

ESSAY: Lessons learned from pymERA, a Spanish initiative for SME stimulation within FP6- the experience of pymERA in CANTABRIA, by Marta Abelleira Álvarez

Abstract: The pymERA network pymERA was founded with the intention of facilitating Spanish SMEs their participation in European Framework Programme projects. Although the establishment of some basic services was easy and quickly done, the network encountered important challenges in its evolution towards a real value-added service provider beyond simple partner search service. I will explain the objectives and functioning of pymERA and I will highlight problems encountered and lessons learnt throughout the development of the network. The case of pymERA might be quite common in similar networks, thus, I shall give ideas on some do's and don'ts and recommendations in making such networks fly.

On the other hand, I will analyse the experience of the Leonardo Torres Quevedo Foundation, a non-profit organisation whose main target is to promote and spread the Scientific and technical researching of the University of Cantabria and therefore the RTD regional development, as a member of the pymERA network in Cantabria.

Taking into account the point of departure of Cantabria in Innovation themes and the limited participation in Framework Programmes especially by Industry, I will define our activity to promote its participation, the handicaps found from the results of the survey-study, where companies point out the difficulties they have in participating and some recommendations for overcoming these obstacles.

1. BACKGROUND

pymERA is a network of organisations throughout the Spanish territory that offers advice and assistance on the 6th Framework Programme especially to smes but also to companies, Universities and Innovation and Technology Centres.

Why is this kind of network necessary in the European Union and especially in Spain?

It is a fact that the competitiveness of companies and the employment they can provide depend to a great extent on RTD. The opening of markets and the existence of Economies with lower labour costs than European costs, force us to discover other competitive factors: These being Research & Technology Development factors to create sustainability and well-being of citizens.

SMEs are essential partners in the EU's current strategy for Knowledge creation and growth as outlined in the Lisbon Strategy, focused on helping Europe become the "most dynamic and competitive Knowledge-based economy in the world by 2010.

"Europe needs more innovative SMES" as laid down by EC/Directorate-General for Research: "Smes may be small, but they account for close to two-thirds of employment and GDP within the EU- so their commercial success and growth is vital for the economic and

social well-being of European citizens, many of whom are employed by smes. If Europe wants to keep its position as lead player in a globalised world, European Smes must become more innovative...becoming more innovative also means getting more involved in research and development activities to create new Knowledge, whether for products, processes or ways of doing business. Therefore, the Design of Public Policies is necessary to facilitate the innovation by smes.

The Sixth Research Framework Programme for Research and Technological Development (FP6) is the main financial and legal instrument of the European Commission to implement the European research Area (ERA), a platform to regroup and intensify research efforts at the EU level which aims at avoiding the fragmentation of European research. This means stimulating innovation and improving the use and transfer of research results into commercial technologies in the Union and all its regions, here smes play a very important role, and FP6 offers important research opportunities to SMEs. (EC has foreseen a percentage of 15% of smes participation in FP6).

However, smes have difficulty in obtaining European RTD aids despite the efforts of the European Commission and this problem is bigger in European peripheries such as Cantabria, with fewer resources and experience than other Spanish regions for a successful participation.

This is the main reason for the creation of pymERA.

In this essay I will expose the services and evolution of the pymERA network, to overcome some problems encountered, and more specifically **I will analyse the experience of the Leonardo Torres Quevedo Foundation within the pymERA network in Cantabria, a periphery region. It is not a successful regional case, smes have difficulties in accessing European funding. Through a survey aimed at a focus group of 24 companies that have applied for pymERA services, these handicaps will be shown. The findings made will clarify the barriers they have and will allow us to show lessons to be learnt and some recommendations.**

The PymERA network was set up on the 24th of April 2003, as a continuation of the initiative: INFOCRAFT, Office with the sponsorship of the Spanish Ministry of Science and Technology since 1999 to support and give assistance about Horizontal Research activities involving SMEs of Framework European Programmes.

On the initiative of CDTI and the Spanish Ministry of Science and Technology, pymERA has been devised to help raise the rate of success of the Spanish SMEs in the EU Framework Programme. The main advantage of this tool is the participation of

organisations from different autonomous communities through a network. In this way we get close to the target firms, and the other improvement with respect to Infocraft is that pymERA extends the range of support to other types of Projects in FP6.

We give special support to smes because they have more difficulties in accessing R&D programmes. Most of them do not know this kind of European funding. Companies must innovate if they do not wish to disappear.

PymERA message is : DO NOT STAY BEHIND!

SMES must Know that in participating R&D projects of the Framework Programme they have a great opportunity to meet their needs for:

- Funding of research projects
- Accessing new technologies
- Technological solutions
- Opening of new markets
- Sharing risks
- Cooperating with other SMES and organizations from different countries.

In order to reach these objectives, pymERA provides companies with a range free charge of services (Annex A: brochure of pymERA) such as:

- Matchmaking Service to European project Coordinators to help them to find those Spanish partners they need for a project
- Promotion of sme profiles to incorporate them in proposals or projects.
- Advisory and support/guiding about aspects of participation in R&D European projects
- Expert consulting (currently, IST and NMP, FOOD and at an early date About ENERGY) to detect opportunities to participate around Europe and give expert assistance.
- Promote the collaboration: Among Smes, Universities and Technology centres in European projects.

PymERA started with only members from just 7 autonomous communities: País Vasco, Cantabria, Galicia, Aragón, Cataluña, Valencia and Andalucía. Currently, pymERA comprises representatives in 17 autonomous communities in Spain.

