A Faculdade de Engenharia, Universidade do Porto

Tese de Mestrado em Inovação e Empreendedorismo Tecnológico

Efficiency Determinants of Technology Transfer Offices: Empirical Analysis and Correlation with Innovation Policies in Portugal and Switzerland

Maria das Dores B. Moura Oliveira

2009

Orientadora: Aurora A.C. Teixeira

Acknowledgements

I'm deeply indebted to my supervisor, Professor Aurora Teixeira, for generously giving her time, expertise and support to the work developed. Her constant availability and pragmatism in the supervision of this work was inestimable.

A special acknowledgment to my colleagues at UPIN for their commitment and support when work was harder and I needed their help.

To my MIETE colleagues that made this journey with me and for several times helped to alleviate the stress.

To my friends for all your words of motivation, valuable advices and for bearing with me when I would go on and on talking about my doubts and the work that still had to be done. Patricia, João, Célio and Susana, I cherish our many dinners and holidays together and hope that soon will be able to have some more.

A special thought to a special friend that even if not present always gave me strength to pursue my objectives.

I thank Yeti and Queenie, for their companion during the long working nights and for the reminder that there are more important things in life than work (namely walk them & feed them). Although I have to say that the snoring didn't necessarily help.

My gratitude goes to my family for their continuous support and comprehension for all the family meetings and weekends I had to skip to dedicate time to the work.

Last but definitely not least, I would like to dedicate this work to Lénio, for never loosing his faith in me and for truly being a source of inspiration.

Abstract

The environment in which technology transfer takes place plays a key role in defining the best approaches and, ultimately, their success. In the present study our aim is to understand how Technology Transfer Offices (TTOs) efficiency is influenced by framework conditions and, in particular, by the innovation policies and programmes set in two quite different countries in this regard: Switzerland, widely associated to high levels of technology transfer efficiency, and Portugal, a laggard country in this particular. We hypothesise that countries with higher technology transfer efficiency levels, translated into outputs generated by a TTO as intermediary agent, would have innovation policies more supportive to technology transfer efforts, in other words, their innovation policies are key to technology transfer efficiency.

Results analysis corroborate our initial hypothesis. As expected, Switzerland policies overall include more references to knowledge and technology transfer, in the form of licenses, R&D collaboration and spin-offs, than Portuguese policies. One exception was the case of patents (intellectual property rights, in general) with stronger weight in Portuguese policies and, to some extent, the support to spin-off creation and venture capital. The findings have also highlighted significant differences in variables with impact in technology transfer as for the priorities addressed, target groups and funding eligibility, aspects of the innovation process targeted and forms of funding. We conclude by identifying a set of factors that should be taken into account in the policy design if a country wishes to increase technology transfer efficiency, specifically: a mandate for R&D cooperation between different actors, a priority to fund cutting edge science and research performers, and a higher emphasis on applied industrial research and prototype creation aspects of the innovation process.

Keywords: Technology transfer, innovation policies, technology transfer efficiency

Resumo

A envolvente na qual o processo de transferência de tecnologia ocorre assume um papel preponderante na definição da melhor abordagem ao processo e, em última instância, no seu sucesso. O presente trabalho tem como objectivo compreender como é que a eficiência das unidades de transferência de tecnologia (UTTs) pode ser influenciada pela envolvente e, em particular, pelas políticas de inovação implementadas em dois países distintos: a Suiça, associada a níveis elevados de eficiência de transferência de tecnologia e Portugal, um país ainda com escassos resultados neste campo. A hipótese a testar assume que países com níveis de transferência de tecnologia superiores, traduzidos em resultados gerados por UTTs como agente intermediário, possuem políticas de inovação mais adequadas ao esforço de transferência de tecnologia. Por outras palavras as suas políticas de inovação condicionam a eficiência do processo de transferência de tecnologia.

Os resultados obtidos permitem corroborar a hipótese inicial. Como previsto, as políticas de inovação Suíças, em geral, incluem mais referências à transferência de tecnologia e conhecimento, na forma de licenças, colaborações de I&D e spin-offs, que as Portuguesas. A título de excepção, apontamos o maior peso das patentes (direitos de propriedade intelectual, em geral) nas políticas portuguesas e, até certo ponto, o apoio à criação de spin-offs e capital de risco. Os resultados evidenciaram igualmente diferenças significativas em variáveis com impacto na transferência de tecnologia nomeadamente, as prioridades endereçadas, o grupo alvo e elegibilidade para financiamento, aspectos do processo de inovação e formas de financiamento. Concluímos com a identificação de um conjunto de factores que devem ser tidos em conta no desenho das políticas caso um país deseje aumentar a eficiência do processo de transferência de tecnologia especificamente, a ênfase na cooperação de I&D entre diferentes actores, prioridade no financiamento da investigação de ponta e das instituições de I&D e orientação das políticas para aspectos do processo de inovação como a investigação aplicada e o apoio à criação de protótipos.

Palavras-chave: Transferência de tecnologia; políticas de inovação; eficiência na transferência de tecnologia

Index of Contents

Acknowledgements ..... **i**
Index of Contents ..... **iv**
Index of Tables ..... **vi**
Index of Figures ..... **vii**
Introduction **1**
Chapter 1. Emergence and role of Technology Transfer Offices (TTOs) and the determinants of Technology Transfer efficiency **6**
1.1. Initial considerations 6
1.2. Clarifying the process of technology transfer 6
1.3. The role of Technology Transfer Offices (TTOs) 9
1.4. Measuring relative efficiency of TTOs 11
1.5. Determinants of successful technology transfer 12
Chapter 2. The role of innovation policies in fostering technology transfer **20**
2.1. Initial considerations 20
2.2. From national to transnational: concept and emergence of innovation policy in the EU 21
2.3. Mapping of European innovation policies main challenges and priorities 25
2.4. Innovation policy and technology transfer 30
Chapter 3. Innovation policies and TTO efficiency: methodological approach for the comparison between Portugal and Switzerland **35**
3.1. Initial considerations 35
3.2. Why Portugal and Switzerland? Some notes on countries' performance regarding technology transfer 36
3.3. The policy analysis: explaining the option for the European Inventory of Research and Innovation Policy Measures (EIRIPM) 38
3.4. Correlating innovation policies with the efficiency of technology transfer offices: the procedure undertaken 42
Chapter 4. Innovation Policies and the TTO efficiency: empirical findings from the comparison between Portugal and Switzerland **44**
4.1. Initial considerations 44
4.2. Descriptive analysis of policy measures between Portugal and Switzerland 44
4.2.1. Technology transfer and policy keywords, aims and rationale 44

4.2.2. Policy priorities 46
4.2.3. Thematic focus of the support measures 49
4.2.4. Policy tenure 50
4.2.5. Policy creation 51
4.2.6. Target groups and eligibility for funding 52
4.2.7. Aspects of innovation process 54
4.2.8. Typologies of funding and eligible expenses 56
4.2.9. Funding Sources 58
4.2.10. Policy evaluation 59
4.3. Policy measures and technology transfer outputs. Are they related? 61
Conclusions 66
References 68
Annex I 73

Index of Tables

Table 1: A "Rich Vision" of technology transfer 8
Table 2: Determinants of technology transfer offices efficiency. 17
Table 3: Main typologies of innovation systems failures 22
Table 4: Technology transfer metrics of success used in CEMI survey 37
Table 5: Policy framework for the European Inventory on research and innovation policies measures 41
Table 6: Explicit reference to technology transfer (or its dimensions) in the keywords, aims and reasoning for creation of the policies 45
Table 7: Priorities addressed by policy measures in Portugal and Switzerland 47
Table 8: Technology fields addressed by innovation policy 49
Table 9: Average policy tenure 50
Table 10: Inspiration for policy creation 51
Table 11: Groups targeted by the support measures and their eligibility for funding 53
Table 12: Importance of cooperation and networking for eligibility criteria 54
Table 13: Aspects of innovation process targeted by support policies 55
Table 14: Forms of funding and eligible costs for funding 57
Table 15: Sources of co-financing 58
Table 16: Evaluation of innovation policies 59
Table 17: Key similarities and differences in policy analysis: 62

Index of Figures

Figure 1: Technology transfer efficiency 4
Figure 2: The process of technology transfer 7
Figure 3: Services provided by Technology Transfer Offices (% of TTOs providing the service) 9
Figure 4: Innovation policy arena 24
Figure 5: Failures targeted by EU-27 innovation policy challenges 26
Figure 6: Differences in failures addressed by EIS country group 27
Figure 7: Policy priorities in the EU-27 innovation policy mix 28
Figure 8: Evolution of the priorities of innovation policies 30
Figure 9: Evolution of the TrendChart-ERAWATCH database of support measures. 39
Figure 10: Relative Importance (% total) in each country's aims and reasoning of policy measures of references to licenses, industry-university collaboration, patents, spin-offs and venture capital 45
Figure 12: Comparison between policy priorities for Switzerland, Portugal and the EU-27 48
Figure 13: Thematic focus of innovation policies (in % of total) 50
Figure 14: Amount of policy measures (in % of total) by average starting period 51
Figure 15: Inspiration for policy creation (in % of total policy measures) 52
Figure 16: Target groups and eligibility for funding of different target groups 53
Figure 17: Incidence (in % of total policy measures) of cooperation and networking requisite in innovation policies for funding eligibility 54
Figure 18: Aspects of innovation process targeted by policies 56
Figure 19: Typologies of funding of innovation policies 57
Figure 20: Eligible costs for funding of innovation policies 58
Figure 21: Sources of co-financing of innovation policies 59
Figure 22: Evaluation procedures for innovation policies 60
Figure 23: Official and unofficial evaluation findings for innovation policies 60

Introduction

Recent studies on industry science links suggest a tendency to the intensification of the interactions between universities and industry over time (Debackere and Veugelers, 2005). Due to the increasing budgetary stringency of public funding, universities and other public research institutions are increasingly expected to transfer more efficiently and at a higher speed the know–how they generate into commercial activities (Debackere and Veugelers, 2005), through patenting, licensing, research joint ventures and the formation of spin-off companies (Link et al., 2003). Technology licensing has become a very lucrative and prominent business for some universities in the USA and around the world (Anderson et al., 2007; Link et al., 2003). Not only is it a source of revenue to the university but it develops university-industry relations that benefit both parties, promotes economic development, and brings additional research grants to the university (Trune and Goslin, 1998).

According to the Association of Technology Transfer Management (AUTM),[1] before 1980, fewer than 250 patents were issued to U.S. universities each year and discoveries were seldom commercialized for the public's benefit. In contrast, in fiscal year 2002, AUTM members reported that 5.327 new license agreements were signed and between 1991 and 2004, annual invention disclosures increased more than 290 percent (to 18.178), new patents filed increased nearly 450 percent (to 11.089) and new licenses and options executed increased about 510 percent (to 5.329). This has led to a change in the institutional environment and set the ground for the development of public policies specially aimed at encouraging the commercialisation of inventions and the creation of intermediary structures such as the Technology Transfer Offices (TTOs) (Debackere and Veugelers, 2005; Link et al., 2003; Siegel et al., 2003).

The surge of new technology transfer institutions in the last 25 years, mainly in the USA but also in Europe, was deeply connected with the growing awareness of the relevance of intellectual property rights (European_Commission(a), 2004; Swamidass and Vulasa, 2008). While in 1980, the number of research universities in North America with a licensing or technology transfer office was roughly of 20, in 1990 it increased to 200 and by 2000 nearly every major university had one (Colyvas et al., 2002). Although several authors (European_Commission(a), 2004; Siegel et al., 2003; Swamidass and Vulasa,

[1] In: http://www.autm.net/AM/Template.cfm?Section=FAQs#4, accessed 4 April, 2009.

