead to large consortia, loss of control and possibly bad performance, and that a more restricted method can lead to sufficiently sized consortia, help the consortium leader to keep the control, and possibly lead to better quality of performance.

IV. METHOD

To find out how to perform better we selected a number of renowned consortia leaders and project managers. We made a convenient selection at this stage and do not claim to have done a scientific selection. Still we think that we can get a first view of the landscape through the responses from experienced project proposers and consortium leaders. The responders were selected from large and renowned organizations that often have been in charge of successful proposals in the selected programs (ARTEMIS and ITEA2). The projects they refer to is however from other programs. Participants in the study have been promised anonymity, and we will not publish names of persons, organizations or proposals/projects.

After an initial investigation among consortium leaders and project managers about who would be interested in taking part in our study, we distributed a digital inquiry including 34 questions. In total, we received responses from 9 persons in 9 different organizations and countries. The questions in the inquiry are partly qualitative questions where respondents are asked to describe their experience in their own words, partly questions where the answers rate a statement (agree - do not agree).

V. RESULT

The problems one is facing when starting off creating a consortium, of course depends on one´s starting position. Are there "old friends" available, or agreements or previous collaborations which can be brought to life? A large need for new international partners makes the task more complex. The experience of the specific funding program and eligibility criteria is also important, and the understanding of the roles needed in the application process. As a complete newcomer one might have to prepare for having to pay for one´s experience, before fully understanding the processes involved.

In our study, we have chosen to interview senior project proposers and consortium leaders with extensive experience from consortium building processes. The respondents in the study are very much aware of problems and challenges when it comes to building a consortium. It is obvious that shaping a consortium is a high risk process, which also requires considerable time and effort. The result from the inquiry states challenges and risks, and respondents have also suggested how to improve the consortium building process and the writing of the proposal, as described in the table below.

Of our eight respondents, five are contented with the strategy they have been using to form their consortium. Three of them are considering to change the ways of working, regarding how to schedule the work, and how to take on partners. Two of the respondents who state that they will change their strategy have experience of using an open, snowball-like methodology. They both want to be more careful next time, choosing partners by personal reference and not using brokerage events to attract new partners. The third

respondent who intends to change his strategy for consortium building has also earlier used a fairly closed model and will continue to do so. The change in strategy refers to starting processes earlier, especially when it comes to involving industrial parties in the proposal.

Problems and solutions in consortium building		
	Problem	***Solution***
Coordinatorship	Lacking a consortium leader in the early stage of the consortium building process makes it difficult to decide which partners who are allowed to join the consortium, and also to make decisions about changes in the focus of the proposal.	The consortium leader should be designated already when starting marketing the proposal and the working on the application. Strong consortium leader with ability to make decisions.
Organization and roles	When organization and roles are not clearly defined within the consortium, there is an insecurity about who should and who has the right to make decisions.	Involve persons who are not partners in the consortium to read the proposal and to give feedback for improvement. All persons who are working with the different parts of the proposal need to have an understanding of the project plan and objectives. Also budgeting should be managed by someone who is familiar with the proposal and with the funding program.
Vision and objective	Lacking vision and idea about the project objective increases the risk of overlap in competences among the partners.	Detailed material about project topics at an early stage of the proposal – drafted by consortium leader or core team.
Commitment	Partners who drop out make the consortium unstable and vulnerable.	Choose better partners with track record; avoid "sleeping partners". Keeping second choice partners on-hold if the primary choice of partners drop out.
Eligibility	Inability to form eligible consortia in the different countries drives clusters of partners to leave the consortium.	Start working earlier on eligibility issues. Prioritize solving eligibility problems in the countries which bring he most important partners.