PymERA has grown very quickly with a lot of new members in a short time. This evolution has been very positive because we cover all the national territory which means a great representativity but it also caused certain problems such as governability, information transparency and communication hurdles, meanings that meetings became a little chaotic.

We had to restructure the network to ensure its flexibility, efficiency, and transparency even Democracy in the decision-making process. (See annex B: Lessons learned from pymERA, a Spanish initiative for SME stimulation within FP6).

In October 2005, we established a new version of statutes, new rules that give stability and a new structure of government which comprises: a coordinator and Vice coordinator, an Executive Committee and a General Assembly.

On the other hand, we had to create a work division in Work Packages that reflect the current activities which are foreseen in the annual strategic Plan of pymERA

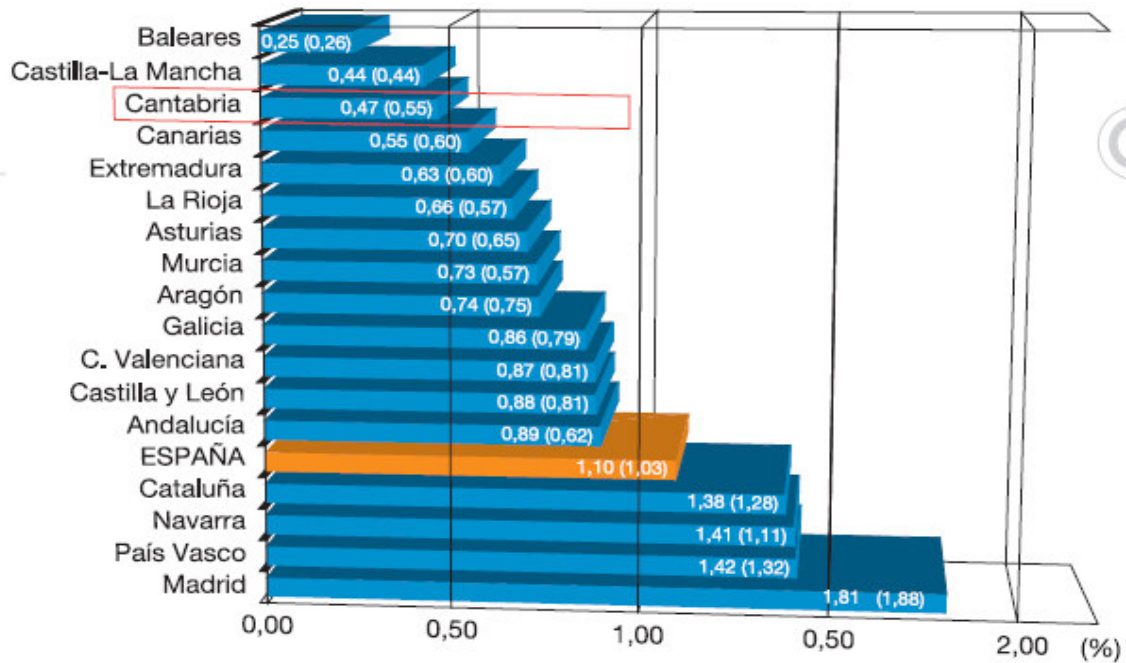
In the present year, we have the following Working Packages:

- **Training Courses:** internal training for pymERA members and on the other hand, regional workshops for target groups with the possibility of Benchmarking and the possibility of making Twinning of workshops, and even with the aim of avoiding wasting of resources some regions that are close together can decide to organise a joint seminar.
- **International Contacts in NMP, IST; Bio-food and Sme areas:** permanent contact with the National Contact Points through our Thematic experts
- **Partner Searches:** Through the collaboration of our experts, NCPs, CDTI, other networks such as IDEAL-IST, the members of pymERA, on line-Web...etc
- **Communication Plan:** In this WP the goal is also to implement strategic alliances with similar networks and organisations involved in European projects, to give a cohesive image of the network and It also manages the Web, Intranet and an internal newsletter.
- **INCUBATION OF PROJECTS:** This WP is very important due to the shortage of calls this year, we have to detect ideas for the forthcoming FP7 and organize workshops to give a quality training to future Spanish coordinators.
- **Technology Platforms:** To give support to smes to join to the ETPs, and offer our matchmaking services because it is likely that European projects will be created within the Platforms.
- **Expert Evaluators:** to promote more expert evaluators from Spain, It is an other way to learn about building quality proposals
- **A national Event about FP7**

2. PymERA in CANTABRIA

First of all, we must take into account the point of departure of Cantabria in Innovation themes and the limited participation in Framework Programmes especially by Industry, the following indicators define Cantabria as a peripheral region. (See annex C: Situation Diagnosis in Cantabria- Plan Regional de Cantabria de I+D+I 2006-2010)

Investment in RTD (% GDP- gross domestic product) of Autonomous Communities in 2003 (in brackets figures from 2002)



Fuente: Informe COTEC 2005. Elaboración a partir de datos del INE.

Investment of Industry, companies from Cantabria have an inferior level compared to other Spanish regions.

