





EXPERT EVALUATION NETWORK DELIVERING POLICY ANALYSIS ON THE PERFORMANCE OF COHESION POLICY 2007–2013

TASK 1: POLICY PAPER ON INNOVATION

CYPRUS

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1 EXECUTIVE SUMMARY

The accession to the EU and the Lisbon Agenda were the driving force behind the design and implementation of the Cyprus research and innovation policy. The territory of the island is one single region, hence innovation (like all others) policies are designed nationally and implemented by the central administration. Beneficiaries are spread all over the country.

The Operational Programme (OP) "Sustainable Development and Competitiveness" co-financed by the ERDF and Cohesion Fund with €492,7mil contributes significantly to RTDI expenditure and has allowed innovation policy to gain momentum with €94mil provided entirely by the ERDF. Two organisations are the main beneficiaries: the Research Promotion Foundation, which could adopt new measures and significantly increase the budget for others and the Ministry for Commerce, Industry and Tourism, which promotes entrepreneurship and competitive investments.

The ERDF supported measures correspond to the objectives and the priorities of the national innovation strategy and to the real challenges of the national economy, namely the effective exploitation and commercialisation of research results by enterprises and the establishment of strong links between the business sector and the academic/research communities. *Knowledge transfer and support to poles* is the leading area of intervention, followed by an innovation friendly environment. Applied research and product development comes last with 20% of the funds.

Thanks to the ERDF, RTDI funding increased and absorption is satisfactory; however, evidence on performance is limited and inconclusive. National evaluations are practically absent and the recommendations of the EU funded Strategic Evaluation have only partly been followed. Based on the limited evidence and international experiences it is expected that:

- The previously existing and replicated measures of the past, which focus on the creation of a critical mass of research capabilities, will meet their direct target. Internal assessments and a previous evaluation consider that they have been effective in the past and will remain so in the future.
- International experience indicated that the new measures for the e-economy promotion and innovation vouchers will contribute to competitiveness and welfare.

Important challenges remain, all of them involving the mobilisation of the business sector:

- Increasing business R&D;
- Improving the propensity of the business sector to innovate through university-industry cooperation, trans-border flow of technology but also the adoption of non-technological innovations;
- · Focusing on the promotion of clusters and agglomeration economies;

 Continued improved governance with emphasis on evaluation and stakeholder involvement.

2 NATIONAL AND REGIONAL INNOVATION POLICY AND THE CONTRIBUTION OF ERDF

2.1 NATIONAL AND REGIONAL INNOVATION POLICY

RTDI policies were practically absent and emerged with the accession of Cyprus to the EU. The EU sponsored "Regional Innovation Strategy in Cyprus" (RISK) in 2006 shaped the first features of the national innovation system, which were refined and reinforced in the first National Reform Programme (NRP) 2005–2008. Support measures were adopted and improved significantly over the last five years. RTDI is among the key priorities of the National Strategic Development Plan (NSDP) 2007–2013, the main strategy document giving guidelines for R&D and innovation policy. It also forms the basis for the preparation of the programming documents, which include actions and schemes proposed for co–funding by the Structural Funds and national interventions. The promotion of research and development constitutes one of the eight strategic development pillars highlighted in the document.

The NSDP defines as its target the utilisation of R&D results and the incorporation of innovative processes and products, as well as new technology in business activities. Special emphasis is given to strengthening SMEs, encouraging R&D and the information society. More specifically, the NSDP defines the following strategic objectives for innovation¹:

- Stimulating the business sector's internal capability to develop innovation-related activities
- Bridging the gap between the business and the academic/research communities
- · Developing funding mechanisms for innovative activities
- Developing an innovation culture and raising public awareness for R&D.

To meet these objectives, the government introduced a set of measures grouped under four main policy priority areas reflected in both the NSDP and the current NRP 2008–2010²:

- Creating Innovation Poles and Business Incubators
- Providing Innovation Support Services
- Improving Access of Businesses to Financial Resources
- · Creating an Innovation Culture

¹ Planning Bureau (2007a)

 $^{^{\}rm 2}$ Planning Bureau (2007a) and Planning Bureau (2008a)

The need to reinforce the participation of the private sector in R&D activities and to strengthen the links between enterprises and the academic/research community is at the centre of all these objectives. Further emphasis is given to the effective exploitation of research results by firms and the community in general.

These objectives were implemented primarily by the measures under the priority pillar "Development of Industrial Research and Innovation Activities" of the new Framework Programme for Research, Technological Development and Innovation of the Research Promotion Foundation (*DESMI 2008–2010*)³, as well as through specific measures undertaken by the Ministry of Commerce, Industry and Tourism (MCIT). Specific measures aim at the dissemination of ICT (e-government, e-learning, e-business, e-health, e-inclusion, broadband networks and services).