When gathering a large consortium, a brokerage event is seen as a good practice by several funding bodies. The possibility to meet and add new partners is as good as unlimited, and the program officers can at the same time get a first view of who will be applying for funding. Visiting a brokerage event, when this is arranged by the funding body, can be seen as a natural and obvious part of preparing a research proposal. Everybody who is visiting the Brokerage event will, though, not have the same reason to be there. Some go there to heavily market their proposals and to collect as many new contacts as possible, some go there to meet with the program officers to get advice and to discuss chances for proposals or consortia. Some participants at the Brokerage events come to analyze the competition and to investigate what others have in mind - and maybe to add single new partners to an existing consortium. Meetings and workshops about proposals can be held in an open forum, or behind closed doors. This mix of motivation among the participants makes it complex for proposal presenters to navigate among available partners. With this heterogeneous audience, it is probably a good idea to have a strategy for consortium building identified before going to a Brokerage event. Even better, it seems, is coming to the Brokerage event with a skeleton of a consortium, or a core team with clearly defined roles and a clear vision about the proposal and its development.

The respondents in our survey confirm this diversity of reasons to attend a brokerage event. All respondents have attended the brokerage event, where these have been available (7 of 9). Thus, the chosen strategy for how to build a consortium does not influence the presence at brokerage events. The brokerage events are well appreciated, mainly for the chance to talk to the program officers, for groups to meet and for the possibility to investigate other project proposals or consortia. Some quotes: "It is a really nice place to get started, but you do not get optimum partners." "It always helps to see others with similar ideas. As we are normally active in more than one proposal, it is always good to see if you can join another one as well."

When asking the respondents about their original strategy for building a consortium, only one had included the brokerage event of the funding program as a planned activity to find and add partners for the proposal. The other seven respondents preferred to base the original strategy for consortium building on contact with previous partners from earlier projects, or, when it comes to industry, primarily on business partners and business networks. However, when describing activities to market the proposal, three respondents mention the brokerage events as a channel that has been used. Instruments used to market the proposal during the brokerage event are in all three cases presentations and posters. In one case the "Project idea tool" is mentioned; a database where applicants can post contact information and information about the proposal to attract the interest of potential partners. A fourth respondent who did not intend to market the proposal at the brokerage event or had planned for any activity during the event, performed a presentation of the proposal anyway, upon request from the funding program office. This presentation led to 6 additional requests from organizations wanting to join the consortium, of which 3 were accepted (and 3 rejected).

Those who do not use the brokerage event as a marketing activity for the proposal seem to have chosen a more cautious strategy to develop the research idea and to take on partners in the proposal. Early planning with selected partners, contacted separately, seem to be a preferred way of working. One respondent talks about the difficulty to say no to organizations

who do not have the right profile for the proposal or in relation to the consortium leader or core group. Sticking to a "low key" consortium building strategy makes it easier to be selective when adding partners to the proposal, and also minimizes the risk of overlap in competence or expertise areas. Individual contacts with acknowledged players is preferred to an open invitation for organizations to join the proposal:

"We don't think presenting proposals at a brokerage event is a very good idea. Brokerage events are predominantly attended by R&D organisations. Industrial partners are the challenging type of partner to bring on board a proposal and they generally don't attend brokerage events in any significant numbers. Unless you are desperate to find an R&D partner with a particular expertise, presenting a proposal idea at a brokerage event can only lead to the idea being "borrowed" and incorporated into somebody else's proposal. "

"It is difficult to control the consortium building process if there is not an agreed active coordinator from the beginning that has a clear vision and can take decisions. Due to this, and eligibility problems, we had to change things in the last minute, and this has affected the proposal. The lesson learned is to have from the start a strong committed coordinator with a strong vision and with the ability to take quick decisions"

One of the respondents declared the original strategy for the consortium building as "Define the idea, select core partners, and detect missing roles for complete the consortium" This is a very clear-cut process, that still have to be designed more concretely. It keeps the ownership at the initiator and a small, selected group of core-partners. The same kind of focus is found in the answer from another respondent: "I strongly pushed for selecting the partners according to their expertise carefully avoiding overlaps" The idea is in the center of interest, and the partners are picked one by one to fit the execution of the project.