Gráfico 2.2.5. Gasto en I+D del sector empresarial (BERD), 2003

REGIÓN	GASTO EN I+D (miles €)	BERD (%PIB)	GASTO EN INNOVACIÓN (miles de €)
Cantabria	16.615	0,18	37.210
Navarra	128.268	1,01	177.468
País Vasco	511.930	1,09	1.062.815
Madrid	1.341.610	1,03	3.079.181
Cataluña	1.249.075	0,92	2.916.821
Región "Modelo"			
Finlandia	3.528.000	2,45	-

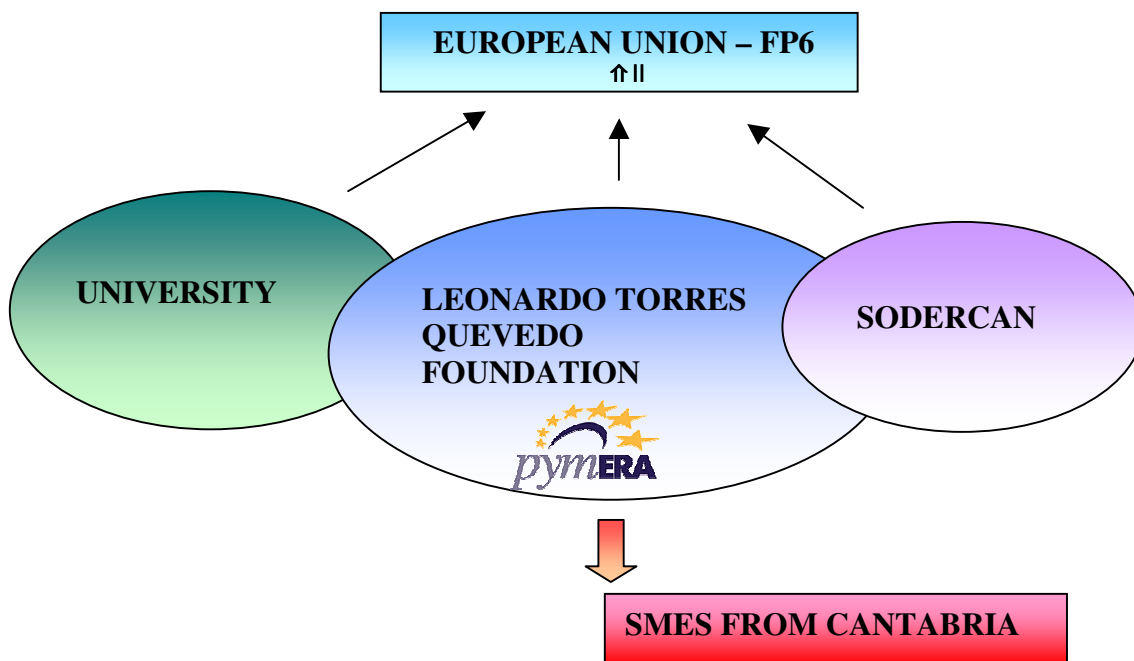
Fuente: Elaboración a partir de datos del INE y Statistics Research Finland.

Main factors for these figures are: Technology environment lacking in technological Institutes and specialized Consulting firms and a productive environment currently in process with the creation of the Science and Technology Park of Cantabria.

In Cantabria, the Leonardo Torres Quevedo Foundation (FLTQ) is the node in charge of developing the pymERA project since the beginnings of the network.

It is a non – profit making organization , whose main objective is to promote and spread the Scientific and Technical researching of the University of Cantabria, transferring the Research results from the University to the companies and the productive sector. FLTQ also manages the University’s Centre of Technological Development (CDTUC) which is a space where R&D Groups and Companies collaborate in joint projects.

WHY has FLTQ –University of Cantabria been chosen to be the regional node of pymERA in Cantabria? **Because the University has been the outstanding entity of Cantabria’s participation in FP5 and FLTQ links the University and the Industry of Cantabria, as an interface organization.**



We had to start practically from scratch, due to the fact that only ten companies from Cantabria participated in FP5, and eight of them were Smes. According to CDTI statistics (Reference 32003), Cantabria had a return of 1.17% over the total of Spain. This shows that we had a lot to do in Cantabria, especially on the managerial scene, because the University had quite a high participation in the 66.3% of Cantabria’s return.

Spain, altogether received 625.9 million euro from FP5 (6.4% return as opposed to the 7.4% Spanish contribution to the budget).

FLTQ - pymERA CANTABRIA activities

At the beginning **training, merchandising, events & workshops** were our main activities. We also published a brochure with our services, and created a Website and a useful intranet to share documents.

We have completed the following **EVENTS & WORKSHOPS:**

1. Institutional presentation session of pymERA network in Santander
2. A training session about EU-funded research for smes under FP6
3. A workshop on how to write quality proposals for FP6, application forms, successful keys and a practice case about building a budget
4. An info day about the fourth IST call

However, our main activity in pymERA is the management of **PARTNER SEARCHES:**

Our role is that of being intermediaries between the coordinators and entities interested in joining to their projects. PymERA's central unit is an interlocutor, the central communication platform of the network, whereas the nodes check if the entities interested have the required profile and in this case we forward them the partner search. If they are interested and have the profile, the process to express interest is quite simple, they have only to fill in a partner search response form describing their main activities, experience and why they have interest in joining to the consortium. PymERA selects the best profiles and forwards them to the coordinator who has applied for pymERA services. Afterwards, we make a follow-up to know if our entities have been invited to join the projects.

	Expressions of Interest (Profiles)	Selection by PymERA	Selection by Coordinator
2003	13 EOIs SMEs	11	0
	7 EOIs RTDs	4	0
2004	34 EOIs - 20 SMEs	34	5
	17 EOIs - 15 RTDs	16	2
	5 EOIs IAGS	5	4
2005	27 EOIs - 16 SMEs	27	5
	19 EOIs - 9 RTDs	19	2
	10 EOIs - 7 IAGs	10	4

Chart of profiles of Cantabrian entities managed

In 2003, the pymERA network managed around seventy partner searches. In August we started to receive the first ones. Altogether, FLTQ managed 20 Expressions of interest for 15 projects. PymERA selected 15 entities from Cantabria for 11 projects. After a follow up, four coordinators decided to postpone the proposal, five of them did not select them and two of them did not give us any feedback. The results were not positive, but we must take into account that pymERA had just started to work and its name was not very well known through Europe, although we are in second place regarding the other nodes in sending profiles and even selected profiles.