2008; Trune and Goslin, 1998) had attributed the rise of university patenting and the aftermath rising of TTOs fundamentally to the University and Small Business Patent Procedures Act of 1980, otherwise known as the Bayh-Dole Act, Colyvas et al (2002) are inclined to justify this trend with the rising and maturing of new scientific disciplines, in the decade of 70, such as molecular biology, genetic engineering, computing sciences and biotechnology, all of which rose interest from industry (Colyvas et al., 2002). Regardless of the different opinions, in the USA the Bayh-Dole Act instituted a uniform patent policy, removing many restrictions on licensing, and, most importantly, the ownership of patents arising from federal research grants shifted from federal government to the universities, given them empowerment to proceed with its commercialisation (Debackere and Veugelers, 2005; Link et al., 2003; Siegel et al., 2003; Trune and Goslin, 1998). At the same time various Patent Office and Court decisions increased the range of research that could be patentable as for biotechnology (Colyvas et al., 2002). Other factors, such as the rise in venture capital, important breakthroughs in computing and, more recently, nanotechnology, besides genetic engineering, and the increase in the pool and mobility of scientists and engineers have also contributed to the inclusion of an economic mandate in universities in addition to their mission of education and research (Rothaermel et al., 2007).

There is, however, a strong suggestion of an inadequate scale and intensity of those transfers, in particular in Europe, also known as the "European Paradox", attributed to the gap between top scientific performance and their minimal contribution to industry competitiveness (Debackere and Veugelers, 2005). Some European universities are rich sources of technology[2] but they lag behind in terms of efficiency in technology transfer when compared with their U.S counterparts, largely due to different legal systems (Rothaermel et al., 2007), significant dispersion of resources and activities, insufficient links with business and society, and rigidities in their functioning (European_Commission, 2007). Still, patenting remains excessively complicated and costly in Europe, and fragmented litigation fails to provide sufficient legal certainty (European_Commission, 2007). Furthermore, considerable diversity exists in technology transfer procedures and policies as well as the organisation of TTOs developed in response to specific legislation and market opportunities (Bercowitz et al., 2001).

[2] According to data from the ERA Green paper on the European Research Area, universities and public research organisations perform more than 35% of all research undertaken in Europe. European_Commission. (2007) GREEN PAPER - The European Research Area: New Perspectives, Brussels, COM(2007) 161 final.

Recognising the importance of improving knowledge transfer in the European Union (EU), motivated by the underperformance of Europe in comparison to the USA in terms of patents, licensing and spin-off creation, the European Commission (EC) launched a programme "Putting Knowledge into Practice" to help create an European framework for knowledge transfer (Siegel et al., 2007). The consistent emphasis by the EC on the coordination and diffusion of best practices in this area had repercussions at regional and national level with the implementation of several policy initiatives to foster knowledge transfer. Such policies aim to increase the transfer activities of public research organisations, to improve the regional coverage of innovation support services, to address the needs of particular target groups such as SMEs,[3] or to provide a particular service such as patenting support (European_Commission(b), 2004).

As illustrated by Figure 1, efficiency in technology transfer is a function of converting inputs to outputs by the involvement of one or more agents or stakeholders, namely researchers, TTOs, entrepreneurs and private industries (Anderson et al., 2007). In technology transfer the most often referred inputs consist of R&D expenditure (Conti et al., 2007; OECD, 2008), either originated from private or public sources, and research results in the form of invention disclosures (Chapple et al., 2005; Conti et al., 2007). As for outputs, most authors (Anderson et al., 2007; Chapple et al., 2005) agree in categorising licensing income, number and income of industry sponsored research contracts, number of patents granted and number of spin-offs created as the main outputs of university/industry technology transfer. The efficiency of this conversation may be hampered or stimulated by a series of factors also known as determinants of technology transfer efficiency. Mainstream literature aggregates technology transfer determinants in two major categories. The first is internal conditions, such as organisational structure and status (Anderson et al., 2007; Bercowitz et al., 2001; Thursby and Kemp, 2000), size (Anderson et al., 2007; Macho-Stadler et al., 2007), rewards or incentives (Anderson et al., 2007; Friedman and Silberman, 2003; Siegel et al., 2003), age or experience (European_Commission(b), 2004; Swamidass and Vulasa, 2008), nature and stage of technology (Colyvas et al., 2002; Rothaermel et al., 2007), culture and norms of behaviour (Anderson et al., 2007; Bercowitz et al., 2001) and links to industrial partners (Colyvas et al., 2002; Swamidass and Vulasa, 2008). The second is external or framework conditions including location (Chapple et al., 2005; Conti and Gaule, 2008; Friedman and Silberman, 2003), context (Debackere and

[3] SMEs stands for Small Medium Size Enterprises.

Veugelers, 2005; Siegel et al., 2003), specific legislation and regulation (OECD, 2004) and public policies (Bozeman, 2000; European_Commission, 2001; Goldfarb and Henrekson, 2003; OECD, 2004).

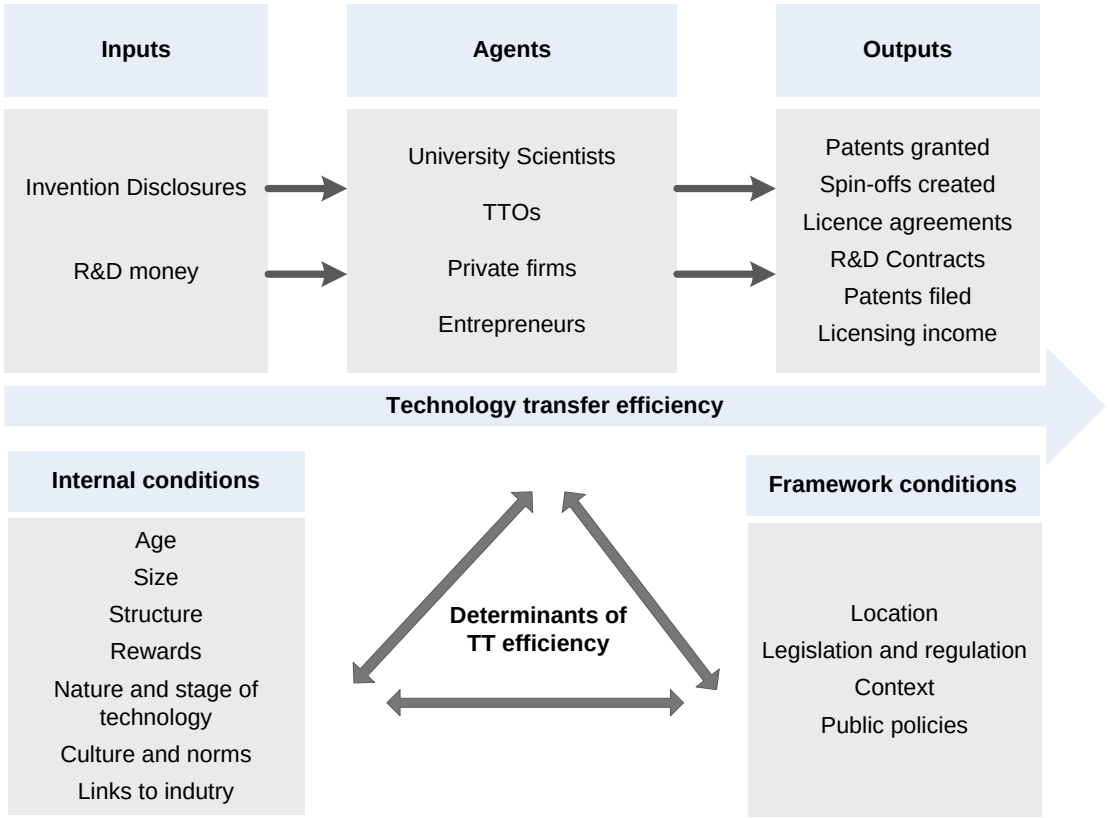


Figure 1: Technology transfer efficiency
Source: The author

Being considered the formal gateway between the university and industry, TTOs have been in the spotlight of research regarding the entrepreneurial university (Rothaermel et al., 2007). But, in recent years, attention shifted from studying the number and impacts of patents and licensing to understanding inter-institutional variations in the range and efficiency of technology transfer activities (Bercowitz et al., 2001). The diversity found in the various transfer offices, besides being a consequence of the capacities and motives of the different stakeholders involved (public research organisations, industry, consulting firms and public authorities) also reflects the specificities of public incentives or policies and their differing degrees of commitment to technology transfer (European_Commission(b), 2004). Nevertheless, as stated by Rasmussen (2008), despite the voluminous literature on technology transfer, few studies have investigated the policy instruments available for governments aiming to improve technology transfer from publicly funded research (Rasmussen, 2008). To our knowledge, there is no published

work benchmarking the impact of innovation policies from different countries in relation to technology transfer efficiency.

In the present study our aim is to understand how TTOs efficiency is influenced by framework conditions and, in particular, by the innovation policies and programmes set in two quite different countries in this regard: Switzerland, widely associated to high levels of technology transference efficiency, and Portugal, a laggard country in this particular. We hypothesise that countries with higher technology transfer efficiency levels, translated into outputs generated by a TTO as intermediary agent, would have innovation policies more supportive to technology transfer efforts, in other words, their innovation policies are key to technology transfer efficiency.

Our objective is not to evaluate the efficiency of different national innovation policies but instead to understand to what degree policies are influencing technology transfer and what type of policies would need to be developed to meet the challenges and the need to increase the efficiency of TTOs. With this objective in mind the dissertation is structured as follows: in the first chapter, a review of international literature on the topic of technology transfer and the role of technology transfer offices is presented. Chapter 2 introduces the concept and evolution of innovation policies in the Europe and their relation to technology transfer. In Chapter 3, we present the methodology used to select the countries to compare and analyse innovation policies. The subsequent chapter presents data and results. Finally, concluding remarks close the work.

Chapter 1. Emergence and role of Technology Transfer Offices (TTOs) and the determinants of Technology Transfer efficiency

1.1. Initial considerations

The present chapter aims at providing some insight into the concept and process of technology transfer, the role of technology transfer offices and the main determinants affecting their efficiency in commercialising university technologies. We start, in Section 1.2 by reviewing the definitions applied to technology transfer and proceed, in Section 1.3, to clarify the role of technology transfer offices. Section 1.4 overlooks the issue of effectiveness measurement and, finally, Section 1.5 describes the main determinants of technology transfer efficiency.

1.2. Clarifying the process of technology transfer

Stone (2003) points that technology transfer is at its infancy as a discipline and, as such, there is a lack of consensus and conceptual models, in the supporting literature, able to clearly define what is "Technology Transfer" and how does it occur (Stone, 2003). In the absence of a solid foundation in literature both "technology" and "transfer" are defined in different manners by different authors, according to their field of science and activity under study (Bozeman, 2000; Lane, 1999). As referred by Mings (1998: 3), "…we need more and plainer language as common reference points for widespread understanding of arguably one of the most important social, political, and economic trends of our time: technology transfer" (Mings, 1998?). If in 1998 Mings was overwhelmed by the 100.000 results found in Internet for the words "technology Transfer" he would be surprised with the 23.700.000 results Google retrieves nowadays (March 2009).

For some the use of "technology" instead of "knowledge" is too restrictive and not representative of the full potential of the activity of transferring intangible assets. For instance, the Institute of Knowledge Transfer, in the UK, puts the tone in 'Knowledge Transfer', defined as "the systems and processes by which knowledge, including technology, know-how, expertise and skills, is transferred from one party to another leading to innovative, profitable or economic and social improvement".[4] Because this

[4] In: http://www.ikt.org.uk/aboutikt.aspx, accessed 21 December 2008.

knowledge may be tacit and specific to the entity that was involved in its creation and, hence, only partially appropriable to its receptor, technology transfer cannot be reduced to a linear "information transmission" and evermore should be considered as a process of reciprocal learning (Laranja, 2009).

