



Pilot Action Plan

***Consolidation and Enhancement
of the Regional S&T Intermediation System***

Implementing region: *Region of Central Macedonia Greece*

Thessaloniki, December 2007





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1 Executive Summary

Main objective	Consolidation and Enhancement of the Regional S&T Intermediation System
Expected results and outcomes	<p>To support the cooperation between academic research units and business through the exploitation of the outcomes (products or services) resulted from the research projects that have been carried out from the research and technology institutes of the Region of Central Macedonia.</p> <p>Outcomes of the new proposed Digital research Centre</p> <ol style="list-style-type: none"> 1. Regional on-line R&D database 2. On-line innovation support 3. Communication between academia and business 4. Pilot applications
Direct and indirect beneficiaries	The direct beneficiaries of the proposed action will be all the academia and the SMEs of the Region of Central Macedonia. The indirect beneficiaries will be the whole population of the Region.
Implementing organisation	<p>It has been justified that the current structure that is operating the Digital Research Centre is facing main issues on collecting and promoting the R&D Results of AUTH.</p> <p>It is proposed that the new structure to be a PPP (Public Private Partnership). A well-structured PPP can ensure the operation and maximize the return on the investments. The proposed organization should be able to gather the R&D results but most importantly to valorise them by v enhancing the links between academia and the business world.</p>
Partner(s)	<p>Academia</p> <p>Research committee Aristotle University of Thessaloniki</p> <p>Research committee of the University of Macedonia</p> <p>Technological Educational Institute of Thessaloniki</p> <p>Technological Educational Institute of Serres</p> <p>The research institutes of the Hellenic Centre for Research & technology (CERTH)</p>

	<p>South East Europe Research Centre (SEERC)</p> <p>Business ecosystem</p> <p>Association of ICT Companies in Northern Greece (SEPVE)</p> <p>Federation of industries of Northern Greece (F.I.N.G.)</p> <p>Exporters' Association of Northern Greece</p> <p>Incubator Technopolis SA</p> <p>Incubator Thermi SA</p> <p>Incubator I4G</p> <p>Incubator Technology park of Thessaloniki</p>
Duration	<p>The actual project is recommended to be accomplished in a period of two years. But the sustainability of the new structure must be unlimited. It is proposed that the implementation of the proposed pilot action to be based on a 5 years business plan. The plan should take in consideration the first two years as subsidised years while the following three as a self financed enterprise.</p>
Estimated budget	<p>Unavailable at the moment</p>

2 Problem identification

2.1 Introduction

It has been already, in detail presented in the report following the survey of the S&T intermediation system in northern Greece that the collective actions appear to be one of the core activities of the intermediaries in North Part of Greece. The activities regarding the support for technological and scientific cooperation and the supporting actions for new product and service development are considered as main secondary activities. The reasons that justify the chosen strategy are that they do not require dedicated high-level expertise from the intermediaries and they can be offered easily with a minimum degree of effort and cost. The secondary identifiable group of activities is the one that is related to the support for technological and scientific cooperation, those activities were provided via a number of European projects that have been implemented by the intermediaries.

The survey identified a lack of services regarding IPR and commercialisation, despite the fact that in the region, large institutions of knowledge creation exist. Most of the SMEs questioned stated they need the proposed services. However, they think that they do not exist in S&T intermediaries, despite the fact that academic institutes appear to be willing to closely cooperate with the enterprises and they stated that are performing actions towards that direction, One of the reasons for this identifiable gap is firstly that there is a lack of communication between the two actors SMEs- intermediaries and secondly, the fact that those services usually are provided by private consulting companies. Those services though are of limited scope and targeted mainly in the framework of access to public funding.



2.2 Pilot project focus

The proposed pilot action intends to support the cooperation between academic research units and business through the exploitation of the outcomes (products or services) resulted from the research projects that have been carried out from the research and technology institutes of the Region of Central Macedonia. It is proposed that the pilot action to be based upon the Digital Research Centre of Aristotle University of Thessaloniki. The Digital Research Centre for Cooperative Innovation is an infrastructure in the Region of Central Macedonia, which supports the cooperation between academic research units and business through the exploitation of the outcomes (products or services) resulted from the research projects that have been carried out from the Aristotle University of Thessaloniki and other research and technology agencies of the Region. The planning of the Digital Research Centre emerged from an extended market research in business for the demand of technologies that covered the following business sectors: agricultural, insurance, industry, energy, consulting, constructions, transportations, informatics, telecommunications, banking, tourism, and health. This market research unveiled the lack of R&D department in the majority of companies and absence of collaborations between academic research units and the private sector. From this research also emerged the areas in which there are increasing demands for technological solutions.