In the Programming Period 2004–2006 Cyprus was Objective 3, while areas in greatest need were eligible for funding under Objective 2 of the Structural Funds. In the current period (2007–2013), the country is eligible for support under both the Convergence objective (Cohesion Fund) and the Regional Competitiveness and Employment Objective ("phasing–in" support). Under the Competitiveness Objective the whole territory of the country is eligible.

Innovation policy is designed at the national level and implemented by the central administration. The highlighted innovation–related objectives and priorities set by the NSDP 2007–2013 are specified by the Operational Programme "Sustainable Development and Competitiveness 2007–2013 co–financed by the European Regional Development Fund (ERDF) and the Cohesion Fund. The strategic objective of the Programme is the improvement of the competitiveness of the economy in the context of conditions of sustainable development. "Promotion of the knowledge society and innovation and improvement of the business environment" is one of the three general objectives of the programme.

The majority of policy measures in support of RTDI, included in the OP are included in the DESMI 2008–2010, the multi-annual and multi-sectoral "bundle" of measures promoted by the RPF since 2003⁴. The objectives of the current DESMI, based on the NSDP, include:

- Reinforcement of the research potential to achieve high quality results
- Increasing the number of researchers and the development of a research culture
- Expansion of the participation of enterprises in RTDI activities and technological investments
- Development of RTDI infrastructure
- Enhancement of international networking and collaboration

³ Practically, it is divided into two Framework Programmes, DESMI 2008 and DESMI 2009–2010, where the latter is the continuation of the former

⁴ Before 2003, the measures of the RPF were promoted on an annual basis

Measures are composed of existing ones and new ones. Among the older programmes, namely those included in the DESMI since 2003, there are those aiming at upgrading the research and technological potential of the country (Thematic Programmes of the Strategic and Multi-thematic Research Pillar), programmes for the development of research infrastructure and measures targeting the involvement of enterprises in research, such as "EUREKA Cyprus" and the "Research for Enterprises Action". Programmes for the development of research infrastructure absorb significant funds (about €37mil⁵ in 2008).

Role of ERDF

The largest share of the ERDF resources allocated to Cyprus for the period 2007–2013 is directed towards the implementation of the OP "Sustainable Development and Competitiveness" (about €279mil). As indicated in Table 1 of Annex A, funding for research and innovation support represents almost one fifth of the total amount allocated to the OP (€94mil) and is provided entirely by the ERDF.

ERDF support allowed to boost the DESMI budget from €37mil (€20mil for DESMI 2003–2005 and €17mil for DESMI 2006) to €70mil in 2008; DESMI 2009–2010 is expected to reach €85mil. For all programmes based on competitive calls the ERDF contribution is 80%. The budget increase made it possible not only to direct more finances to already existing initiatives, but also to include a set of new measures in DESMI 2008–2010 and complement research with more focus on innovation support. Cluster framework policies and innovation, the development of the innovation culture among economic actors, linking university and the business sector as well as the enhancement of endogenous capacity of enterprises to innovate have become a focus of the innovation support promoted by the RPF. Many of these measures are quite new.

2.2 ERDF CONTRIBUTION ACROSS POLICY AREAS

The largest volume of the ERDF support for innovation goes to **knowledge transfer and support to innovation poles and clusters** (44% of the total ERDF funds for innovation or €41,3mil) with almost 85% of this amount distributed between "Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)" and "R&TD infrastructure and centres of competence in a specific technology" policy areas (see Table 2 of Appendix A). A set of measures, designed by the RPF in the context of the "Innovation" programme, was introduced under this category. The measures highlight the intention of the government to direct the country's innovation strategy towards more intense support for cluster creation and activities, technology utilisation and transfer as well as reinforcement of linkages between enterprises and research organisations. Another significant activity for infrastructure is the establishment of the Technology Park of

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⁵ This figure represents the total budget allocated for the programmes of the Priority Axis Development of Research Infrastructure".

Cyprus which is undertaken by the MCIT. Funding is also foreseen for incubators but postponed because of the limitations of national funding.

Approximately 35% of the ERDF support for innovation (or €32,7mil) is earmarked for the reinforcement of innovation friendly environment. A significant amount of €15,3mil goes to interventions in the field of ICT (e-government, e-health, e-inclusion, e-commerce). Priority is given to the expansion of the utilisation of ICT in order to upgrade the services offered by the public sector, public organisations being the main beneficiaries. Interventions which include incentives for the development of the human resources ("Programme for the Support of Young Researchers (PENEK)"and "DIDACTOR – PhD Degrees in Cooperation with Enterprises") aim to increase the low number of researchers, upgrade their skills and reinforce their mobility.

Measures targeting **applied research** absorb one fifth of the total ERDF funds. The "Research for Enterprises Actions" promoted by RPF gives business R&D grants. The Thematic Actions focus on new-technology areas and encourage the participation of enterprises in scientific projects and the efficient exploitation of their research results. Beneficiaries are research establishments, enterprises and public utilities. A new measure includes financial support to enterprises or individual researchers for patent registration.