Nevertheless, most definitions agree in characterising "technology transfer" as a process (cf. Figure 2), in which science or knowledge or capabilities are transferred or moved from one entity (person, group, organisation) to other for the purpose of further development and commercialization (Lane, 1999; Lundquist, 2003; Swamidass and Vulasa, 2008). The process usually includes the identification of technologies, its protection by patent or copyrights and the development of commercialization strategies, such as marketing and licensing to existing private sector companies, or the creation of new start-up companies based on the technology (AUTM).[5]

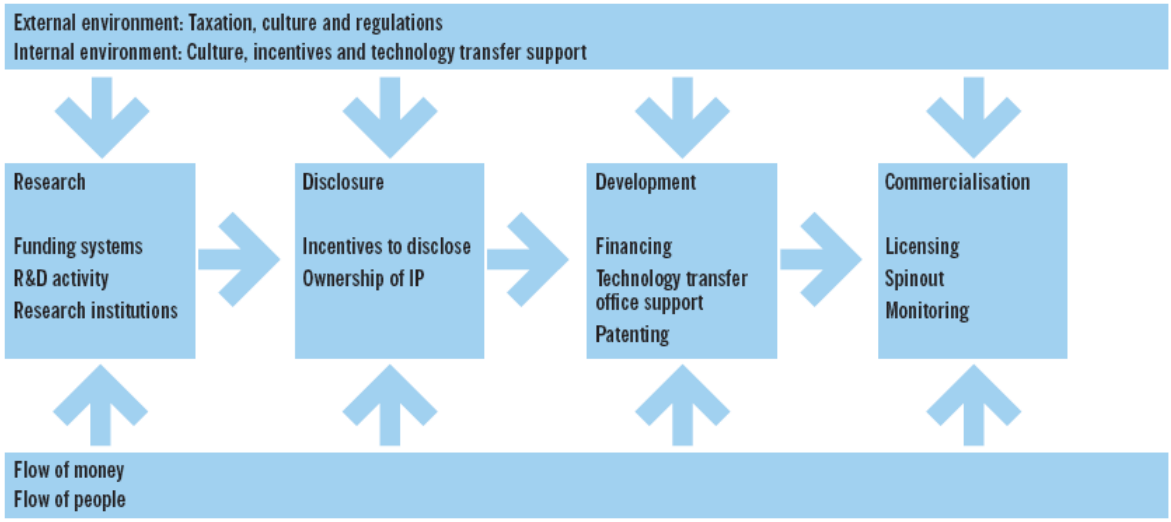


Figure 2: The process of technology transfer
Source: (APAX, 2005)

Technology transfer happens for a reason, it is a method for reaching goals, meeting needs and create wealth just as any other effort in business, government or academia (Lundquist, 2003). When this view is applied technology transfer becomes a logical, manageable, repeatable science (Lundquist, 2003). In its "rich vision" of technology transfer Lundquist (2003) attempts to clarify and provide a holistic description of technology transfer by searching answers for the questions: why, who, where, when, what, at what cost and how technology transfer occurs (cf. Table 1).

[5] In: http://www.autm.net/aboutTT/index.cfm, accessed at 7 November 2008.

Table 1: A "Rich Vision" of technology transfer

Why?	Reason for transfer	"Technology is transferred to solve problems and create wealth"
Who?	Those doing transfer	"Technology is transferred by agents of change"
Where?	The environment for transfer	"Technology transfer occurs in value chains within or across corporate boundaries"
When?	Timing for transfer	"When barriers to transfer fall and both source and adapter of technology agree to move forward"
What?	Technology	"A unique source of value to its developers, adopters and eventual end customers"
At what cost?	Justification	"Transfer is cost justified by proving the unique and durable value of the technology to the company (transition) or the adopter (transfer)"
How?	Transfer	"Technology transfer works by engaging agents of change in a practical program built on deep understanding of technologies, technology management and marketing"

Source: In (Lundquist, 2003)

Besides technology licensing and the creation of spin-off, there are several other mechanisms for technology transfer to occur. Graduate students carry knowledge from university into other sectors; publications and conferences allow industry to monitor new knowledge; faculty consulting leads inherently to the transfer of knowledge; the mobility of scholars has long allowed for exchange of knowledge and, more recently, the industry affiliate, program, research collaborations and interdisciplinary research centres have brought industry into campus with similar purposes (Goldfarb and Henrekson, 2003). As referred by Laranja (2009: 25), "no longer makes sense to think of unilateral transfer from supplier to recipient, but rather to regard technology transfer as a process, in terms of the recipient's capabilities, including technical and organisational capacity to take on board ideas and technologies developed by others" (Laranja, 2009).

The European Commission (European_Commission(a), 2004) further adds that some pre-conditions must be fulfilled by the research organisation in order for technology transfer to occur, namely: (1) it must hold relevant state-of-the-art competence, be capable to produce it, or be in a position to provide applied research services for the implementation and adaptation of (cutting edge) technology developed elsewhere; (2) be motivated to transfer its knowledge and to communicate with enterprises and (3) establish a transfer mechanism that is transparent to the potential user and capable of combining and integrating (research) competences according to the needs of client enterprises.

1.3. The role of Technology Transfer Offices (TTOs)

Within the scope of BEST[6] project, the European Commission (European_Commission(b), 2004), p. 10), defines TTOs as "…institutions which provide, continuously and systematically, services to publicly funded or co-funded research organisations in order to commercialise their research results and capacities. They are instruments to further the dissemination and the uptake of new technologies by enterprises". Link et al. (2003) agree that TTOs facilitate technological diffusion through the licensing to industry of inventions or intellectual property resulting from university research (Link et al., 2003).

TTOs contribute to faster and better commercialisation of research results; they improve innovation performance and accelerate the dissemination of new technologies; lead to better management of intellectual property rights and identify specific research demands through dialogue with industry (European_Commission(b), 2004; Siegel et al., 2003). In general, services provided by TTOs (cf. Figure 3) cover patenting and intellectual property management, including activities necessary for the filing of a patent and the management of other forms of intellectual property; licensing of intellectual property rights; liaising with industry for collaborative and contract research, including client recruitment, contracting, and contract management; supporting spinouts, including business planning and fund raising; and potentially financing spinouts by providing seed capital (European_Investment_Fund, 2005).

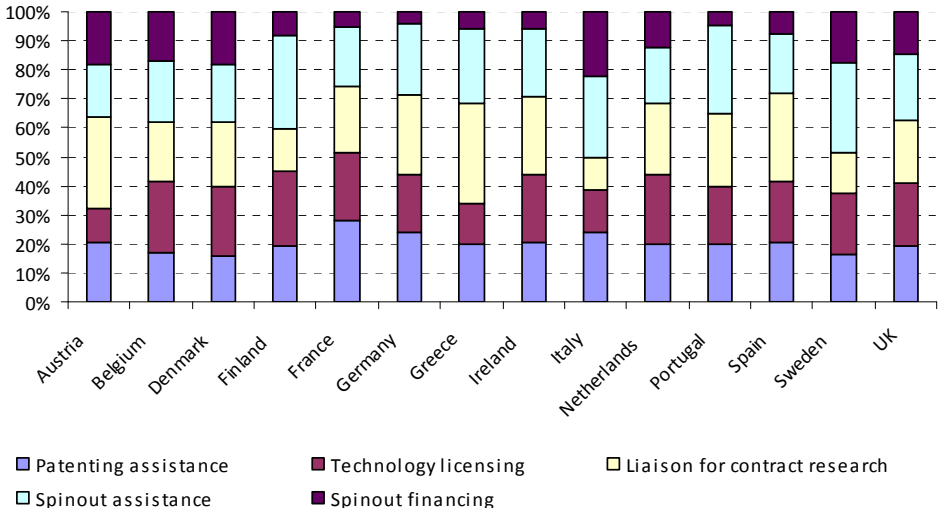


Figure 3: Services provided by Technology Transfer Offices (% of TTOs providing the service)
Source: Computed by the author based on data from (European_Commission(b), 2004)

[6] BEST "Evaluating Dissemination and Quality of Institutions for the Technology Transfer from Science to Enterprise (ITTE), was a DG Enterprise -project under the Multi-annual program (MAP – ITTE 1.11/2002). As part of the project, a study contract had been tendered to a consortium of inno AG, Logotech and Angle Technology, which subsequently conducted a survey of TTIs in Europe.

The European Investment Fund (2005) refers that TTOs as intermediary structures, favour a more efficient division of labour. By investing in the required expertise, TTOs allow inventors, for whom the main comparative advantage is creativity or specific knowledge, to avoid devoting time and resources to commercialising their inventions, and hence reduce transaction costs and improve allocative efficiency (European_Investment_Fund, 2005). Furthermore, their activities have important economic and policy implications since licensing agreements and spin-offs may result in additional revenue for the university, employment opportunities for researchers and graduate students and local economic and technological spillovers reflected in the stimulation of job creation and additional R&D investment (Siegel et al., 2007).

The creation of a specialized and decentralised TTO within the university is instrumental to secure a sufficient level of autonomy for developing relations with industry (Debackere and Veugelers, 2005; Macho-Stadler et al., 2007). Additionally, it allows a better management of possible conflicts of interest between the activities of commercialisation, research and teaching, whilst creating the conditions for a specialisation in supporting services such as management of intellectual property rights and business development (Debackere and Veugelers, 2005).

For Colyvas et al. (2002), in many cases, the role of such offices is not to create links between the university and industry but rather to facilitate, mediate and regulate the transactions that already take place between parties that already knew each other (Colyvas et al., 2002). In such cases, the value and costs of operating these offices is inherently the result of the university policies to file, enforce and licence patents on their inventions (Colyvas et al., 2002). Their assumptions were, however, based on the study of the licensing efforts of Stanford and Columbia University, two worldwide renowned institutions with secure links with industry, the role of TTO in less emblematic universities may very well turn out to be the only channel through which industry may learn about research commercialisation opportunities.

The TTOs may adopt several organisational set-ups depending on the hosting university directives, objectives to achieve and policies in place. The most common typologies include: organisational units or specialised departments operating within the university, wholly owned subsidiaries operating outside the university and public or private structures serving a larger group of universities or research institutions (European_Commission(a), 2004). The institutional type chosen reflects factors such as the legal environment

(ownership arrangements of IPR), the degree of institutional autonomy of PROs, the PRO's legal status, or the amount of public funding available for the TTO (European_Commission(a), 2004). This diversity may be faced as a natural experiment in which the various actors search for efficient means to organise their activities to promote both the diffusion of university research and the generation of additional revenue, while maintaining the traditional university mission of creating knowledge and educating students (Bercowitz et al., 2001).

1.4. Measuring relative efficiency of TTOs

The linkages between science and industry, and the effectiveness and efficiency of these linkages for a smooth transfer of knowledge are many-facetted and difficult to measure and evaluate (European_Commission, 2001). According to Sorensen and Chambers (2008), defining success in academic technology transfer is a function of selecting what outcomes are desired and then measure performance in light of those outcomes (Sorensen and Chambers, 2008). Most authors aim at evaluate the efficiency of a TTO based on the study of tangible outputs of university research and typically with respect to patenting, licensing and spin-off creation. As referred by Anderson et al. (2007) the simplest method to measure TTOs efficiency would be to rank universities based solemnly on their licensing revenues (Anderson et al., 2007).

According to the microeconomic literature (Thursby and Kemp, 2000) a producing unit is 'technically inefficient' if it is possible to produce more output with the current level of inputs or, equivalently, it is possible to produce the same output with fewer inputs. As Thursby and Kemp (2000) point out, in universities the reasons for technical inefficiency include, among other things, the failure to take advantage of all commercialisable IP as well as a greater preference for basic over applied research.