In 2004, the pymERA network managed around a hundred and five Spanish partner searches. Altogether, we managed 56 EOIS and pymERA selected all our profiles except one. There has been a great evolution regarding to interested entities, an increase of 47.3% if we compare with 2003. Factors to keep in mind:

- An increase of 20% over the number of partner searches managed by the network.
- The improvement of our data base of companies.
- Coordinators define better the profiles they wish and tasks to be developed, despite the fact that the information about the projects is very reduced for reasons of confidentiality.
- Longer deadlines to look for the profiles. When the deadline given by the coordinator is very short it is difficult to contact the person able to make the EOI

Coordinators of the proposals selected eleven entities for five collective research projects. Once again we can observe an evolution. In the year 2003 no profile was selected while in 2004, eleven entities from Cantabria were selected which means a success rate of 19.6%. Bearing in mind that in this year, twelve coordinators decided to postpone the proposal for the next call, a lot of proposals fell by the wayside but they conserve the forwarded profiles, so future collaborations are possible.

Factors which have influenced in this increase of selected profiles:

Insistence on getting feedback from the coordinators, the central unit of pymERA decided to hide the coordinator's contact details in the partner search forms and they are given only to the entities selected by pymERA to avoid the possibility of some node going against the procedure rules and another factor is that pymERA is more well-known throughout Europe thanks to our Experts.

Besides, we supported in the generation of two proposals with the leadership of a Cantabrian Sme: European Metal Industry Cluster for knowledge Transfer-

EUROMETALIA and Development of a worldwide audiovisual/entertainment distribution channel web/TV based -**WAD**, a Co-operative research project.

All the projects outlined have not been selected to get European funding. The WAD proposal was very well judged regarding to the aspects of Mobility of Resources, S&T Excellence and Quality of consortium (4/5), which enables us to say that pymERA searching partners service WORKS! This was because all the consortium was formed with our support.

From 869 submissions in response to the third SME Co-operative Research Call, FP6-2003-SME-1 call, where the WAD project was sent, the EC has selected the 92 highest-ranked project proposals, (11% success rate).

Following the second call for SME Collective Research projects, FP6-2003-SME-2 , the EC through an independent panel of experts, has selected the 21 best ranked project proposals of the 105 evaluated, (20% success rate).

Some of them got a high score and were very near of being selected but they did not pass all the minimum thresholds, in many cases because of the lack of budget. The inability of new FP6 instruments: Networks of excellence and Integrated Projects, to the necessities of the participants has caused a great demand for craft and collective research instruments which are specifically aimed at smes. Only large companies/ RTD groups can take the leadership of the new instruments, a FEDIT (The Spanish Federation of Innovation and Technology Organisations) study agrees with this conclusion.

In 2005, pymERA managed 131 Spanish partner searches and we have managed 56 profiles from Cantabria, pymERA selected all of them, but coordinators of the proposals selected eleven entities.

On the other hand, we supported the generation of the NETWAD project, a new presentation of the WAD project and we continued mentoring for the presentation of the Eurometalia project. An sme coordinator of those proposals was invited to participate in other RTD European projects thanks to the pymERA dissemination of its partner searches. They were very grateful to us because appearing as a coordinator in Europe became a great marketing campaign for the company.

Unfortunately, once again none of the proposals was selected to be financed by EC.

We can conclude that there has been a certain stagnation, from 2004 to 2005 year, maybe due to de-motivation that arose because none of the proposals got European funding. As FEDIT outlines: “There is an enormous disproportion between the period of time and resources aimed at preparing a proposal and the possibility of being successful.

If we analyze the proposals where entities from Cantabria were included thanks to pymERA intermediation, the most common motives pointed out by expert evaluators for fail the proposals attending to the following Criteria are:

“Lessons to be learnt from failed proposals”

• **RELEVANCE TO THE OBJECTIVES OF THE INSTRUMENT**

- Proposal too theoretical. Fails to convincingly demonstrate the relevance to smes.
- The proposal does not convincingly justify that the sector will benefit from the technology developed.
- It does not fit in the Collective Research call due to the excessive weight of research, a lack of focus on dissemination & training.

• **S&T EXCELLENCE**

- Necessary standardization / There is not enough focus on the Issue of standards.
- State of the art is not well explained
- No Literature references are given
- The approach selected does not clearly illustrate how it will facilitate the solution of the problem for a critical mass of the target smes.
- There is little Innovation to be expected

• **POTENTIAL IMPACT**

- Weak Structure of dissemination and exploitation plans, need more details. Figures about the size of the market to be considered as target and expected revenues should have been provided.
- The problems presently faced by users are not described, which means a strong limitation on its potential impact
- Dissemination Issue: It is uncertain who would continue to develop the technology
- There is no exploitation plan
- The Potential impact for smes is not self-evident as no cost estimation is provided for investment of the new technology as well as daily operation & potential cost savings compared to traditional treatment methods.
- There is no effective analysis proposed for existing and competing solutions. This indicates that the risks are underestimated.