Besides the measures introduced in the DESMI, the ERDF supports measures that contribute to innovation indirectly, such as the measures targeting support to entrepreneurship in the form of incentives for youth and female entrepreneurship designed and managed by the Ministry of Commerce, Industry and Trade (MCIT). Although not directly addressed to innovation eligibility criteria they put special emphasis on knowledge-based activities, the utilisation of new technologies, the use of innovative methods of production and promotion.

The focus of ERDF support with regard to innovation is consistent with the national objectives and corresponds to the real challenges of the economy.

3 EVIDENCE AVAILABLE ON THE PERFORMANCE OF INNOVATION MEASURES CO-FINANCED BY ERDF

3.1 ACHIEVEMENTS UNDER THE CONVERGENCE OBJECTIVE

This is not applicable in the case of Cyprus since all the measures related to innovation were introduced under the Regional Development and Competitiveness Objective and financed by the ERDF.

3.2 ACHIEVEMENTS UNDER THE COMPETITIVENESS OBJECTIVE

The majority of innovation-related interventions co-financed by the ERDF are promoted and implemented through the RPF's current DESMI, whose design and launch shows a more focused approach than in the past.

There is little evidence concerning the performance of the measures funded: In Cyprus there is no evaluation culture and programmes are not evaluated. The evidence produced comes from an old institutional evaluation of the RPF in 2005 (PRAXE, 2005), the Strategic Evaluation on Innovation and the Knowledge Based Economy funded by the European Commission (Technopolis et al., 2006) and internal assessments of the RPF. The Inno Appraisal study gives no information on Cyprus; in the EW/TC database two programmes are reported as evaluated. However, these evaluations are not publicly available and they constitute internal assessments rather than formal evaluations. Hence, the achievements reported below reflect are:

- assessments of previously existing measures as in the evaluations mentioned above;
- opinions expressed in interviews;
- experiences of the achievements of similar schemes in other countries.

The measures introduced by DESMI⁶ constitute a core policy mix envisaged for the achievement of the goals of the "Promotion of Knowledge Society and Innovation" Priority Axis of the OP "Sustainable Development and Competitiveness". In the framework of the implementation of this Priority Axis, during 2008 and the first months of 2009, 36 calls for projects were announced of a total budget of about €81 mil. This means that almost three fifths of the total budget allocated for this pillar was activated, the result has been assessed as satisfactory⁷.

These measures seem to be well designed and consistent with the objectives set. The RPF has exhibited high–degree of effectiveness in the implementation of the programmes, as indicated by the number of projects and the increasing absorption rates. The number of applications in the last two years' calls was satisfactory. In 2008 expenditures of €5,7mil were realised which correspond to the percentage of implementation of the Priority Axis equal to 5,3% (lower in comparison with those of the Basic Transport Infrastructure (18,5%) and Revitalisation of Urban and Rural Areas Priority Axes (16,4%)). According to the Cyprus National Strategic Report (Planning Bureau, 2009a), because of the particularity of the research projects, there were problems in the absorption of the committed funds for the RTDI programmes. To address the problem RTDI was placed among the main concerns⁸ of the government by the Third Progress Report of the National Reform Programme (Planning Bureau, 2008b).

Several measures (funding schemes), co-funded by the ERDF and contributing indirectly to innovation, were introduced under the specific objective "Support to SMEs" of the Priority Axis "Productive Environment" of the OP. They concern mostly actions addressing competitiveness of

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⁶ Except for the programmes and measures included in the fifth pillar of DESMI "Development of International Collaboration", which fall under the European Territorial Cooperation Objective

⁷ Planning Bureau, 2009b

⁸ Called "points to watch" in the document

the manufacturing sector such as promotion of entrepreneurship and the development and support of new SMEs. The Industrial Development Service of the MCIT is the key player in the design and implementation of such initiatives and is currently running the Female and Youth Entrepreneurship Schemes. The measures under this Priority Axis are co–financed 85% by the ERDF, absorbing about 10% of the Community Contribution to the Programme. Beneficiaries (mainly SMEs) show great interest⁹. However, in terms of the expenditure incurred, progress is still very limited (€0,3mil. for 2008 and the first months of 2009) giving rise to the very low percentage of the implementation equal to 0,46% of the Priority Axis.