In their unusually comprehensive literature analysis (173 articles) on university entrepreneurship, Rothaermel et al. (2007) refer quantitative methods as the most often used when studying the efficiency of TTOS (63% of articles) (Rothaermel et al., 2007). These methods are based on the construction of a "best practice" frontier, the distance to which represents the inability of a structure to generate maximal output from a given set of inputs (Chapple et al., 2005; Siegel et al., 2007). Two methods are used to estimate these frontiers, Data Envelopment Analysis (DEA) and Stochastic Frontier Estimation (SFE) (Siegel et al., 2007). DEA is a non-parametric approach that obviates the specification of a

functional form for the production frontier (Siegel et al., 2003). It allows to handle multiple outputs and to identify "best practice" universities"(Chapple et al., 2005) and can also cope more readily with multiple inputs and outputs than parametric methods (Siegel et al., 2003). The major drawback of DEA is that it is deterministic and highly sensitive to outliers which means that it does not allow to distinguish between technical inefficiency and noise (Chapple et al., 2005). SFE allows for statistical inference about the impact of independent variables but requires restrictive functional form and distribution assumptions, being limited when a multi-output approach is required (Siegel et al., 2003). It allows hypotheses testing and construction of confidence intervals (Chapple et al., 2005). This approach is useful when there is more interest in estimating average relationships than in identifying outliers for diagnostic purposes (Chapple et al., 2005). DEA and SFE can generate different results particularly when high levels of heterogeneity and noise are present in the data (Chapple et al., 2005). For Siegel et al (2003) both methods are complements and not substitutes.

Anderson et al. (2007) used an output oriented DEA model, including weight restrictions, to access the productivity of selected US University TTOs. An examination of differences between public versus private universities and those with medical school and those without indicated that universities with medical schools are less efficient than those without (Anderson et al., 2007). Thursby and Kemp (2002) employ DEA combined with regression analysis to explore the increase in licensing activity of U.S universities as well as the productivity of individual universities. They found that licensing activity had increased over the years by others factors than increases in overall university resources (Thursby and Kemp, 2000). Siegel et al. (2003) present a quantitative analysis of efficiency, measuring the relative productivity of TTOs in the U.S using a parametric approach (SFE). Their findings suggest that TTO activity is characterized by constant returns to scale and that the variation in performance is explained by environmental and institutional factors. Chapple et al. (2005) present evidence on the performance of TTOs in the U.K. using both DEA and SFE approaches. They found that there is a need to increase the business skills and capabilities of TTO managers and licensing officers (Chapple et al., 2005).

1.5. Determinants of successful technology transfer

Several factors have been pointed as having influence in explaining the success in technology transfer and the relative efficiency of TTOs, among which (Rothaermel et al.,

2007): technology transfer systems, structure and staffing, nature and stage of technology, faculty, university system and environmental factors. Table 2 summarises the main determinants of technology transfer offices efficiency found in the literature.

It takes considerable time to successfully licence or market good university inventions that on a short run do not generate cash flow for the licensing companies (Swamidass and Vulasa, 2008). A direct correlation between age and performance of technology transfer activity was also described by the European Commission (European_Commission(b), 2004), when assuming that to build up a large portfolio of patents and generate high yearly licence revenues is a time consuming activity, so the more mature a TTO is the more probable to have a history of at least moderately successful activity and survival. Most technology transfer offices in Europe exist for less than 10 years and are still not self-supporting. Proton Europe 2004 Annual Survey to European university TTOs, confirms this trend with 60% of respondents reporting to have been created in the last 10 years (Proton-Europe, 2005).

A relevant implication is that in times of university budget deficits TTOs may face budget cuts which, in turn, may erect capacity barriers to the smooth flow of inventions to the market making their activity even more challenging (Swamidass and Vulasa, 2008). The budget allocated to the TTO, influences the number of personnel employed in invention evaluation and marketing, staff trained, the information technology (IT) infrastructure to help automate the process and the overall success in technology transfer (Swamidass and Vulasa, 2008). Also trust and visibility, which are important success factors for TTOs and which need time to develop, correlate with age as well as the accumulation of knowledge, some of it tacit, and the development of a social network (European_Commission(b), 2004).

Another particular success factor for the TTOs is the awareness about technology transfer, which they are able, in general, to create among researchers in the institution (European_Commission(b), 2004). University researchers are the suppliers of innovations since they are the ones involved in the creation of knowledge while conducting research projects (Siegel et al., 2007) hence, the potential of a public research organisation can only be fully exploited if researchers are conscious of research results valorisation, have sufficient incentives to engage in commercialisation and industry collaboration and hence actively disclose inventions and contribute to contract research (European_Commission(b), 2004). University inventors which do not have ties to potential industrial licensees make

the technology marketing a considerable more challenging task for the TTOs (Swamidass and Vulasa, 2008). The researchers involved in successful technology transfer cases were, in most cases, active members of a community, a network of scientists that involved people from the industry who were aware of the research projects, sometimes from its inception, and that most likely could benefit from the application of such results (Colyvas et al., 2002).

The stage of development of an invention seems also to have a direct implication in the strategy that should be adopted to bring it to industry. Colyvas et al. (2002) observed that for emergent technologies intellectual property rights and exclusive licences appeared to be relevant for inducing firms to engage in the development of the invention while not as important for "off the shelf" technologies (Colyvas et al., 2002). However, the authors also claim that the for embryonic inventions the dangers of strong exclusivity are higher since it is never clear so in advance which firm will have the capability to successfully develop the additional work (Colyvas et al., 2002).

Institutional history, culture and norms of behaviour, while not sole determinants of the structure of the TTO, appear to play an important role in the universities' approach to technology transfer (Anderson et al., 2007; Bercowitz et al., 2001). Differences amongst intellectual property rights policies in Universities may very well be one of the critical factors stifling university-industry links and the efficiency of the TTO (Anderson et al., 2007; Debackere and Veugelers, 2005). Within each university intellectual property regulations vary greatly, with some taking total ownership of any know-how generated with its resources and others granting the rights to the individual researcher and/or R&D centre. Colyvas et al. (2002) based on their work on how university patents get into practice, suggest that in contexts where other means of appropriability by the companies are present patentability and exclusive licences of the university research may be less essential (Colyvas et al., 2002). There is, however, one major distinction between patents issued by companies, that patent mostly in areas relevant to their activity and for internal consumption and patent filed by universities who need to find external licensees for their issued patents, an expensive and time consuming task (Swamidass and Vulasa, 2008).

Another major issue is whether researchers have sufficient incentives to disclose their inventions to the TTO and to induce their further collaboration during and after the licensing agreement (Debackere and Veugelers, 2005; Siegel et al., 2007). In order for the university to generate an economic flow from the transfer of intellectual property first the

faculty members must disclose their inventions to the TTO (Link et al., 2003). Technology Transfer Offices must access a critical mass of inventions by pooling a sufficient number of inventions originating from different laboratories or research organisations (European_Investment_Fund, 2005). In reference to the work of Thursby (2001), Link et al. (2007) claim that many TTOs report that only half of the potentially viable commercial inventions are actually disclosed (Link et al., 2003). This creates discrepancies in TTO performance that, as referred by Siegel et al. (2007), may in turn highlight the problems for technology transfer officers in eliciting disclosures (Siegel et al., 2007).

On the other hand, not all disclosed and potentially viable inventions will be protected and licensed by the University. Siegel et al. (2007), draw attention to the problem of asymmetric information on the value of the inventions between industry and researchers (Siegel et al., 2007). While industry has problems in foreseeing the quality of the invention ex ante, researchers may find it difficult to assess the commercial profitability of their inventions (Debackere and Veugelers, 2005; European_Investment_Fund, 2005; Siegel et al., 2007).

Anderson et al. (2007), quoting Siegel et al.'s (2003) work, also link the productivity of TTOs to their organisational structure and, in particular, the existence or not of faculty reward systems, TTO staffing compensation practices, and cultural barriers between universities and firms. The authors also point out to the possible influence of scale size of TTO and if there is a dimension below which successful technology transfer is difficult to occur (Anderson et al., 2007; Macho-Stadler et al., 2007). Smaller universities often lack the level of resources and expertise necessary to effectively support the creation of a TTO (Debackere and Veugelers, 2005). For Bercowitz et al. (2001), one common complaint heard from the TTOs interviewed is the understaffing of their offices (Bercowitz et al., 2001). Achieving a critical size is also crucial to support the sunk costs needed to acquire the required expertise for identifying new inventions and sorting out profitable from unprofitable ones (European_Investment_Fund, 2005). Alongside, further research should be done to clarify if the organisation structure and operational processes/policies of the TTO as well as the level of support given by the university administration may impact the technology transfer efficiency (Anderson et al., 2007).

Although, organisational factors, as for cultural barriers between universities and small firms, incentive structures in the form of pecuniary and non-pecuniary rewards and staffing and compensation practices of the TTO, tend to be the most relevant impediments to

effective university technology transfer, they cannot by itself explain divergences in TTO performance (Siegel et al., 2007). Environmental and institutional factors are also likely to be important determinants of relative performance (Siegel et al., 2007). These are characterised by Debackere and Veugelers (2005) as “context” related to the institutional and policy environment, the culture, and the history that has unfolded within the academic institution (Debackere and Veugelers, 2005) and by the European Commission (2001) as “Framework conditions”, covering all those factors which affect the behaviour of actors and institutions in industry and science, which are involved in knowledge and technology exchange activities (European_Commission, 2001). Of particular relevance for the present work are the "policy-related framework conditions" that refer to those factors which are strongly shaped by policy decisions or may directly be designed by policymakers, namely public promotion programmes and initiatives, henceforth referred as innovation policies.

In fact, fostering the direct commercialisation of research results in public science has been an important policy issue, especially in fields such as biotechnology, genetic engineering, new materials, and new information and communication technologies (European_Commission, 2001). Thus, various initiatives have been proposed or implemented, by different countries, to increase the incentives and commitment of universities to transfer technology to the private sector. In a number of countries, policymakers have even gone further, enforcing technology transfer as one of the missions of Universities, as for the case of Denmark’s new University Act which integrates knowledge and technology transfer as part of the universities’ charters (European_Investment_Fund, 2005). The relation between innovation policies and TTOs efficiency is further developed in the subsequent chapters.

Table 2: Determinants of technology transfer offices efficiency.

Determinants	Study	Research questions	Method	Variables	Key findings
Structure and status	(Anderson et al., 2007)	Is there a relationship between university efficiency and the existence of a medical school using linear regression? Are private universities more (or less) efficient than their public counterparts in terms of technology transfer?	Data envelopment analysis (DEA) approach is used as a productivity evaluation tool applied to university technology transfer. The methodology included weight restrictions providing a more comprehensive metric.	An examination of differences between public versus private universities and those with medical schools and those without.	The results obtained indicate that public versus private status and the presence of a medical school do not explain the variations obtained in technology transfer efficiency amongst the 52 universities analysed. Universities with medical schools are less efficient than those without.
	(Chapple et al., 2005)	What is the performance of UK university technology transfer offices? Do different methods (non-parametric and parametric) result in different conclusions?	50 UK universities	The annual number of licensing agreements consummated by the university, annual invention disclosures/total research income	Invention disclosure, total research income, the number of technology transfer employees, and protection of licensee affect TTO's licensing performance. Regions with a higher R&D intensity, younger TTOs, and universities with medical schools are more efficient at generating new licenses. Parametric methods results in higher efficiency measures than those of non-parametric.
Staffing capacity	(Swamidass and Vulasa, 2008)	Is staffing shortages in university TTOs a performance limited constrain?	Survey questionnaire sent to 99 randomly selected US research universities	(1) Education and experience (2) Staff size and shortage (FTE) (3) staffing and tech transfer performance in terms of provisional applications and licensing agreements (4) The percentage of inventions that do not get processed due to the lack of personnel (5) The budget allocated for invention commercialization	When short of staff and budget university TTOs will be reduced to devoting their resources to ensuring patent applications are filed and granted at the expense of marketing inventions
	(Macho-Stadler et al., 2007)	n/a	Theoretical model to explain the specific role of Technology Transfer Offices (TTOs) in licensing university inventions	n/a	TTO is often able to benefit from its capacity to pool innovations across research units (and to build a reputation) within universities Importance of a critical size for the TTO to be successful as well as the stylized fact that TTOs may lead to fewer licensing agreements but higher income from innovation transfers.