• **QUALITY OF THE CONSORTIUM**

- How they would exploit the project results, are they capable?
- The coordination does not have relevant experience

- Limited geographical coverage
- **QUALITY OF THE MANAGEMENT**
- The management plan is weak, and IPR & Innovation is not addressed.
- There is not enough effort in the plan for prototyping & assessment
- **MOBILISATION OF THE RESOURCES**
- Everyone seems to be involved in every activity instead of being focused in specialist areas
- The financial plan is not clearly presented.
- There are no tasks for intellectual property rights
- The overall budget is estimated as too high, mainly focusing on the RTD part
- The necessity of Cost for equipment for several partners is not explained sufficiently
- There is not enough justification for subcontracting to a specific partner.
- Personnel resources envisaged for the project are outlined. However, the proposal does not provide any insight into any other resources required.
- The training activities are quite concentrated among the RTD partners, it is important that the IAGs are more active in this activity.

I wish to emphasize that It is very important to design a structure of dissemination and exploitation plans for project results to be successfully implemented in Europe.

Conclusions: It is going to be difficult to raise the rate of success of the Cantabrian SMEs in the EU FP 6 comparing with the results obtained in FP5. According to CDTI statistics up to the first of February of 2006, the return in Cantabria is 0.69% over the total obtained by Spain (Funding of 5.1 M€ ,by the moment 4 smes participate) although we must wait to the end of FP6 to know final results.

pymERA -OBJETIVES 2006

PymERA aims to make an opportunity of the fact that we have the present year to launch projects, as preparing proposals, specially for non-experience smes, requires a long period to mature them. Therefore, we are in a key phase so as to prepare ourselves for the forthcoming FP7 and pymERA network is focused on other strategic objectives, such as the generation of projects to incubate.

A goal of the network this year has been the establishment of collaboration with other European networks, through the presentation of the European **CATALIST Project**.

The main objectives of the project are benchmarking, to collect and share lessons learnt and best practices by all SME supporting entities and projects, and to provide recommendations to avoid the duplication of effort and inefficient strategies for the SME support in FP7.

Another near goal: a new thematic expert will soon be working for the pymERA network in the Energy area, and he will be based in Cantabria.

3. DIAGNOSIS /CONCLUSIONS BASED on the results of a SURVEY STUDY

GOAL: Detecting which problems the smes from Cantabria encounter when participating in RTD European projects with the idea of developing recommendations based on our findings.

Focus Group: Customers of pymERA services in Cantabria.

Project Methodology: Surveys by e-mail/ one-to-one interviews by phone. Support from Sara Gómez from Economy Department of UC in dealing with the surveys.

RESULTS

➔ **Typology of the companies surveyed:** 79.17% are SMEs (19/24)

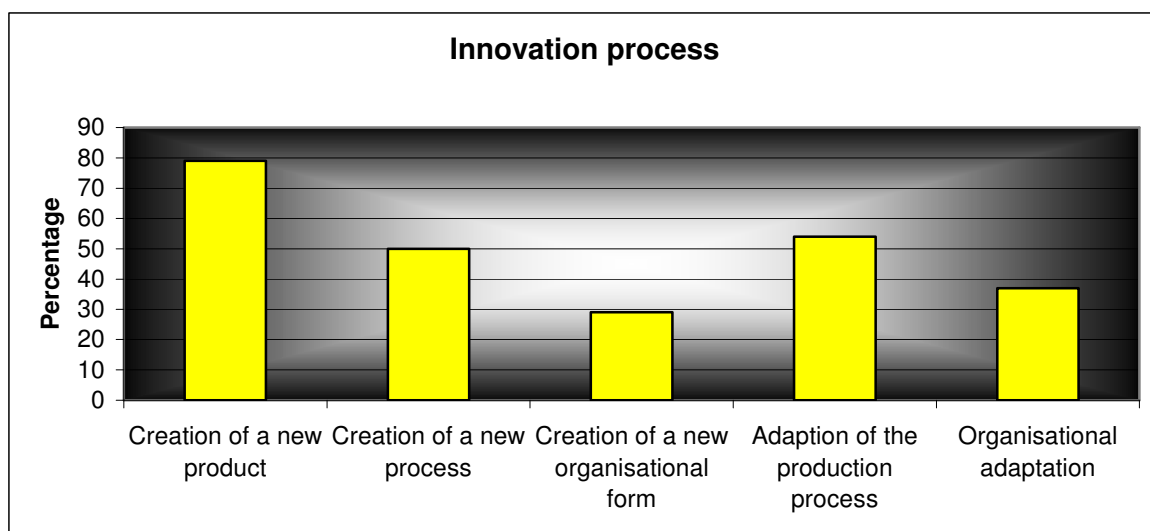
➔ **Sectors analysed:** Automobile, Metallurgy, IST, Food, Consulting, Engineering, Textile and Environmental (Waste treatment)

➔ **Companies with an R+D+I department:** 79.16% (19/24)

➔ **Companies with an Export Department:** 45.83% (11/24)

➔ **Where do they focus their innovation process?**

- creation of a new product: 79.17%
- creation of a new process: 50%
- creation of a new organisational form: 29.17%
- adaptation of the production process: 54.17%
- organisational adaptation: 37, %



CONCLUSIONS: THEY ALL INNOVATE !!

Most of them have an R&D Department. Of those companies that have an R+D+i department, 47.36% also have an export department to output these innovations.

Important factors regarding innovation.