With regard to the policy area "Innovation Friendly Environment", the main measures introduced concern, in the first place, the utilisation and facilitation of ICT diffusion. Opportunities provided by Information and Communication Technologies are considered key means for improving the competitiveness of all sectors of economic activity; for this reason, there has been a remarkable increase in the allocation of funds in the field in recent years. Specific focus was given to ICT utilisation in the public sector. ERDF supported measures (e–government, e–inclusion, e–health, e–commerce) demonstrated progress during recent years. Since January 2006 all government ministries, departments, and services have their own website. In the same year the first government web portal was launched: the Government Data Network (GDN) and Government Internet Node (GIN), the e–Procurement System and the Office Automation System (OAS)¹⁰ are facilitating innovation in the public service. The annual e–Government survey of the United Nations places Cyprus among the top 35 countries in the 2008 e–Government Readiness Index. There has also been satisfactory progress in the area of e–Health. The contract for the preparation of an e–Inclusion National Strategy was signed in summer 2009¹¹. However, despite this significant growth, Cyprus is still underperforming, if benchmarked with the EU–27.

Other important measures in this policy area include the initiatives launched by the RPF that target the creation of a research culture and promote researcher careers among young Cypriots. Programmes such as "Development of Research and Innovative Culture" (a set of competitions addressed to different generations of young researchers, such as pupils, students and new researchers), "PENEK" (aiming to support doctorate candidates to work as researchers in research organisations or in companies) and "DIDACTOR" (supporting young PhD holders to be involved in research activities in both the public and the private sector) accounted for about 10% of the total budget of DESMI 2008. Judging from the number of applications submitted, significant interest was demonstrated in almost all the actions included in these programmes by potential beneficiaries. Low participation rates were registered for DIDACTOR in Enterprises aimed at

⁹ Planning Bureau, 2009b

¹⁰ Source: http://en.wikipedia.org/wiki/EGovernment_in_Europe#Cyprus

¹¹ Source: http://www.epractice.eu/en/document/288187

supporting the implementation of a research project by young PhD holders, in the framework of their employment by an enterprise. This fact demonstrates the lack of interest of the Cypriot business sector in RTDI activities.

The significant progress of the reinforcement of human potential involved in RTDI activities, as can be seen from the success of the above mentioned measures and complemented by the opportunities offered by the establishment of new universities and research centres reflects the success of the policies in the field both in terms of coherence with the objectives of the national innovation strategy and the results achieved so far.

The expected performance of the measures enhancing an "innovation friendly environment" may be sub-divided into two groups:

- International experiences indicate that measures related to the e-economy, when well designed, are likely to contribute significantly to business productivity and social welfare. This is also expected to be the case in Cyprus.
- The measures already operational before 2007 are expected to continue having an impact
 on increasing numbers of researchers and PhD holders as they did in the past. However,
 the impact of these increased numbers on the local economy will remain limited if
 knowledge transfer does not improve significantly.

The signing of a €20mil (€17mil from ERDF) Funding Agreement between the Government of Cyprus and the European Investment Bank (EIB) (in the framework of implementation of the JEREMIE initiative, co–financed by the ERDF by about 85%) in April 2009 was an important development and may improve access of innovative SMEs to financial resources. The EIB in cooperation with the local financial institutions is responsible for the design and utilisation of adequate financial instruments in support of SMEs. The first Call for Expression of Interest, concerning the Funded Risk Sharing Financial Instrument, was announced in February 2010. The launch of the JEREMIE initiative, which was assessed as a good practice (Planning Bureau, 2009a), may stimulate the creation and expansion of innovative companies.

In the policy area "Knowledge transfer and support to innovation poles and clusters" measures under the "Innovation" programme introduced by the RPF highlight the importance given to this field in recent years. Thus, innovation support in the form of innovation vouchers has been in place since 2008 with business enterprises as the main recipients of funding. Despite the relatively low funding budget of the measure (about €300.000 for 2008), it is expected to have a high leverage effect. Concerning the two new measures supporting university–industry linkages ("Mediation Centres for Research and Innovation" and "Innovation Clusters"), the calls are expected to be announced in the near future. In the case of the "Mediation Centres for Research and Innovation", financial support will be channelled towards the development of the intermediaries and not to SMEs or research organisations. These initiatives are very recent, hence it is still too

early to appraise (qualitatively and quantitatively) their results and achievements. The "EUREKA CYPRUS" programme gives business enterprises, research centres and universities from the member states the opportunity to develop and exploit technologies essential to reinforce the competitiveness and improve the quality of life.

The creation of Technology Park is also foreseen by the OP "Sustainable Development and Competitiveness". The area of about 1,8mil. sq.m. in the region of Pentakomo (municipality of Limassol) was chosen to host the Technology Park with research centres, business incubators and innovative SMEs. Implementation, however, has been significantly delayed: only the feasibility study has been completed, the land expropriation in the area has just been accomplished and the access road has been built. It seems that large companies such as Google, Microsoft and others have shown interest in participating in the Park¹².

An Infrastructure support scheme in the form of business incubators is also included in the context of the OP but as mentioned above it has been delayed due to a of lack of national funds. The final decision on the introduction of the programme (or not) and the precise mechanism to be adoped was transferred to the newly established Board of Directors of the Foundation. In general, the output of the incubator scheme can be considered unsatisfactory at present, first under the MCIT and now in the RPF.