Determinants	Study	Research questions	Method	Variables	Key findings
Organizational practices/structure	(Siegel et al., 2003)	How do stakeholders of university-industry technology transfer (UITT) define the outputs of the process? What are the organizational/managerial barriers to UITT?	Based on 55 interviews of 98 entrepreneurs, scientists, and administrators at five research universities	n/a	TTO activity is characterized by constant returns to scale and by environmental and institutional factors. Productivity may also depend on organizational practices. Unfortunately, there are no quantitative measures available on such practices, so they conclude that the most critical organizational factors are faculty reward systems, TTO staffing/compensation practices, and cultural barriers between universities and firms.
	(Bercowitz et al., 2001)	How organisational structure mediates the relationship between inputs that give rise to IP and the level and forms by which the university generates revenues from it?	21interviews conducted in 3 universities with technology transfer personnel, faculty and research administrators. The interview protocol was loosely structured to allow open responses. Documentation on policy statements, organizational charts and history was also collected.	The structure of TTO provides a set of organisational variables that may be used to explain technology transfer outcomes across universities, namely: Information processing capacity (yield as measured by invention disclosures/TTO, licensing/TTO, sponsored research agreements/TTO), Coordination capabilities (likelihood that research firms will be shared" Incentive alignment properties ((trade-off between royalty rate/ licensing fees)	Structure affects performance in a predictable manner.
	(Debackere and Veugelers, 2005)	How do technology transfer mechanisms evolve to contribute into an effective commercialization of academic science base?	Katholieke Universiteit Leuven R&D	n/a	Framework of governance structure that captures the formation of effective mechanisms: an appropriate organizational structure (e.g., unambiguous regulation of ownership titles and property rights, appropriate mix of incentive mechanisms targeted to the research group and individual researchers, decentralized management style, a matrix structure for the interface/ liaison), process (e.g., a well-balanced process to manage and monitor contract research), and context (e.g., active management policy) within university.

Determinants	Study	Research questions	Method	Variables	Key findings
Budget	(Trune and Goslin, 1998)	Do the economical benefits of maintaining a TT program outweigh the related financial burden (salaries, overheads, patenting…)	Data from the 1995 AUTM licensing survey, from which estimates of the benefits and costs of maintaining a TTO were made.	The criteria used to provide the estimates: - Technology transfer office (nº of staff, salaries and overhead) - Patent costs - New research grants - Royalties	On a national scale the technology transfer programs appear to be making money for some institutions and providing benefits to their local communities. Although only half of the universities are operating profitably this may be due to the short term (5 to 10 years) their programs have been in operation.
Policy/contextual-related factors	(Rasmussen, 2008)	How can government instruments facilitate the commercialization of university research based on the Canadian case?	Case study of the variety of national government initiatives available in Canada, and how these initiatives are operated.	n/a	Government initiatives encourage a bottom up approach. This is accomplished by providing resources for direct use in commercialization projects or to develop professional expertise in technology transfer in the university sector, by experimenting with new initiatives, and finally by facilitating cooperation between commercialising organizations
	(Friedman and Silberman, 2003)	What are the characteristics of research universities that affect the number of invention disclosures? What are the university policies, incentives, regional and local characteristics that affect the technology transfer output?	AUTM, National Research Council, universities' published policy on distribution of royalty income Invention disclosure, licenses executed, licenses generating income, cumulative active licenses, license income	n/a	Factors enhancing university TT: greater rewards for faculty involvement in TT, proximity to regions with concentration of high-tech firms, a clear mission in support of TT, and the experience of technology transfer office. The number of invention disclosures influences licensing agreements, while faculty quality affects the number of disclosures.
	(Goldfarb and Henrekson, 2003)	What are the national policies that are most efficient in promoting the commercialization of university-generated knowledge?	n/a	n/a	Top-down nature of Swedish policies of commercializing university inventions and Swedish academic environment discourage academics in actively participating in the commercialization of their inventions. US institutional setting, characterized by competition among universities for research funds and scientists, has led to a more active commercialisation of faculty inventions.

Chapter 2. The role of innovation policies in fostering technology transfer

2.1. Initial considerations

The European Union institutions have proven to be very concerned about the "European paradox", translated into the lack of capacity, with respect to U.S. and Japan, to transform scientific knowledge into new products and processes, and thus to increase employment and growth. As already refereed during the introductory part, in the US the Bayh-Dole Act represented one of the most influential policy-change towards the commercialisation of university research (Rasmussen, 2008). The subsequent success in the US in bringing research results into the marketplace inspired legislative changes in several countries around the world, following the assumption that universities should be given incentives to support an infrastructure for the commercialisation of research (Rasmussen, 2008). In particular in Europe, the notion that innovation needs to be supported and subsidised actively by public funding resulted in a mindset that public intervention is mandatory to prevent market failure (Leydesdorff et al., 2002) or, what more recently has been known as, systemic failures (Arnold, 2004; Smith, 2000). As a consequence, many European countries are increasingly implementing reforms and initiatives to promote technology transfer from universities (Rasmussen, 2008) emerging top-down, from the government and its agencies, as well as bottom-up from individuals and institutions, such as IP regulations in universities (Goldfarb and Henrekson, 2003).

Recently, in Europe there has been considerable interest in the way in which innovation policies can be used to strengthen economic development in the European Community which, in turn, has led to a proliferation of innovation support mechanisms, such as science parks, regional technology advisory centres, collaborative research centres, venture capital funds, and university technology transfer offices (Charles et al., 2000). Can these policies and instruments really impact in technology transfer and improve the efficiency rate to which intermediary structures such as TTOs operate? Furthermore, in a world where business as well as science and technology are increasingly transnational, is it possible to allege that the performance of a TTO is derived from the policies implemented in its country of origin? This chapter is organised in three sections. Firstly, the concept of innovation policy and its emergence from national to transnational level is briefly clarified in Section 2.1. Secondly, the main trends and challenges faced by national innovation

policies are presented in Section 2.2 and, finally, the possible interrelation between innovation policies and technology transfer is described in Section 2.3.

2.2. From national to transnational: concept and emergence of innovation policy in the EU

The European Commission (2000: 9) defines innovation policy as "…a set of policy actions to raise the quantity and efficiency of innovative activities, whereby "innovative activities" refers to the creation, adaptation and adoption of new or improved products, processes, or services…" (European_Commission(b), 2000). The INNO-Policy Trendchart further adds that Innovation policy measures are defined as any activity that mobilises: (1) resources (financial, human, and organisational) through innovation orientated programmes and projects; (2) information geared towards innovation activities and (3) institutional processes (legal acts, regulatory rules) designed to explicitly influence environment for innovation (European_Commission(a), 2008). In short, public innovation policy aims to strengthen the competitiveness of an economy or of selected sectors of it, in order to increase societal welfare through economic success (Kuhlmann and Edler, 2003), by stimulating, guiding, and monitoring knowledge-based activities within a political jurisdiction (Mothe, 2004).

Being an integral part of the innovation system, understood here as the interconnections of institutions, corporate actors and processes contributing to industrial and societal innovation, "innovation policies" are multifaceted, ingrained and wide ranging, including all state initiatives regarding science, education, research, technology development and industrial modernisation and which may also overlap with industrial, labour and social policies (Kuhlmann, 2001; Kuhlmann and Edler, 2003; Shapira et al., 2001). Furthermore, they can be developed and implemented at various levels: local, regional, national and European (European_Commission(b), 2000). They are executed by a wide range of differentiated innovation policy instruments, reflecting the scope of institutions and interests involved, as for: various forms of financial incentives for research institutions; the conducting of research and experimental development in public or industrial research labs; the design of infrastructure, innovation clusters and poles, including the institutions and mechanisms of technology transfer (Kuhlmann, 2001).

Innovation policies emerged to offset "market failures" reflected in insufficient allocation of funding for risky and innovative investments (European_Commission(a), 2008).

Nevertheless, evidence suggests that in practice innovation policy is driven by a much more diverse set of issues (European_Commission(a), 2008). Recently the theory of market failure as a basis for policy has been extended to include the notion of "systemic failures", which take into account not only the key deficiencies of companies but also failures in capabilities, behaviour, institutions and framework conditions which damage system performance and justify intervention (Arnold, 2004). Table 3 describes the main typologies of failures in innovation systems found in literature. Innovation policy challenges described in Section 2.3 will further built upon the failures indicated in this table.

Table 3: Main typologies of innovation systems failures

Market failure	Three prime sources for market failure coexist (Falk, 2007): (1) the appropriability problem, translated into innovating firms bearing high costs when generating new knowledge that spills over to society, competing firms included, and hence cannot reap the full benefits thereof; (2) the key generation of knowledge may require a scale of effort larger than individual firms alone could generate or sustain and (3) risks and uncertainties associated to initial investments while markets that insure against these risks either do not exist or they do not function properly due to information asymmetries.
Capability failure	Inadequacies in the ability of companies to act in their own best interest due to managerial deficits or technological deficits (Arnold, 2004).
Failure in institutions (norms and regulations)	Inability of other actors of the national innovation system to work properly, for instance due to rigid rules that might hinder change or adaptation in universities (Arnold, 2004).
Network failures	Problems in the interactions among actors in the innovation system such as inadequate amounts and quality of interlinkages (Arnold, 2004).
Framework failures	Gaps and shortcomings of regulatory frameworks health and safety rules, IPRs as well as other background conditions, such as the sophistication of consumer demand, culture and social values (Smith, 2000).
Policy failure	Reflected in activities to enhance the policy process and to induce policy learning (European_Commission(a), 2008).

In terms of chronological evolution, for most OECD countries, it was the Second World War, and after that the national security considerations and the Cold War which settled the stage for a technology burst of development, the close collaboration of industry, universities and government and the links between science and technology (Freeman, 2003). Policies for the development of science and technology which had up until then been sporadic and relatively small-scale, became recognized as a regular requirement of

government, at first in the military field but soon for civil industry as well (Freeman, 2003; Lemola, 2002). During the following 40 years, policies and instruments for the funding of R&D have shown an irregular evolution and development, reflecting budgetary constraints, the outcomes of political compromises, and prevailing ideas about what a European science and technology policy should be (Pavitt, 1998).

Despite the emerging importance of stimulating R&D and the development of technological competitive advantage over the USA and Japan, neither industrial policy nor research and development policy were among the areas covered in the 1967 Treaty of Rome (Mytelka and Smith, 2002). It was not until the 1970s that industrial policy turn into an area of activity for the European Union (EU) and that science and technology become linked with such policy (Georghiou, 2001; Grande and Peschke, 1999), but still regulation and support of high technology sectors and R&D policy occurred almost entirely at the national level in EU member states (Gulbrandsen and Etzkowitz, 1999). In fact, until recently, the innovation policies of European countries clearly reflected the profiles of their national (and regional) innovation systems (Kuhlmann, 2001). But is also true that frontiers are permeable and countries copy and learn from each other, as a consequence policies increasingly follow a transnational tendency. These developments have both been influenced and reinforced by the rise of transnational public programs of R&D support, such as Eureka, the Framework Programme, which arose in response to a situation where individual R&D activities were uncoordinated and required a large number of Council decisions, and the increasing activity of organizations such as the European Commission (Georghiou, 2001; Grande and Peschke, 1999; Lemola, 2002).