Another kind of strategy is "The consortium was derived from the consortium of a previous project with exclusion of some partners and addition of new ones" or "We had two previous projects successfully funded [---] and wanted to continue to a new funding instrument with a bigger consortium." In this kind of work, the community is more in the center, even if we guess that the project idea still is central and one of the selection criteria. We call the two kinds of approach task oriented strategy and community oriented strategy.

Out of the sample, just two seems clearly to apply a task oriented strategy, even if some answer might be understood in the same. One of the respondents agreed that they used a "massive marketing campaign" to find new partners, the other one disagreed. This constitute two opposite subtypes here. Even when you start out with a very small core team, focused on the task, you can have totally different strategy to find new, fitting competence. Possibly it depends on your contact network, if you think that you can find fitting competence among them, or if you think that you need new partners. Otherwise it depends on your inclination, or orientation. Are your strategy "open" so that you might invite "anyone" who might be interested in your proposal, or "closed" so that you pick the right partners out of your network? We call the two kinds of approach closed and open.

This constitutes four kinds of strategies in our sample:

- Closed, task oriented: We found at least one, possibly more representatives of this kind in our sample. They established a core team, didn't market their idea too much but picked their partners one by one from the network.
- Open, task oriented: We found at least one, possibly more representatives of this kind in our sample. They also established a core team, but then marketed their proposal densely, finding lots and lots of potential partners, out of whom they picked the fittest.
- Closed, community oriented: This kind establish their consortium out of "old friends" - partners in existing projects. The research question might be secondary to the consortium, in some sense, so that it was changed with incoming partners.
- Open, community oriented: This kind establish their consortium out of new (and old) friends found after the marketing of the proposal. The research question might be secondary to the consortium, in some sense, so that it was changed with incoming partners.

	Task oriented	**Community oriented**
Open	"*Define the idea* , select core partners, and detect missing roles for complete the consortium - We started out with *a massive marketing campaign* for the proposal"	"[the project] wanted to continue to a new funding instrument with a bigger consortium. - Everyone was welcome. our strategy was to create a BIG project with loads of impact. - well, *the project lacked focus.* this was clear as there were so many voices. also it did not address technological issues really but more process level innovations which is not a good thing in ARTEMIS calls.- *I really had no plan. the bigger the better* and we ended up being very big."
Closed	"Selecting the partners according to their expertise carefully avoiding overlaps" "We have very good contacts within the community the partners were selected from."	NA

[italics ours]

VI. DISCUSSION

Some of the findings in earlier studies seems to support the importance of the community in which the consortium is built. The prospective partners are to be found among old friends, who know each other from earlier projects or other kinds of collaborations. This "community oriented" strategy calls for cultivation of strategic partnerships, and fits for "goal-seeking" proposals. The coordinators own agenda might be to primarily build his or her network, rather than solve a specific problem. Still, in most cases, you have to address a call for

proposals, and in the end of the day define objective in correspondence.

The opposite direction is to start with the objectives and gather the consortium around the fixed research question. This "task oriented" methodology isn't "better", but might fit for other purposes, as "goal-oriented" proposals, where the desired result is more or less fixed. Possibly this is also a better case for most commercial businesses involving in R&D-projects.

In our sample we also found both kinds of consortia.

Both kinds also need a strong management. More or less all responders in our sample stressed that.

Our hypothesis that the "standard" mechanisms might lead to large consortia, loss of control and possibly bad performance, and that a more restricted method can lead to sufficiently sized consortia, help the consortium leader to keep the control, and possibly lead to better quality of performance, is probably not really verified, but definitely not false. Most responders in our sample, were inclined to a task oriented methodology. Those who consciously were more community oriented, had a reflected reason for this. Still the objective for the resulting kind of project becomes more "fluffy" or fuzzy. In most cases a firm goal and a cautious building of the consortium is an advantage.

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