→ **Current participation in European projects: 33.33 % (8/24 companies)**

→ **Experience in participation in European programmes:**

- in the Framework Programme: 29.17% (7/24)
- in other European programmes: 16.17% (4/24)
- only 3 have been coordinators (12.5%)

→ **62.5% of companies know the EU's R+D+i Framework Programme.**

→ **9 of the 24 companies have Ideas to generate proposals in FP6**

CONCLUSIONS:

Low participation in European programmes, and lower still in FP6, however a high percentage of companies know about it but do not take part. The generation of proposals is scarce, only 3 have been leaders.

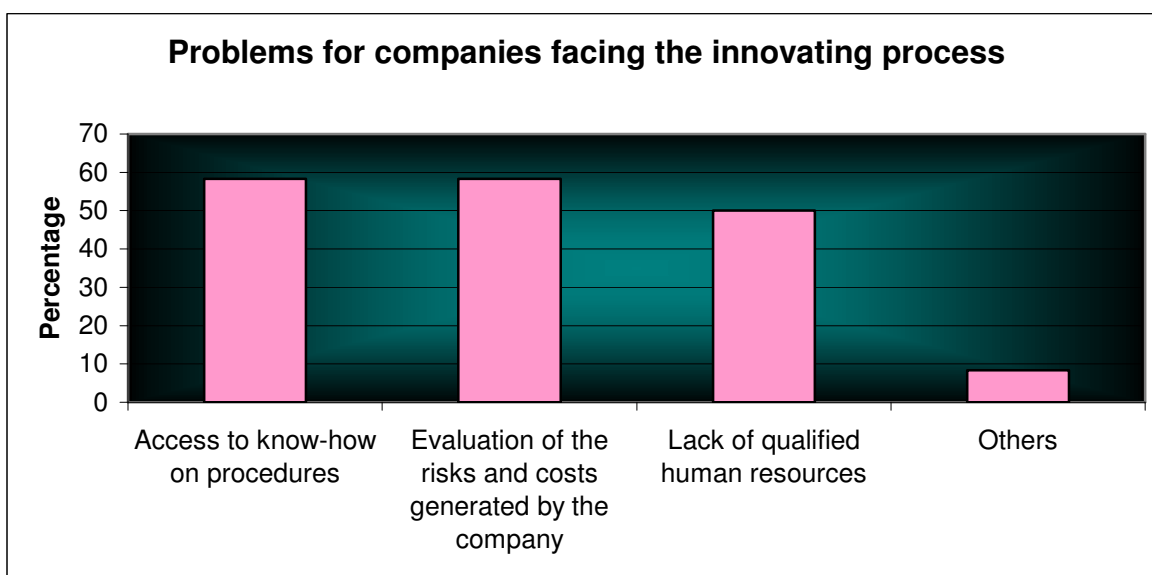
Despite the low participation, **100% of the companies have declared that they would be interested in receiving information and assistance on the possibilities of financing the VII Framework Programme, which is clearly a positive sign: IT SHOWS THAT THEY ARE INTERESTED IN PARTICIPATING! And more importantly, 9 companies want to GENERATE THEIR OWN PROPOSALS!**

If we analyse the characteristics of the companies that want to generate ideas and who are willing to present proposals to the forthcoming FP7, we can see that all of them have collaborated with the University of Cantabria in R+D projects and six of them have strong links with the University; three are spin-offs, one of them was based in the CDTUC and two of them use the UC's material characterisation laboratory on a frequent basis, one of them was created to exploit a new technological process.

The most innovative companies collaborate with the University of Cantabria! We can establish a strong link as these companies underline that the experience has been positive in the know-how acquired and the high degree of competence of the University's RTD. Only one company said that the RTD did not collaborate enough in drawing up the proposal. All of them wish to continue their collaboration with the University. **The transfer of RTD technology to the Industry boosts CREATIVITY in TWO WAYS: the industry determines market needs and the RTD provide the means for the development of innovative solutions**

➔ **Most frequently found problems for companies facing the innovating process:**

- access to know-how on procedures: 58.34%
- evaluation of the risks and costs generated by the company: 58.34%
- lack of qualified human resources: 50%
- others: 8.34% (2 companies see problems in opening new lines of investigation and the need for time / one company abstained as it was only recently created).



Lack of information is observed as the most common problem, together with the lack of economical and qualified resources.

➔ **Regarding the question as to whether the existing financial help responds to the needs of the companies**, 12 companies responded negatively, three positively as they use it on a frequent basis and 9 did not reply probably unaware of its existence or because they had not used it and therefore could not form an opinion.