The Digital Research Centre has been already implemented and the first two operative years have been accomplished. Unfortunately though, despite the justified design and high tech web applications supporting its operation, DRC is facing critical issues in its operation. The issues are mainly due to the difficulties of collecting the R&D results and communicating the DRC to SMEs.

The survey that has been performed regarding the S&T intermediation system, identified that intermediaries consider themselves very well networked and linked to all the actors of the intermediation system. While most of the SMEs claim that they are linked mainly to the private consultant companies. The chambers of commerce, industry and associations have been linked up to now to the SMEs mainly for functional and bureaucratic reasons, though their role appear to change and offer intermediation services. The link and cooperation



between the SMEs and the S&T intermediaries between research and business is considered quite high.

The companies that have been questioned according to the projects requirement were either research active or research oriented, that can explain the matching of the point of view regarding the collaboration between the SMEs and the Universities and other higher education institutions. A gap is presented between the perspectives on the collaboration of the public and private research institutes and the SMEs. Both of the actors agree on their connection with the private companies. The S&T intermediaries consider themselves strongly connected with networks of organisations, while the SMEs actually do not present nearly any collaboration. The view of the S&T intermediaries and the SMEs, regarding their link with the chambers of commerce and other associations and regional authorities do not match. This actually defines their role in the S&T intermediary system.

The new proposed structure reinforces the tasks and actions of DRC. It is suggested that it would become a multi stakeholder entity, a public and private partnership. The new structure should be able to collect the results from all the regional research institutes and have access to as many SMEs as possible.

2.3 Pilot Action Specification

2.3.1 Objective and purpose

The scope of the proposed action is to design and implement an umbrella that will facilitate the technology transfer process that is taking place between the academia and business eco system in RCM.

The objectives and tactical targets will be:

- ✓ Design a self-sustainable structure/organisation that its main income will be from the exploitation of R&D results.
- ✓ Design a five year business plan for the proposed structure
- ✓ Collection and classification of all the R&D results produced in RCM
- ✓ Perform informative events to collective associations of SMEs in order to inform all SMEs about the new structure and its core business.
- ✓ Establish long term relationships between SMEs and academia

- ✓ Valorise R&D results by signing formal contracts between SMEs and research institutes and academia