With the Single European Act and the Maastricht Treaty, the EU innovation policies acquired a legal basis and enlarged scope (Grande and Peschke, 1999). Still, EU policies must, officially, be concentrated on the creation of "European added value" (Kuhlmann, 2001) and must obey two guiding principles: the "subsidiarity principle" proclaiming that whatever can be done at the local governmental level, should be done at the local governmental level and the "additionality principle" by which if a policy can be reproduced at national level it should not be undertaken (European_Commission(b), 2000).

The influence of EU policy on the national level is of relevance to each Member State to varying extent including, but not limited to, the influence of the Lisbon Strategy, the influence of the Framework Programme and the influence of the structural funds, which all together may impact on national strategy formulation or on the implementation of

instruments as well as more structural elements of the governance system such as evaluation procedures (Whitelegg et al., 2008). The decision, in the March 2000 Lisbon European Council, to create a European Research Area (ERA), further emphasised the need for programmes and policies implemented and funded at European level as well as effective European-level coordination of national and regional research activities (European_Commission, 2007). The impact of such reform was visible on the compromise of all Member States in setting national R&D investment targets in the context of the overall EU 3% of GDP R&D investment objective (European_Commission, 2007).

National as well as transnational innovation policy governance is characterised by, more or less, formalised "negotiations" between multiple self-interested groups of actors, (industries, research and education institutions, policymakers, etc.) that coexist in innovation systems (see Figure 4) (Kuhlmann, 2001).

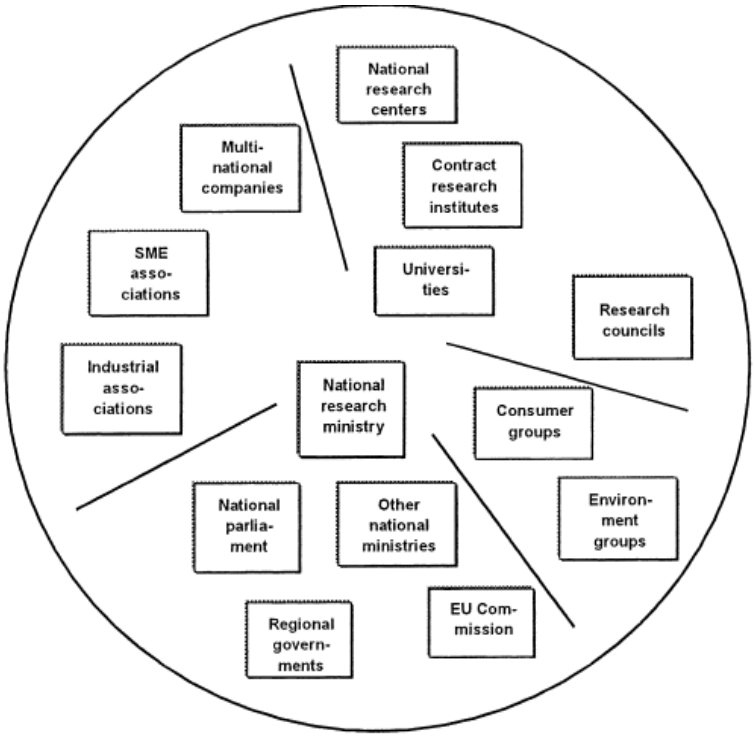


Figure 4: Innovation policy arena
Source: in (Kuhlmann, 2001)

In this context, linking science and industry in a systematic way without jeopardizing the necessary autonomy of the sub-systems involved has become a characteristic feature of national innovation policy as well as a major challenge (Grande and Peschke, 1999). In the EU, this 'linkage problem' has an additional dimension since innovation policy is not only confronted with the issue of establishing channels of communication for cooperation among the actors and organizations relevant in science & technology policy, but in

addition, the different national research systems and the various levels of policymaking have to be linked and integrated as well (Grande and Peschke, 1999).

So far, policy coordination at the EU and national level has been addressed through the 'open method of coordination' and the use of voluntary guidelines and recommendations (European_Commission, 2007). Despite these transnational efforts, evidence of a ‘‘governance gap’’ reflected in the high degree of fragmentation, stratification and duplication of innovation policies in Europe still exits (Kuhlmann and Edler, 2003). The majority of public initiatives is still mainly developed in national policy arenas addressed to national beneficiaries, in the implicit assumption that the research institutes, universities and enterprises involved carry out their innovation activities entirely or for the most part within national boundaries (Kuhlmann, 2001). There is a role for the political system to intervene in regional and national innovation systems but there is also an emerging consensus that the idea of a European level of innovation policy needs to be developed (European_Commission, 2002). Diversity is a European asset, but a lack of transparency, bad coordination, and duplication means a waste of resources: innovation policy in Europe needs structure, adaptation, coordination and mediation (European_Commission, 2002).

2.3. Mapping of European innovation policies main challenges and priorities

Different countries reveal different approaches towards science and technology policy design and implementation in response to specific challenges inherent to their national innovation systems and, in essence, as a result of their history, culture and political contexts (Lemola, 2002). In the last decade, most OECD countries have been confronted with a new set of challenges to improve the efficiency of public research and to facilitate the translation of research into commercial realities (OECD, 2004). These challenges have been described, in a broadly categorisation, as belonging to two types: pressures for science systems to respond better to a more diverse set of stakeholders and the need to adapt to changes in the processes of knowledge creation and transfer (OECD, 2004).

At European level, policy challenges are identified on the basis of several elements, with emphasis being put in the EU-27 country reports and the latest comparative results provided by the European Innovation Scoreboard (EIS), which provides a comparative assessment of the innovation performance of EU Member States (European_Commission(a), 2008). Responses to these challenges affect the decision

making processes that determine the setting of research priorities, the allocation of funds to the public and private research sectors and the management of research institutions (OECD, 2004). The following analysis on the challenges and priorities of European innovation policies has been based on the 2008 European Innovation Progress Report (EIPR),[7], which provides a synthesis of the work undertaken by the network of national innovation correspondents that draft the INNO-Policy TrendChart country reports. Each year the national correspondents are asked to identify the key challenges facing innovation policies in their country.

From the perspective of a typology of failures in innovation systems (market; capabilities; institutional; network; framework and policy failures), cf. Table 3 in Section 2.2, the identified challenges have been classified in the 2008 EIPR and their relative weighting is summarised in Figure 5.

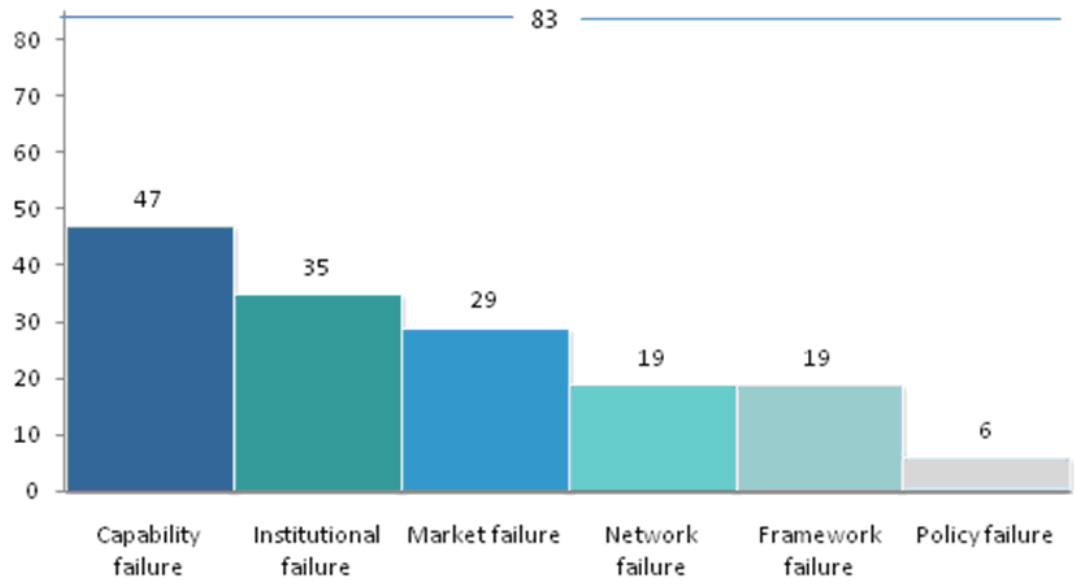


Figure 5: Failures targeted by EU-27 innovation policy challenges
Note: The numbers over the vertical bars indicate the number of challenges addressing one or more failures. There were 83 challenges defined in the 2008 TrendChart country reports.
Source: in (European_Commission(a), 2008)

Capabilities failures, translated into managerial deficits, weak know-how on technological or organisational innovation, have been reported as the most predominant failure, ahead of market and institutional failures, suggesting that more attention should be given in policy support to alleviate internal factors hindering innovation from European enterprises

[7] The EIPR analysis is based on the count of the number of innovation measures introduced in INNO-Policy Trendchart. Due account should be taken to the fact that advanced countries tend to introduce a smaller number of larger, more complex support measures addressing diverse groups of stakeholders, which may be reflected in the results obtained, European_Commission(a). (2008) European Innovation Progress Report 2008. In Inno Policy Trendchart: Enterprise Directorate-General.

(European_Commission(a), 2008). Network failures, as for industry science cooperation and clustering, often considered a weakness of many national innovation systems, was less relevant as a challenge than market, institutional and capabilities failures (European_Commission(a), 2008).

Concerning the policy mix and the extent to which it targets a particular failure (see Figure 6), the moderate innovators[8] and catching-up countries give much more emphasis to "capability failures", in the form of direct support to companies, while the more advanced countries pay more attention to network failures, reflecting a shift to a broader understanding of innovation drivers in their economies (European_Commission(a), 2008).

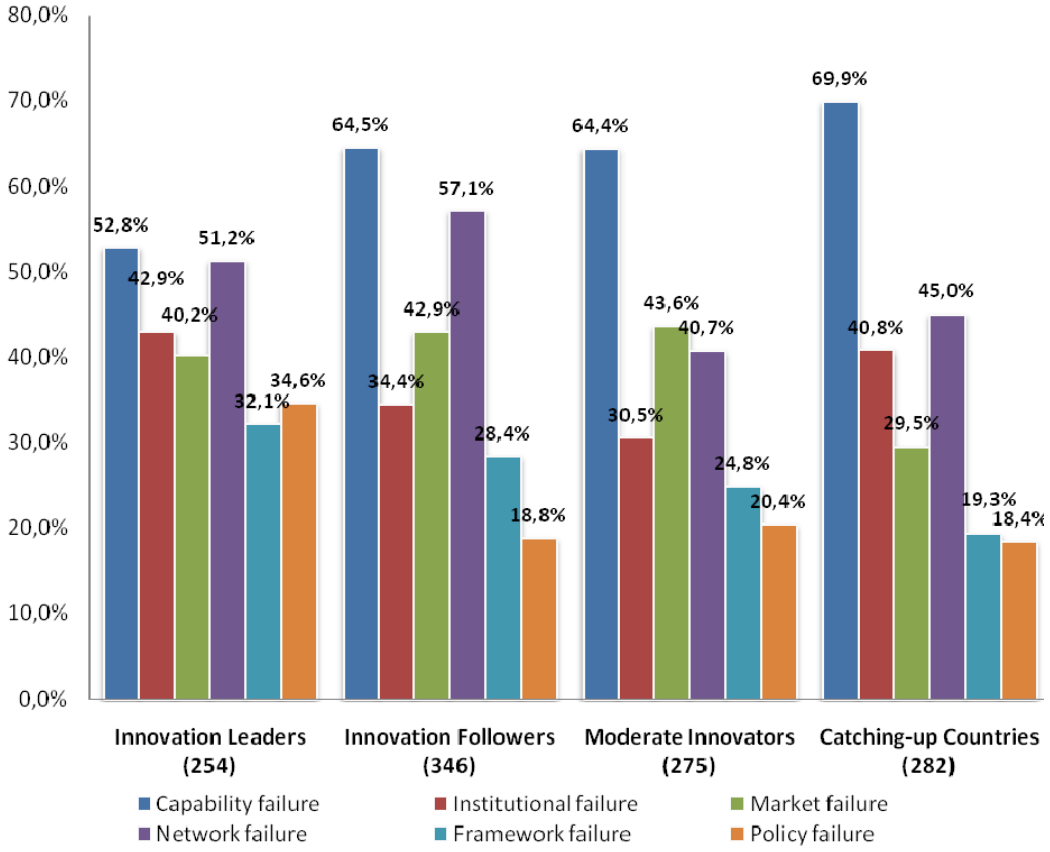


Figure 6: Differences in failures addressed by EIS country group.
Note: The percentages refer to the share of measures in of EIS country group addressing a given failure. Measures can target more than one type of failure. The numbers in brackets indicate a total number of support measures in EIS groups (N=1157).
Source: Adapted from (European_Commission(a), 2008).