The expected performance of the measures related to the policy area "Knowledge transfer and support to innovation poles and clusters" can again be subdivided into two categories:

- New measures: Based on the international experience and the recommendations of the Strategic Evaluation the newly created Innovation Vouchers are likely to tackle the needs of the productive sector directly. Expectations are also high for the Innovation Clusters recommended also by the Strategic Evaluation. However, their slow start and unclear details make it difficult to foresee whether they are likely to replicate internationally successful models or not. Finally, the Mediation Centres for Research and Innovation have not always demonstrated a high impact, when introduced as university-liaison offices. Their impact will depend on the details of their implementation.
- Existing measures: The infrastructure support in the form of incubators and technology parks has as yet been slow and with a limited impact. Unless processes and schedules improve significantly there is no evidence that these measures will be more influential now than they were in the past.

In "Boosting applied research" the Thematic Programmes of the Strategic and Multi-thematic Research Pillar target specific scientific areas. These programmes support research institutes, and promote scientific collaboration between local and foreign research institutes as well as between

Cyprus Final Draft, August 2010

¹² Cyprus Institute, 2010

academia and industry. The high rates of participation of the potential beneficiaries in the calls for proposals are the only indication that the measure may be assessed as successful. According to RPF officials the majority of the proposals submitted for the Thematic Programmes in the previous periods were of high quality and the programmes was well received by the local research community. Promptly implemented, the initiative also encourages the efficient exploitation of research results thus contributing to one of the main goals of the national innovation policy. "Patents" was introduced by the RPF in 2008 and aims to support patent applications among enterprises and individual researchers. The measure is too young to be appraised. However, if successfully implemented, it may significantly improve the very low patent application rates in the country.

Schemes to support youth and female entrepreneurship were also introduced under this policy area. The number of participants and the overall response by potential entrepreneurs in the past suggest that they are appreciated by the business community. A range of new modern viable enterprises was created under the MCIT schemes in the past. The start-ups financed by the schemes, involved to a great extent knowledge-based activities, the utilisation of new technologies and the use of innovative methods of production and promotion of goods or services. For all these reasons, the "Youth entrepreneurship" scheme was considered an example of best practice¹³.

Overall, "Boosting applied research" is composed of measures, which were internally appraised as meeting their targets and contributing to the national targets in the past.

4 CONCLUSION: MAIN CHALLENGES FACED BY COHESION POLICY PROGRAMMES

The measures announced and co-financed by the ERDF have enriched RTDI policy in Cyprus. There is optimism on the expected impact on R&D, as it gradually improves in terms of infrastructure, human capital, research implementation and internationalisation. But the impact on the business sector, and hence the economy as a whole, remains limited. Significant challenges remain, if Cyprus wants to restructure and change into a knowledge economy; they may be summarised in four categories:

1. *Increasing business R&D*: The administration has launched more and more incentives for business enterprises but their response is slow and low. The measures, for which both the academic and the business sectors are eligible, benefit the former considerably more than the latter. More intense participation of the business sector in the publicly funded research programmes (DESMI) is needed. Support schemes addressing companies only are launched

¹³ Planning Bureau (2009a)

but they are either underutilised or too recent to be able to demonstrate significant impact. As it is impossible to force the private sector to undertake research, it seems that more time and additional effort is necessary to convince SMEs to move towards intramural R&D and/or R&D cooperation and thus change the overall perception of research as a determinant of competitiveness.

- 2. *Making the business sector more innovative*: Companies in the country continue to lack an innovation culture and rely mainly on their internal market. Measures supporting innovation have been launched, in particular in the form of the innovation vouchers. While based on international experiences this is expected to have positive impact, alone it is insufficient to make the sector more innovative. More needs to be done.
 - In particular it is important to *address non-technological innovation*, which is important in a country specialising in the service sector.
 - Technology transfer, in the form of university-industry cooperation is one important way to increase the inclination of the business sector to innovate. In the past the research cooperation measures have had limited success and could not trigger a change of mentality. Different, more proactive or more intensive intervention is necessary.
 - Transborder knowledge acquisition is another way to make the business sector
 more innovative. Recent support schemes facilitate such knowledge transfer but it
 remains marginal and mainly in the form of embodied technologies. More is
 expected in the near future but with no specific indications on how it will be
 implemented.
- 3. Making policies more ambitious by seeking agglomeration economies. Until now most measures address individual actors and are not specially designed (or are only to a limited extent designed) to try and multiply their impact through externalities. The exploitation and stimulation of specialisation opportunities, as well as the encouragement of agglomeration economies (through cluster creation) are announced but not launched. The real challenge hence still consists in the multiple utilisation of research results and technology transfer to address more actors and have whole networks benefit from significant economies of scope and agglomeration. This needs to be more focused in order to permit the national economy to exploit its capabilities and geographical location. Although prioritisation has improved compared to the past, visible economic impacts will only occur when significant agglomeration economies can be expected. The past recommendation to pay special attention to promoting clusters, in particular the tourism-finance and maritime services, should be addressed. But as there is no evidence on how they will be implemented, nor has there been any ex ante appraisal and it is difficult to estimate what their likely impact will be.