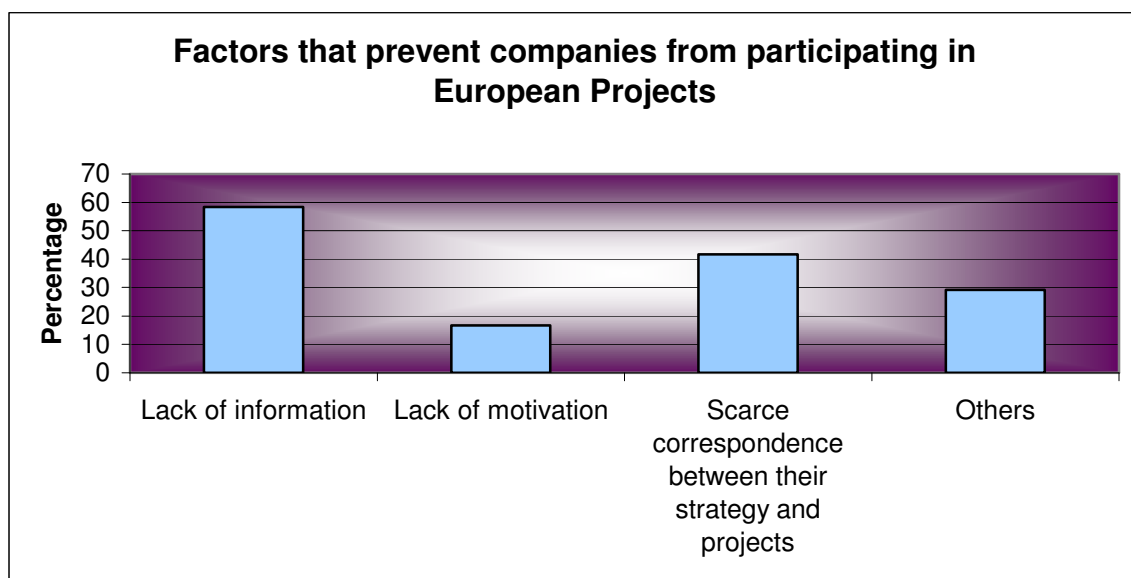
The companies that are not satisfied with the financial help point out that the main reasons are that the preparation of proposals requires resources for which they do not always find finances, the quantities are insufficient as they do not cover all their needs and they lack the qualified human resources to request the help. On the other hand, they say that a lot of weight is put on to help to the RTD and Universities and not enough to the efforts of the companies.

One of the more experienced companies indicated that on a national level, reasonable percentages are not subsidised and that at a European level, it is illogical to finance 35% of eligible costs for demonstration activities, and that if 50% concept tests costs are paid, this also means a high cost for the manufacturer.

As for the technological platforms, the companies interested in getting involved in them complain about the inexistence of financial help to participate in international meetings.

→ Factor that prevent companies from participating in European projects are:

- lack of information about the projects available and their criteria: 58.34%
- lack of motivation: 16.67%
- scarce correspondence between their strategy and those projects likely to be included in this framework: 41.67%
- others: 29.17%. The reasons are the difficulty in finding partners, projects of interest, economical difficulties, lack of capacity, scarce profitability for the SMEs, who do not only seek the development of know-how but also an applicability, such as, for example, a product that enables them to obtain a competitive advantage; difficult approval, large companies preventing SMEs from benefiting; abusive exploitation agreements.
- Four companies did not reply as they participate in the FP and have experience which means that they do not see any problems in taking part. However some participating companies point out problems that while not preventing their participation, do make it difficult.



→ The reasons indicated for not selecting the project of the candidates both as leaders or as partners are (we must also include the reasons previously mentioned in the ESR):

- Ambiguity in planning and lack of experience
- Not achieving the required store; high competitiveness due to the lack of budget and high demand / No Lobby in Brussels.
- Reasons related to technological risk and no contribution to standards

- The problem of English not being our mother tongue means that we have difficulty in transmitting concepts to evaluators in English.
- They score well technically but large powerful consortiums score better.

→ What do they expect from European Programmes?

- Fair financing that allows them to assume risks
- Increasing the capacity of R+D and participating in European Organisms
- Technical and economical support
- Creation of know-how through Networking on common R+D lines / Exchange of experience
- No abuse of technological platforms
- Quality work / Investigation of state of the art technologies
- To join consortiums with powerful companies / Relationships with other companies in the sector

→ How can access be made easier?

- Proposals should be well designed and have a good consortium
- Receiving advice on the process
- Establishing a pool of companies interested in common projects through community networks: Company network and Research Units
- Support in financing R+D+i initiatives
- Integration in sector platforms and networks
- Improvement in internal communications, frequency and agility
- Greater involvement of Industrial Associations
- Proposal leaders should be Universities or Technological Institutions that are working on Industry proposals.
- Continuation of the support given by the FLTQ as a node of the pymERA

→ Services of interest requested by the companies

- Diagnosis to determine the possibility of participating in the FP: 54.17%
- Information and assistance for the integration of their entity in possible Framework programme proposals / projects related to their interests in R+D+i: 91.67%
- Support in the preparation and presentation of a specific proposal for a European Project: 66.67%
- Attending workshops on the VII Framework Programme: 37.5%
- Analysis of the company's capacity to innovate:: 25%

4. RECOMMENDATIONS

The main problems enterprises face when taking part in R+D+i European projects are the lack of information about economic aids, procedures and projects which need partners and the lack of technical or even economic capacity to face up to the preparation of high quality proposals. Together with this, we have already seen the demotivation produced by the hard competitiveness due to insufficient budgets against a big demand, especially in FP6 instruments addressed to Smes: Horizontal Research activities involving SMEs.

That is why a supportive regional strategy in this sense is needed, until our enterprises acquire enough experience to successfully take part in R&D European programmes.

The first R&D plan of Cantabria 2006-2010 has been recently established with the intention of concentrating all the efforts in promoting the research activity and in obtaining an efficient transfer of the results of this innovation to the enterprises in Cantabria and to all the society. This will be the vehicle to put Cantabria into the knowledge economy and in convergence with the richest regions in Europe.

So far PymERA has acted without the existence of a strong regional strategy to promote the participation in EU-funded R&D programmes, the stakeholders who promote Innovation in Cantabria have acted without any coordination, making resources to fragment and some tasks overlap. In many cases, businessmen did not know where to turn to or they did not know about all the existing aid actions.

The new R&D plan will end up this situation, articulating the R&D regional system through a network, making easier the integration and participation of all the members: OTRI-FLTQ, SODERCAN, Scientific and Technological Park and its management company. **IT IS A REGIONAL PROJECT!**

The plan contains the strategic axis to consolidate Scientific and Technological Centres in Cantabria, as point of reference in the International Community, in areas of future for the region, to provide the system with suitable organisms which ensure the transfer of knowledge and to develop the capacity of innovation of all the stakeholders.