.

Regarding the priorities most often addressed by EU-27 innovation policies, "support for R&D cooperation", including joint research projects run by public-private consortia of business and research, ranks first (Figure 7) with nearly one-third of all support measures

[8] According to the European Innovation Scoreboard (EIS) countries are ranked into 4 categories based on their innovation performance across 29 indicators (the Summary Innovation Index – SII): innovation leaders and followers if they rank above the EU-27 SII scores and moderate innovators and catching-up countries if they rank below. More information about the EIS and SII may be found in http://www.proinno-europe.eu.

reporting R&D cooperation as one of their key priorities (European_Commission(a), 2008). Changing innovation processes and trends in the division of labour between the private and public sectors may partly justify the need for strong industry-science linkages (OECD, 2004). Such linkages serve both to facilitate industry's uptake and commercialisation of public-sector research results and to ensure that research performed in the public sector is adjusted to social and economic problems (OECD, 2004).

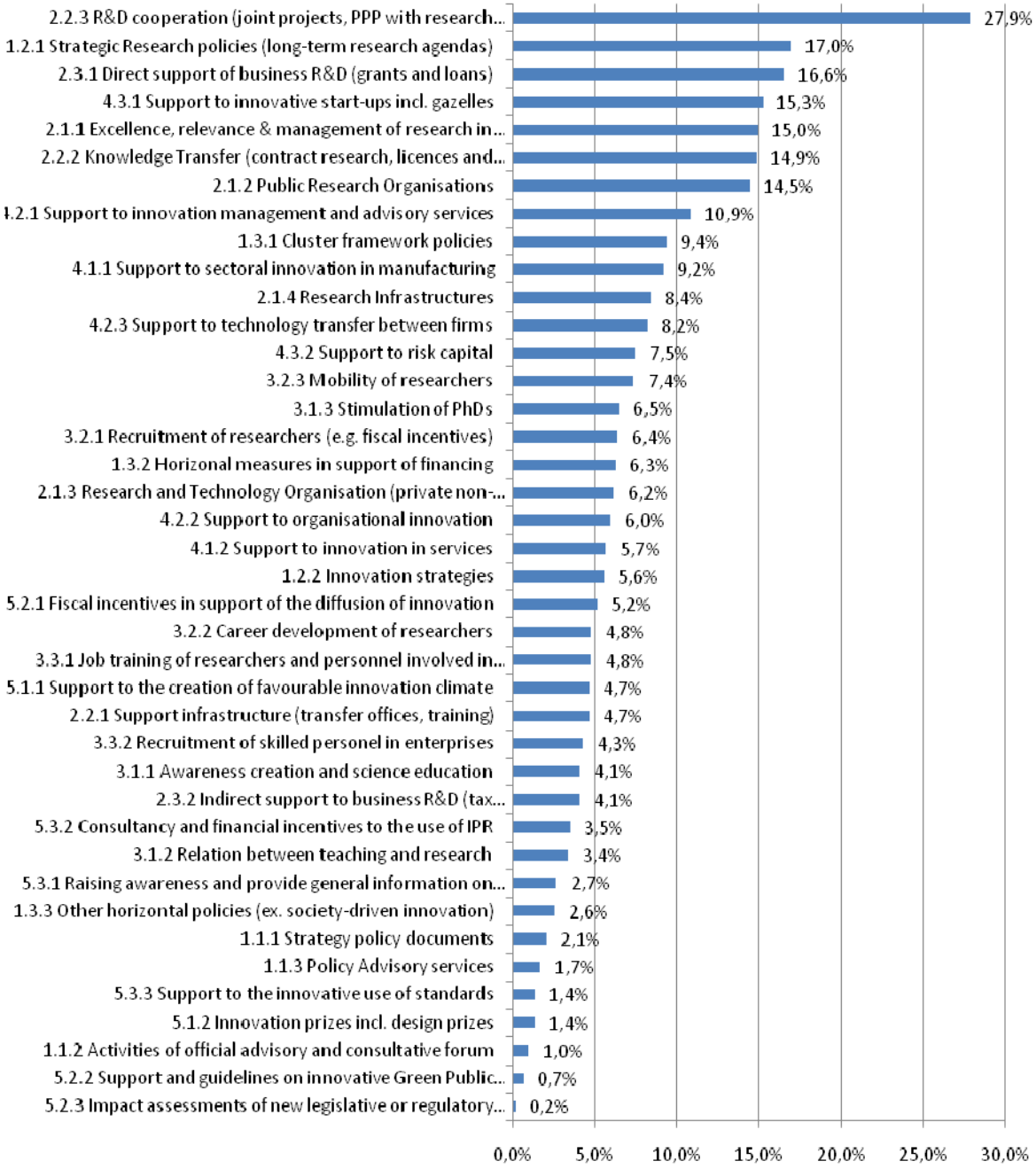


Figure 7: Policy priorities in the EU-27 innovation policy mix

Note: Percentages refer to the share of measures addressing a given policy priority in the overall EU innovation policy mix (N=1157). A single support measure can be assigned up to four policy priorities

Source: Adapted from (European_Commission(a), 2008)

The following most often addressed priorities include implementing strategic research policies such as long-term research agendas (17% of support measures), direct support for business R&D (17%), support to innovative start-ups (15%), measures targeting excellence and management of research in universities (15%) and knowledge transfer, covering contract research, licensing and IPR issues, (15%) (European_Commission(a), 2008). Bottom line is the "impact assessment of new legislative or regulatory proposals" with only 0,2% of measures from EU-27 member states directed to tackle this priority (European_Commission(a), 2008).

Surprisingly, measures addressing human capital are relatively under-represented in the overall policy mix, notably in what concerns mobility of researchers (7%), recruitment of researchers (6%) and skilled personnel in enterprises (4%), job training of researchers and other personnel involved in innovation process (5%), career development of researchers (5%) as well as, more generally, stimulation of PhDs (6%) (European_Commission(a), 2008). Qualified and mobile human resources are the foundation of all scientific and technological accomplishments in the public and private sectors, both factors are seen as an important aspect of efforts to diffuse scientific and technological knowledge (OECD, 2004). As stressed in OECD study on Science and Innovation Policy Key Challenges and Opportunities (2004: 14), "policy makers are looking into a variety of measures to help increase graduation rates, mobility and the relevance of educational programmes". Hence, although recognised as a need for policy intervention, still, comparatively to other priorities, not enough attention is being given by the EU-27 to the implementation of specific measures addressing human resources for science, technology and innovation. The EC has been an active proponent in setting programmes to promote the mobility of researchers on a pan European scale compensating for the incentive shortage at national level (Siegel et al., 2007). Examples of such initiatives are the Framework Programme Marie Curie Mobility Grants and, more recently, the Marie Curie Industry-Academia Partnerships and Pathways (IAPP) to foster exchange of know-how and experience through one-way or two-way secondments between the private and public sector.

Also elucidative is the analysis of the evolution of policy priorities over time represented in Figure 8. From mid-1990s until mid-2008 shifts in the innovation policy agenda demonstrate an increasing number of measures supporting science-industry links, at the beginning of the 2000s, and measures targeting start-ups from 2006 onwards (European_Commission(a), 2008). The accentuated increase in the number of innovation

policy measures from 2004 onwards is clearly due to measures introduced in the new Member States, mostly co-financed by the Structural Funds (European_Commission(a), 2008).

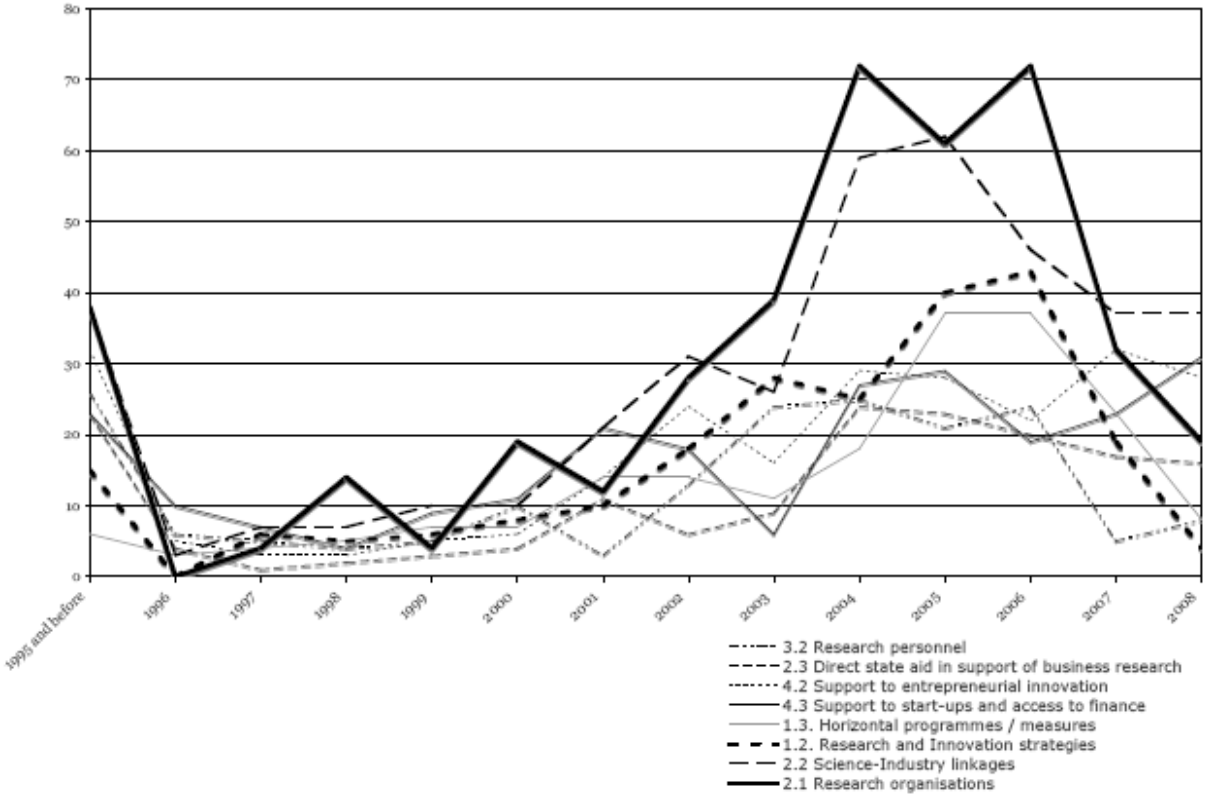


Figure 8: Evolution of the priorities of innovation policies

Note: The absolute values on the vertical axis represent a number of new measures addressing a policy priority introduced in a year. The exhibit presents the priorities with 150 and more measures currently reported as web-published or draft in the support measure database. The chart does not account for an accumulation of measures in time.

Source: in (European_Commission(a), 2008)

Innovation policies are concerned above all with companies, nearly 65% of measures, and research performers with more than 42% of all support measures (European_Commission(a), 2008). Notably, in last couple of years, a higher importance has been given to support measures targeted at improving the diffusion of technologies in enterprises and innovation management and commercialisation of innovation (including IPR) (European_Commission(a), 2008), which may be interpreted as a higher concern for technology transfer issues in the innovation policy agenda of most European countries.