4. *RTDI governance needs further improvement*. Initial steps of coordination and prioritisation have been taken, but a lot remains to be done there as well: the system that has been emerging timidly in the last months needs to be developed and operate regularly. The activation of the Ministry of Commerce, Industry and Tourism is an integral element of improved innovation governance. Further improvements are needed in the form of the creation of a systematic evaluation mechanism to help more evidence-based policies. A better assessment of the impact of all funding schemes in the future will help significantly. Finally, stakeholders are expected to take a more pro-active role.

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INTERVIEWS

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Ms Kalypso Sepou, Research Promotion Foundation

LIST OF ABBREVIATIONS

CSC Cypriot Scientific Council

DESMI Research Promotion Foundation's Framework Programme for Research,

Technological Development and Innovation

EIB European Investment Bank

ERDF European Regional Development Fund

FP Framework Programme

GDN Government Data Network

GIN Government Internet Node

ICT Information Communication Technology

JEREMIE Joint European Resources for Micro to Medium Enterprises

MCIT Ministry of Commerce, Industry and Tourism

NCRI National Research Council for Research and Innovation

NRP National Reform Programme

NSDP National Strategic Development Plan

OAS Office Automation System

OP Operational Programme

OSS One-Stop Shop

R&D Research and Development

RISC Regional Innovation Strategy Cyprus

RPF Research Promotion Foundation

RTDI Research Technology Development Innovation

SME Small and Medium Sized Enterprise

ANNEX A - BACKGROUND DATA ON EU COHESION POLICY SUPPORT TO INNOVATION

Table 1 - Total ERDF resources allocated per programme (2007-2013)

Programmes	Total ERDF resources for innovation	Innovatio n support as % of total ERDF	Main initiatives* being undertaken or implemented
National/Multi-regional programme	94.150.000	19,1	

Sustainable Development and Competitiveness	94.150.000	19,1	Innovation Clusters	The measure aims at the creation of cooperation networks between enterprises, research organisations and intermediate bodies. Budget (in thousands): Not available yet
			Mediation Centres for Research and Innovation	The measure aims at bridging the gap between the supply and demand of innovation through a mechanism of intermediation among research/academic institutions and SMEs. Budget (in thousands): Not available yet
			Innovation Coupons	The measure attempts to create a simple and effective mechanism (in the form of a €5.000 coupon), which will allow SMEs to understand the importance of innovation. The main goals involve the acquaintance of traditional SMEs with the meaning of innovation, their involvement in innovative activities and the enhancement of their competitiveness through collaboration with research oranisations. Budget (in thousands): 2008:€300,00
			EUREKA CYPRUS	Cyprus has been a full member of the EUREKA Organisation since June 2002. The programme "EUREKA CYPRUS" offers funding opportunities to Cypriot companies and research organizations wishing to participate in EUREKA projects. The Programme includes the following Specific Actions: - «EUREKA - New Projects» - «EUREKA - Ongoing Projects» - «EUROSTARS Cyprus» Budget (in thousands): 2008:€2.000,00 2009-2010: €2.400,00

Patents	The measure aims at the provision of financial support to enterprises or individual researchers for patent registration. Inventors or enterprises, who implemented research activities, which were completed during the last three years and which were funded by the RPF, the European Commission or any other body that finances scientific research will be eligible for funding of the costs incurred from submitting and / or being granted a patent. Budget (in thousands): 2008:€200,00
Research for Enterprises Actions	The Programme aims to contribute to the development and dissemination of research activities in enterprises, through the creation of specific incentives for integrating research into the business world and familiarising enterprises with the procedures and the prospective benefits that stem from research through rendering these activities an indispensable part of the planning for setting up a successful business. Budget (in thousands): 2008:€8.750,00 2009-2010: €4.500,00

	The Programmes of this Pillar
Thematic Programmes of the Strategic and Multithematic Research Pillar	supports the research activities of local research institutes, and promotes scientific collaboration between local and foreign research institutes as well as between academia and industry. It also encourages the active participation of Cypriot enterprises and the efficient exploitation of research results. Each of the 5 programmes targets specific scientific areas such as Technology, Information and Telecommunication Technologies, Sustainable Development, Social and Economic Science and the Humanities, Health and Biological Science. Budget (in thousands): 2008:€12.750,00 2009-2010: €14.020,00
Development of Research and Innovative Culture	The main objective of this Programme is to help young people undertake initiatives, develop innovative ideas, create and collaborate. It consists of four competitions, focused on the younger generations of schoolchildren and students at all levels of education. At the same time, the programme intends to reward experienced researchers with research work at an international level. Budget (in thousands): 2008:€120,00 2009-2010: €200,00
Programme for the Support of Young Researchers (PENEK)	The measure aims at the active involvement of young researchers in the research procedure. It provides financial support to PhD candidates who wish to combine their studies with the parallel participation in research activities in collaboration with a local research organisation or enterprise. Budget (in thousands): 2008:€3.980,00 2009-2010: €3.600,00