The so far existing lack of infrastructures which promote the scientific excellence will be outdated with the construction of PCTCAN and guided cooperative research and technological centres in the near future.

The logical recommendations to increase the return of European R&D programmes in Cantabria, find a suitable breeding ground in the new R&D Plan. Among others, the important measures which will contribute to this return are:

- Promotion of the researchers' mobility and measures to avoid the brain drain from Cantabria.
- Training Human Resources in R&D management activities and promotion of Human Resources in RTD activities working in enterprises, providing some incentives for the creation of R&D Business Units.
- Aids for the request and support of patents/IPR.
- Wider spreading of the scientific and technological offer in Cantabria region wide, nationwide and at a European and International level: Technological Portal.
- Clusters - Business cooperation to integrate together the critical mass and resources needed; in this sense clusters are being created in the TIC and Automobile industry area.
- Promotion of the creation of Technological-based enterprises and Spin Offs. Regarding the Spin offs, a support measure would be to establish the possibility that the implicated professors involved can ask for a temporary leave in order to start up the enterprise, with the possibility of returning to University.

I wish to outline the collaboration between pymERA node and SODERCAN, which will have regional aids for proposal presentations at its disposal. This will be very important with a view to the increasing participation of the SMEs in the Framework Programme. It will offer specialised advice from expert consulting firms from the moment the idea is detected until the project justification in case it is selected in Brussels to be financed.

PymERA advises but does not write proposals. These aids will make easier the participation of SMEs because they will have technically qualified staff at their disposal. These will support them in everything concerning the creation and management of the project.

It will be important to analyse the Degree of Innovation, before creating the proposal, through a searching patent database, "early enough makes possible to avoid re-inventing the wheel."

Concerning the polled SMEs' request which prefer the leadership to be assumed by Technological Institutes/ Centres or RTDS, it would be advisable also in this case that they had some kind of aid to defray the cost. They may be more experienced than SMEs in preparing proposals but they have a lot of expenses, such as travelling to the consortium previous meetings, international meetings, such as European Technological Platforms, drawing up the Consortium Agreement, etc... and they could even need support with the

management of the projects if we want an increase of RTD European projects which are led by Cantabria entities.

On the other hand, the regional strategy should pursue an Institutional Europeisation. Take advantage of the resources provided by Brussels: ERANET+, INTERREG, Regions of knowledge projects in cooperation with other countries and regions. These actions are also observed in the Plan. Besides, a bigger lobby of Cantabria is necessary in Brussels.

Another mechanism considered is the promotion of meetings among scientific and technological agents, enterprises and investors. The model to follow would be the **Brokering Events** one, adapted for the creation of innovative ideas. The regional support with risk capital actions and the creation of a Business Angels Bank will to a large extent make it easier to carry out viable projects.

Concerning the generation of innovative ideas, we cannot forget the importance that Cantabria becomes a region that attracts TALENT. As Richard Florida outlines “Cities must be talent magnets to succeed in today’s knowledge economy. To succeed they must attract young mobile professionals who make up the knowledge workforce” . Influential factors are tolerance, diversity, culture creativity, great universities and learning opportunities with many attractive employment options. In short, the place gets more important as it supplies a better quality of life.

It is important to point out that the University work is not enough as an innovation generator. Creating and keeping talent must be promoted but it is also necessary that the region has the ability to absorb and apply those ideas in order to exploit and market them.

A greater implication of the Industrial Associations in the participation in European projects would be very advisable. Individually, SMEs become weaker. These associations should be integrated in the European Technological Platforms and in their Spanish mirrors, so the impact will be bigger and SMEs won’t have to defray the costs of continuously attending meetings, as long as the Association or cluster represents its interests at the European – international forums.

The European Commission has declared that it will continue to promote the SMEs participation through different ways in all the FP7, the average annual budget assigned to investigation actions in aid of SMEs will be increased by 54% compared to FP6. Besides, the common financing of innovation and research activities costs will be 75% instead of the current 50%. Anyway, this increase may not be real considering the possibility of the establishment of a model of unique costs, which could have repercussions on the way that

enterprises would not be able to charge their indirect costs, but only a flate rate over the direct costs.

Another important point that FEDIT mentions to improve the Spanish return is that the consortiums could be smaller, and have the chance of choosing the instrument according to the pursued impact and the increase of the two steps of the evaluation procedure to guarantee the success in the proposals passing to the second phase and this way, reducing the disproportion between the resources used in the preparation and the success rate. They also point out that some concepts about evaluation criteria such as the concept of breakthrough should be more defined to avoid the expert evaluators' subjectivity.

Finally, there will be more budget in FP7 compared to FP6, the European Parliament has adopted the report outlining FP7 by an overwhelming majority. The report now gives broad support to the European Commission's proposed work programme, which will have a budget of EUR 50,521 billion..

The establishment in Cantabria of the new R&D plan give us the required vehicle to increase the participation of Cantabria. This is an opportunity, because without regional support pymERA does not have enough to succeed.

Everything seems to indicate that all the efforts are going in the same direction, promoting smes participation in RTD European projects and creating Science &Technological Excellence poles in the European Union.

Appendices:

- ❑ Annex A: brochure of pymERA
- ❑ Annex B: Lessons learned from pymERA, a Spanish initiative for SME stimulation within FP6
- ❑ Annex C: Situation Diagnosis in Cantabria- R&D Plan of Cantabria 2006-2010

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