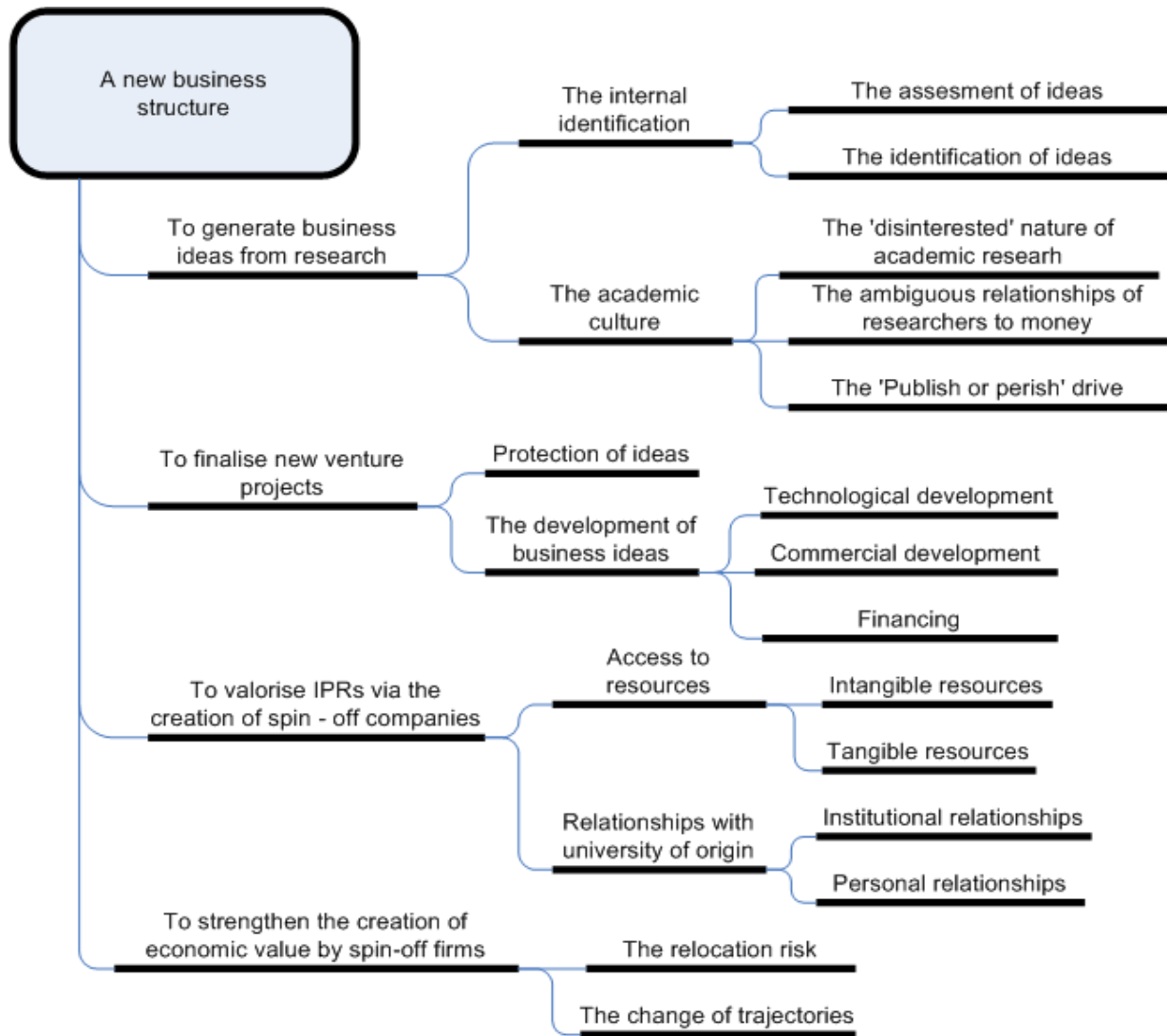


Figure 1: Objective and purpose

2.3.2 Approach: tools and methods

The new structure, as mentioned above, it will be based on the concept of DRC, therefore the centre's three components is considered essential to be underlined:

1. On-line R&D database

The research outcomes of all the research institutes produced in the region, especially those that lead to the development of new products, new production processes and new services, should be listed to the database. Technology providers (universities and other research and technological units) are proposed to submit their profiles and detailed information about



their research products and services while technology consumers (from both private and public sector) can access this information over internet. The database entries will be categorised in scientific categories and market applications so that companies and public organisations can easily find what they want. One of the tasks that the proposed action should implement is to assess the entries and further elaborate on their potential for exploitation.

2. On-line innovation support

The existing on-line roadmaps (guides) that support the further exploitation of the research results is proposed to be used both by the SMEs and the proposed organization as well. The proposed organization can utilize the roadmaps to identify services that can provide to both the SMEs and academia. The roadmaps are complete methodological tools that can help users (laboratories, companies and entrepreneurs, and public organisations) to accomplish, with a new and innovative way, the following tasks: New product development, Intellectual property rights protection, Spin-off creation, and quality management. Each roadmap gives know-how in the form of articles, papers, reports, tools, resources and links.

3. Communication between academia and business

The DRC established this communication with the:

1. Development of an on-line technology-matching tool. It concerns a digital space where entrepreneurs, SMEs, and public organisations can post their needs in technological solutions. These needs are automatically presented to the appropriate technology providers in order they satisfy it.
2. Build of an on-line discussion forum where the users can exchange ideas and opinions about various aspects concerning the exploitation of the research results.
3. Creation of a printed guide and organisation of ten seminars in the region of Central Macedonia where the Digital Research Centre for Cooperative Innovation along with the most important listed research products and services, are presented to researchers and entrepreneurs.
4. Development of extensive, sustainable collaboration networks between research laboratories and enterprises.

This proposed pilot action should analyse further what has been implemented regarding the above actions to identify the issues that should focus on. The above-mentioned components

show that the Digital Research Centre for Cooperative Innovation has both digital and physical dimensions. They both stimulate and enhance the cooperation between research units and companies or public organisations allowing the knowledge and expertise possessed and developed by universities to flow directly into business and society. The digital parts of the Centre are built using standard web technologies and are accessible through the internet. All services provided by the Centre are available for free in Greek and English. The new structure is proposed to utilize all the potentials of the digital applications and elaborate further the services that will provide.

2.3.3 Target groups and beneficiaries

As described above, the outcomes of proposed pilot action will benefit the academia of the region and the SMEs. Academia will become more extroverts with their work, while the SMEs can identify solutions to technical issues that are facing and can be considered as obstacles for their further development. The direct beneficiaries of the proposed action will be all the academia and the SMEs of the Region of Central Macedonia. The indirect beneficiaries will be the whole population of the Region.