Programme is the immediate integration of young Post Doctoral scientists in the Research, Technological Development and Innovation System of Cyprus in order to implement high level research projects. Additionally, the measure aims at the upgrading of the executive staff of SMEs and the enhancement of SMEs and the enhancement of the communication and cooperation between the education institutes and the business community. Budget (in thousands): 2008: € 2.000,00 2009-2010: € 2.600,00 The programmes of the "Development of Research Infrastructures" Pillar of DESMI 2008-2010 The programmes of the existing infrastructures, as well as to improve access to important research infrastructures, as well as to improve access to important research infrastructures abroad for Cypriot researchers. Budget (in thousands): 2008: € 37.250,00 The Technology Park will be created in the area of about 1,8mil. sq.m. in the region of Pentakomo (municipality of Limassoi). The Technology Park will host research centres, business incubators and innovative SMEs. Its establishment and the development will be based on the similar French experience, the Sophia Antipolis Technopole and will constitute a pole of attraction for RTDI mainly in the fields of biotechnology, biomedicine etc. Budget (in thousands): Not yet elaborated		The main objective of the
Programmes of the "Development of Research Infrastructures" Pillar of DESMI 2008-2010 The Technology Park will be created in the area of about 1,8mil. sq.m. in the region of Pentakomo (municipality of Limassol). The Technology Park will host research research solutions and innovative SMEs. Its establishment of Technology Park Establishment of Technology Park Establishment of Technology Park Budget (in thousands): 2008:6 37.250,00	in Cooperation with	Programme is the immediate integration of young Post Doctoral scientists in the Research, Technological Development and Innovation System of Cyprus in order to implement high level research projects. Additionally, the measure aims at the upgrading of the executive staff of SMEs and the enhancement of the communication and cooperation between the education institutes and the business community. Budget (in thousands): 2008:€ 2.000,00
created in the area of about 1,8mil. sq.m. in the region of Pentakomo (municipality of Limassol). The Technology Park will host research centres, business incubators and innovative SMEs. Its establishment of Technology Park Establishment and the development will be based on the similar French experience, the Sophia Antipolis Technopole and will constitute a pole of attraction for RTDI mainly in the fields of biotechnology, biomedicine etc. Budget (in thousands): Not available Business Incubators Not yet elaborated	"Development of Research Infrastructures" Pillar of	aims to develop new infrastructures, to upgrade the existing infrastructures, as well as to improve access to important research infrastructures abroad for Cypriot researchers. Budget (in thousands):
		created in the area of about 1,8mil. sq.m. in the region of Pentakomo (municipality of Limassol). The Technology Park will host research centres, business incubators and innovative SMEs. Its establishment and the development will be based on the similar French experience, the Sophia Antipolis Technopole and will constitute a pole of attraction for RTDI mainly in the fields of biotechnology, biomedicine etc. Budget (in thousands):
	Business Incubators Programme (planned)	Not yet elaborated

		Budget (in thousands):
	Support to female entrepreneurship	The measure aims at the development, support and promotion of entrepreneurship for women aged 18 to 55 years who wish to establish an enterprise in manufacturing, trade, services or tourism, by exploiting their knowledge, training and skills. The programme, therefore, targets to foster a more entrepreneurial culture, to encourage more women to create their own business and to facilitate their access to finance. Particular emphasis is given to the development of innovative projects, new technologies and new products.
	Youth Entrepreneurship (funding scheme)	The aim of the measure is the development, promotion and support of entrepreneurship among young men and women (between the ages of 20 - 39) through the provision of financial support and training for the establishment of new, sustainable SMEs. In this context special emphasis is being placed on the knowledge-based activities, the utilisation of new technologies, the use of innovative methods of production and promotion of the goods or services, the development of entrepreneurship in the environmental sector and finally the development of modern firms able to survive and compete in the international market environment. Budget (in thousands): 2007-2013: €6.000,00

Source: core team on EC data.

Table 2 - ERDF contribution to innovation by policy area (2007-2013)

Competitiveness and Employment Objective

	Categorisation of		%	
Policy area	expenditure (corresponding FOI codes)	Total ERFD	Regional share	
	05	8 .500.000	0%	8 .500.000
	11	-	-	-
	12	-	-	-
Innovation friendly environment	13	15.300.000	0%	15.300.000
	14	-	-	-
	15	-	-	-
	74	8.900.000	0%	8.900.000
Knowledge transfer and support	02	19.000.000	0%	19.000.000
to innovation poles and clusters	03	6.600.000	0%	6.600.000
	04	15.750.000	0%	15.750.000
	01	8.500.000	0%	8.500.000
Boosting applied research and	06	-	_	_
product development	07	-	_	_
	09	11.600.000	0%	11.600.000

Source: core team on EC data.

ANNEX B - CLASSIFICATION OF INNOVATION POLICY AREAS, INSTRUMENTS AND BENEFICIARIES

Policy area	Short description		
Innovation friendly environment	 This category covers a range of actions which seek to improve the overall environment in which enterprises innovate, and notably three sub groups: innovation financing (in terms of establishing financial engineering schemes, etc.); regulatory improvements and innovative approaches to public services and procurement (this category could notably capture certain e-government investments related to provision of services to enterprises); Developing human capital for the knowledge economy. This category will be limited to projects in higher education aimed at developing industry orientated courses and post-graduate courses; training of researchers in 		

^{*} The term initiatives should be understood in a wide sense covering measures, projects, actions and so on co-financed by the ERDF. Among these, experts should identify the main kinds of intervention.

	enterprises or research centres.
Knowledge transfer and support to innovation poles and clusters	The category also covers initiatives geared towards improving governance capacities for innovation and knowledge policies (e.g. specific technical assistance funding, support for regional foresight) Direct or indirect support for knowledge and technology transfer: • direct support: aid scheme for utilising technology-related services or for implementing technology transfer projects, notably environmentally friendly technologies and ITC; • indirect support: delivered through funding of infrastructure and services of technology parks, innovation centres, university liaison and transfer offices, etc.
clusters	Direct or indirect support for creation of poles (involving public and non-profit organisations as well as enterprises) and clusters of companies • direct support: funding for enterprise level cluster activities, etc. • indirect support through funding for regrouping R&D infrastructure in poles, infrastructure for clusters, etc.
Boosting applied research and product development	 Funding of "Pre-competitive development" and "Industrial research" projects and related infrastructure. Policy instruments include: aid schemes for single beneficiary or groups of beneficiaries (including IPR protection and exploitation); research infrastructures for non-profit/public organisations and higher education sector directly related to universities. Any direct or indirect support for the creation of innovative enterprises (spin-offs and start-ups)

Instruments	Short description
Infrastructures and	Building and equipment for laboratories or facilities for university or research centres,
facilities	Telecommunication infrastructures,
	Building and equipment for incubators and parks for innovative enterprises
	Grants and loans for RTDI projects
Aid schemes	Innovative finance (venture capital, equity finance, special bonds, etc.) for innovative enterprises
Education and training	Graduate and post-graduate University courses
Laucation and training	Training of researchers

Beneficiaries	Short description
	Universities
Public sectors	National research institutions and other national and local public bodies (innovation agencies, BIC, Chambers of Commerce, etc)
	Public companies
Private sectors	Enterprises
	Private research centres
Others NGOs	
	cooperation between research, universities and businesses
Networks	cooperation between businesses (clusters of SMEs)
	other forms of cooperation among different actors

ANNEX C – CATEGORISATION OF EXPENDITURE TO BE USED FOR CALCULATING EU COHESION POLICY RESOURCES DEVOTED TO INNOVATION

FOI	
Code	Priority Theme
	Research and technological development (RTD), innovation and entrepreneurship
01	R&TD activities in research centres
02	R&TD infrastructure (including physical plant, instrumentation and high-speed computer networks linking research centres) and centres of competence in a specific technology
03	Technology transfer and improvement of cooperation networks between small businesses (SMEs), between these and other businesses and universities, postsecondary education establishments of all kinds, regional authorities, research centres and scientific and technological poles (scientific and technological parks, technopoles, etc.)
04	Assistance to R&TD, particularly in SMEs (including access to R&TD services in research centres)
05	Advanced support services for firms and groups of firms
06	Assistance to SMEs for the promotion of environmentally-friendly products and production processes (introduction of effective environment managing system, adoption and use of pollution prevention technologies, integration of clean technologies into firm production)
07	Investment in firms directly linked to research and innovation (innovative technologies, establishment of new firms by universities, existing R&TD centres and firms, etc.)
09	Other measures to stimulate research and innovation and entrepreneurship in SMEs
	Information society
11	Information and communication technologies (access, security, interoperability, risk-prevention, research, innovation, e-content, etc.)
12	Information and communication technologies (TEN-ICT)

13	Services and applications for the citizen (e-health, e-government, e-learning, e-inclusion, etc.)
14	Services and applications for SMEs (e-commerce, education and training, networking, etc.)
15	Other measures for improving access to and efficient use of ICT by SMEs
	Human capital
74	Developing human potential in the field of research and innovation, in particular through post-graduate studies and training of researchers, and networking activities between universities, research centres and businesses