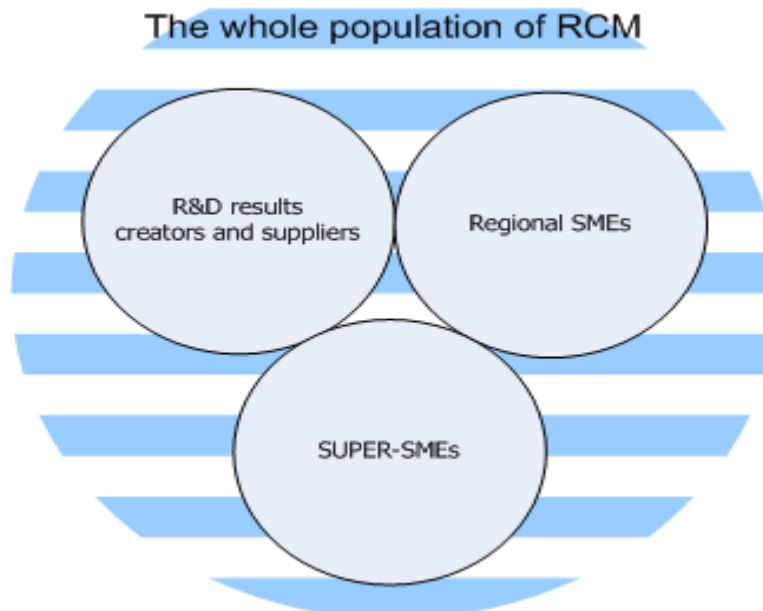


Figure 2: Target groups and beneficiaries

2.3.4 Implementing body and partnership

The experience from the up to now operation of DRC identified deficiencies on the current leading implementing body. Therefore, the proposed new structure to be implemented in the form of a well defined Public Private Partnership (PPP) enterprise with clear defined scope and business plan. The leading partner should be the Regional authority of Central Macedonia, since appears to be the only actor that can act jointly to all the other potential partners of the organization. The stakeholders of the proposed new structure should be all the research committees of the regional academic institutes and the collective associations of the enterprises.

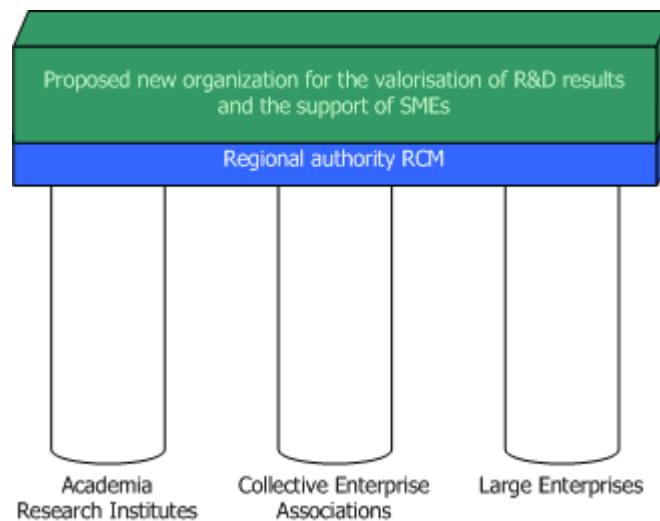


Figure 3: Stakeholders

The regional authority can act as the link and the facilitator actor to bring together all the other stakeholders. The research committees and institutes will be the suppliers of R&D results, while the collective associations of the SMEs will be the end users. The collective associations, according to the survey that it has been performed show a potential change in the services that they offer to their members, therefore it is proposed some of them to be stakeholders of the proposed organization. It can be thoroughly examined if large and distinguishing enterprises can be part of the organization, since they can act as the main engine of driving the whole concept by valorising R&D results.



2.3.5 Policy context

Based upon DRC experience, its difficulties and deficiencies have been identified and the proposed pilot project attempts to resolve all these issues. Regional Innovation Pole enhances the cooperation between academia and enterprises via consortia and spin-offs and in synergy with the proposed new DRC it will optimise the regional intermediation system.

Main objective of the new DRC is to play the role of coordinating body between all the regional knowledge-creators and industry, as the previous DRC mainly focused on the exploitation of the results produced within Aristotle University of Thessaloniki.

2.4 Duration and detailed action plan

All main activities of the proposed pilot application including their length and the appropriate implementing body are mentioned below in the table:

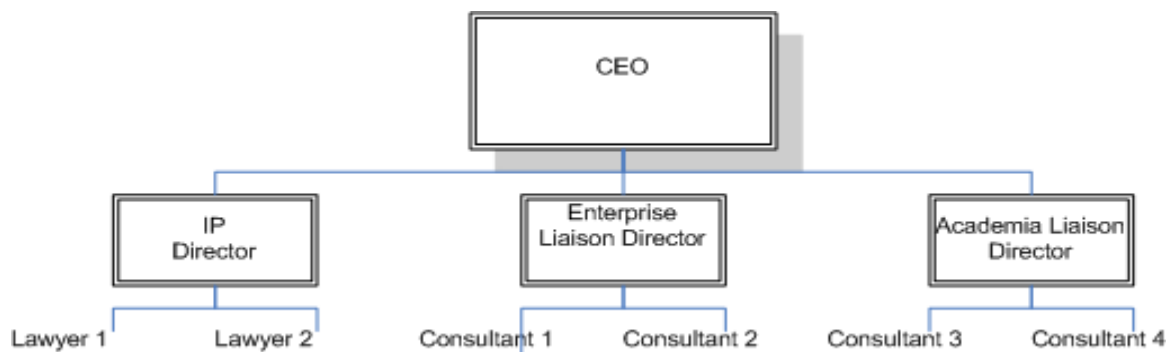


Activity	Year 1												Year 2												Implementing body
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Signing of contracts with enterprises regarding the supply of intermediation services															X	X	X	X	X	X	X	X	X	X	The new DRC
Coaching of the enterprises during the implementation of joint R&D projects with the research institutes															X	X	X	X	X	X	X	X	X	X	The new DRC
Evaluation of the first year of operation														X											Steering committee
Evaluation of the second year of operation														X											Steering committee
																									Steering committee

3 Management and Human Resources

As it has been above analysed, the proposed new Digital Research Centre will be a Public and Private Partnership Scheme (PPP). Therefore the management board body will be formed from all partners that participate and will operate according to the main business plan conducted. In this management scheme even private initiatives can be added, if there is a private funding source to the whole project.

In more details, the management board requires a special IP director, a business oriented manager (executive MBA) and the academic participation will be covered from an expert on the academic results and their promotion, someone like the director of the liaison office. IP manager needs two employees, probably lawyers. Enterprises' director requires two consultants on this field and the academic director requires one or two employees. Last but not least is the role of a secretary that will play also the role of communication hub. The whole human resources needs are depicted in the exhibit below:



4 Budget and Financial Sustainability

4.1 Budget

For the current project proposal is almost impossible to make budget estimation, as it requires the participation of financial officers. However, in the case of need of pragmatic economical figures an expert team would be able to make some rough estimation.



4.2 Sources of funding

Regional Operation Programme (ROP) will be the main source of funding for this project. Most definitely the Region of Central Macedonia will recognise its vital role for the promotion of R&D and it can be incorporated in the current ROP 2007-2013. However, local development agencies might be willing to participate in some kind of funding schemes under certain agreements. It has been a quite popular action for this kind of agencies to get involved in such projects, as they promote themselves through them and they have added value. There are always some EC calls like the Framework Programme 7 that can fund the proposed project.

Last funding source could be private entities, either private companies and investors or local incubators. Particularly in the case of the Region of Central Macedonia incubators have a strong presence and they appear to be quite active in such initiatives like the DRC.

5 Dissemination

First of all the development of a portal in the beginning of the project will facilitate the communication between partners and the diffusion of all deliverables and results. It will also give the opportunity to third parties to participate in any potential discussion and raise polls etc. Members of the portal that would like to be directly informed will be able to receive a bi-weekly newsletter with all fresh issues and relative links for further reading.

Moreover, the hosting of several workshops and the mount of a large-scale conference by the end of the project are considered as main promoting activities and will help also the project's continuation after its completion. Needless to mention the usefulness of paper made promotional material like a brochure or some larger posters. Towards this direction some kind of advertisement in special R&D journals will be valuable too.

6 Sustainability and Follow-on

All actors involved in this project should follow closely the initial business plan in order to secure its viability and further more its sustainability. If this business plan is well structured then it should have predicted the continuation of the project and should highlight all beneficiaries after its completion. Follow on of the project is nowadays a crucial element in all EC funded projects and the added value of its project has to be disseminated in case other similar projects might use the results or in the case of potential synergies. Therefore, sustainability of the current pilot application is a prerequisite and particularly the management board have to take this issue into consideration.

As far as the implementation of the current pilot project in a larger scale is concerned, the results should be enough to distinguish its practicality and usefulness. Final conference and all other dissemination activities play the role of mainstreaming media to set off the advantages of using the Digital Research Centres. In that case, the locality as factor won't be important anymore and the relative ministry should embrace the project and promote it to a national level. It can also be the General Secretary of Research and Development the body that will take care of the expansion of this operation. Inter-regional synergy will be crucial towards this direction and the time-horizon could be expanded to a 5-year plan.