2.4. Innovation policy and technology transfer

The environment in which technology transfer takes place plays a key role in defining the best approaches and, ultimately, their success. The ability to innovate depends not only on the organisation innate conditions but also on its context: including "framework conditions" and governance mechanisms which surround it (Falk, 2007), considered by

some to be the most important external factors stimulating universities to engage in technology transfer and establish TTOs (European_Commission(b), 2004). In fact, the form of incentives for public research organisations to engage in technology transfer affects not only the likelihood and efficiency of technology transfers but also its orientation and the channels used for this purpose.(European_Commission(b), 2004). For instance, the public funding of incubator facilities in a science park may help to established several companies in the surroundings of the university stimulating collaboration links, employment opportunities for alumni and knowledge transfer. In the same way governments may take the lead in promoting venture capital and proof of concept incentives which may very well be decisive to un-shelve technologies that otherwise could not be further developed.

Diffusion-oriented policies have been in place in some countries for several years reflecting a growing consciousness that knowledge transfer must improve in order to accelerate the exploitation of research and the development of new products and services (European_Commission, 2001; Georghiou, 1997; Siegel et al., 2007). An increasing goal of the EU innovation policy has been to enhance the effectiveness and coherence of existing innovation and technology transfer instruments and policies, and to disseminate knowledge concerning innovation processes (European_Commission, 2002). The question of stimulating technology transfer has been also stressed in various discussions at European Council level. As an illustration, in the conclusion of the Competitiveness Council of September 2004[9] it is stated that: "The Council of the European Union highlights the need to pay special attention to actions in the following areas: (...) promoting favourable conditions for technology transfer and innovation, especially, taking into account the needs of SMEs, noting in this context the important of intellectual property rights."

The shift to more collaborative forms of innovation has stimulated the expansion of markets for technology through which technologies are licensed or shared (OECD, 2004). Nowadays, virtually all regions in Europe provide some sort of support, direct or indirect, for technology transfer activities, either for Technology Transfer Offices, spinouts or licensing (European_Commission, 2002). Whereas support was originally often indirect and targeted at the development of economic growth and the creation of jobs through start-

[9] Council of the European Union, Competitiveness (Internal Market, Industry and Research), Council Conclusions, Brussels, 24 September 2004, 12487/2004. TTA Final report.

ups, more and more regions are now implementing programmes that directly support technology transfer (European_Commission, 2002). Among the direct policy measures to foster technology transfer and links between science and industry, the following measures are well-established practices in almost all countries (European_Commission, 2001): (1) specific financial support for collaborative research, mostly provided within thematic programmes or for special groups of enterprises (SMEs), based on the assumption that direct collaboration between industry and science researchers is the most effective way to transfer knowledge and exchange competence; (2) specific financial and informative support to SMEs, directed towards improving innovation management capabilities, enlarging R&D and innovation financing, and direct grants for stepping into collaborative research relationships, contract research, personnel mobility, training and consulting services; and (3) researchers mobility from science to industry, including subsidies to enterprises (typically small enterprises) for covering labour costs when employing young researchers, scholarships for PhD students for carrying out a PhD at an enterprise, exchange programmes for mutual visits and temporary placements.

Having a dominating SME structure of the enterprise sector, Austria is one of the countries that most actively has been working in the implementation of measure to support collaborative R&D efforts targeted to SMEs (European_Commission, 2001). The policy measure "Innovation Voucher" (AT 159),[10] an incentive for Austrian SME to cooperate with knowledge institutes for the first time, illustrates this trend. Austrian SME can obtain a 5,000€ Innovation Voucher through a simple application procedure and spend it in a contract with a public R&D institution or a university that do e.g. studies, feasibility analysis, concepts for technology transfer or innovation projects etc. In Denmark, a new programme named "open" funds (DK 34),[11] has also been established to strengthen the research and innovation cooperation between SMEs and the research and academic community. "Open" funds will be awarded to projects that do not fall under the category of already known forms of cooperation. Public financing reduces barriers to entry for such collaborations, such as uncertainty of outcome, information asymmetries, and the problem of individually appropriating the results of joint research efforts (European_Commission, 2001).

[10] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CAT=39&CO=1), accessed 26th June 2009.

[11] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=3, accessed 26th June 2009.

To stimulate the mobility of researcher and stop the "brain drain", Belgium implemented the Brussels-Capital - Brains (back) to Brussels (BE 184) with the aim to invite high-level scientists to come to or return to the academic research in Brussels. The research projects that receive financial support need to contribute to the development of the Region. Portugal implemented the "Doctoral Grants in Companies" measure (PT 72),[12] aimed at attracting doctoral students to focusing their dissertation on issues relevant for firms, and to undertake them in a firm context and, in this sense, encouraging a strategy of cooperation between companies and Universities.

Industry representatives often mention the lack of transfer capabilities in public science (with respect to both individual researchers and the organisation) as a major barrier to interaction, therefore, policy attempted to overcome this bottleneck by employing a variety of measures, including the establishment of technology transfer offices to reduce transaction costs, eliminate information asymmetries and increase professionalism in transfer activities (European_Commission, 2001). This concern is reflected in policies such as the Hungarian "INNOTETT" (HU 110),[13] to develop the services of technology transfer centres, business incubation, connecting R&D performing organisations and firms utilising their results and to strengthen their market oriented attitude, and Switzerland policy "KTT - knowledge and technology transfer" (CH 20)[14] to implement five consortiums consisting of KTT service centres to link TTOs at universities, and the federal institutes of technology on a regional level and promote "good practices" in technology transfer to the private sector. Nowadays, most universities run their own technology transfer/liaison offices, or have access to consulting networks that support scientists in patenting and licensing activities (European_Commission, 2001).

The promotion of start-ups from science is currently also a well-established element of innovation policy in Europe, with almost all countries introducing new supportive measures, many of them based upon regional approaches, combining infrastructure (incubators), consulting and pre-seed financial support (European_Commission, 2001). The UK High Technology Fund (UK 54),[15] is a "fund of funds", it commenced in 2000 and

[12] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=15, accessed 26th June 2009.
[13] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=20, accessed 27th June 2009.
[14] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=45, accessed 27th June 2009.
[15] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=18, accessed 26th June 2009

has raised €152 million in funds, to invest in venture capital funds targeting the early stage high technology SME sector. With similar intentions, Finland implemented the Funding Scheme for Young Innovative Companies (FI 36),[16] to increase the number and to accelerate the development of enterprises which are willing to grow fast and to get international.

There are also a number of policy initiatives in the field of strengthening the use of IPR in public science, including financial support, expert advice, and administrative support (European_Commission, 2001). Solid examples of some of those policies are the GAPI - Industrial Property Support Offices (PT 26),[17] financing small units specialised on the provision of information and on the development of actions concerning the promotion of industrial property and the creation, in Denmark, of Patent Information Centres and Thematic Information Centres (DE 7)[18] to provide access to scientific and technological information that is contained within patents, registered designs and trade marks for firms and private inventors.

.

[16] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=4, accessed 26th June 2009.
[17] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=15, accessed 26th June 2009
[18] In http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=list&CO=3, accessed 26th June 2009

Chapter 3. Innovation policies and TTO efficiency: methodological approach for the comparison between Portugal and Switzerland

3.1. Initial considerations

Assuming that innovation policies play a relevant role in stimulating universities to be involved in technology transfer activities and, as a consequence, implement TTOs, the present study was designed to assess whether such policies may be responsible for higher levels of technology transfer efficiency, reflected in technology transfer outputs (number of patents, spin-offs created, industry-university contracts and licensing income) generated by technology transfer offices. We hypothesise that countries with higher levels of technology transfer efficiency in relation to the abovementioned outputs, have implemented policies with stronger emphasis in the support of technology transfer activities, than others. In this regard we took two countries with very different performances concerning technology transfer: Switzerland, widely associated to high levels of technology transference efficiency, and Portugal, were technology transfer is high on the political agenda and where, in the last 8 years, most universities have implemented a TTO to manage their research results commercialisation, but still with limited results.

The present chapter details the methodological approach used to access and compare innovation policies in Portugal and Switzerland to test their relation to technology transfer and, in concrete, to technology transfer offices efficiency. The country selection was mainly based on the performance of TTOs assessed by Conti and Gaule (2008) in the CEMI Survey of University Technology Transfer Offices in Europe and is presented in Section 3.2. The unit of analyses consisted in the innovation policies for Portugal and Switzerland included in the European Inventory of Research and Innovation Policy Measures (EIRIPM). Section 3.3 explains the reasoning for using the EIRIPM database to gather information about the policies and Section 3.4 the procedure undertaken to analyse the policies and their impact in technology transfer efficiency.

3.2. Why Portugal and Switzerland? Some notes on countries' performance regarding technology transfer

The empirical analysis for the selection of the countries to compare in terms of TTO efficiency is based in information contained in the CEMI Survey of University Technology Transfer Offices in Europe. This survey targeted TTOs of 355 universities, located in Western European countries, whose researchers published more than 200 scientific articles, according to information collected from the ISI Web of Science, in the period 2004-2006 (Conti and Gaule, 2008). A response rate of 59.4% (211 responses) was obtained, with answers coming from 15 countries, considered by the authors to be broadly representative of the target population in terms of size and geography (Conti and Gaule, 2008). The response rate was higher than average for small countries such as Switzerland, Denmark, Belgium, Norway, Finland, Portugal and Ireland (Conti and Gaule, 2008). We have taken this response rate into account in the selection of the countries to compare.

The metrics used in the survey to access success in technology transfer, represented in Table 4, included: license income; number of licenses/options executed; industry sponsored research contract income; number of industry sponsored research contracts; number of patents awarded; number of start-ups established (Conti and Gaule, 2008). For the aim of this study we only took into account the metrics ranked from "Important" to Extremely important" by the majority of respondents in issues such as licensing income; industry sponsored research contracts; number of industry sponsored research contracts; number of patents awarded and number of spin-offs created (cf. Table 4). These findings are consistent with the ones referred in the work of Siegel et al. (2003), based on interviews to 15 TTO directors/administrators in which licences, royalties, patents, sponsored research agreements and start-up companies where ranked higher as the main outputs of university/industry technology transfer (Siegel et al., 2003).

For the selected metrics, Switzerland ranked consistently among the top four countries, being the first in terms of the greatest number of licenses executed (followed Belgium, Denmark and the UK); the country that earns the most from licenses (other countries that reported above average results include Belgium, Denmark, the UK, and the Netherlands), the forth in terms of the greatest number of start-ups created (Sweden ranks first followed by the Netherlands and Finland) and the third in the number of industry sponsored research contracts (surpassed only by Danish and Spanish TTOs) (Conti and Gaule, 2008).

Table 4: Technology transfer metrics of success used in CEMI survey

	Extremely important	Very important	Important	Somewhat important	Not important
License income	17,56	20,00	**33,17**	14,15	15,12
Number of licenses/options executed	15,12	10,73	27,32	**30,73**	17,07
Industry sponsored research contract income	**28,29**	**28,29**	22,93	6,83	13,17
Number of industry sponsored research contracts	18,54	**29,76**	27,80	7,80	16,10
Number of patents awarded	14,63	22,93	**35,61**	14,15	14,15
Number of start-ups established	12,68	**32,20**	27,32	10,24	7,80

Note: Respondents were asked to rank the importance of each metric. Values represent percentage of answers to each metric. Most frequent answers in bold; n=205.
Source: In (Conti and Gaule, 2008)

On the other extreme we have Portugal, a country that in recent years has been strongly committed, both at political and institutional level, to increase technology transfer efforts from public research to industry, visible in the implementation of TTOs in almost all universities as well as in the creation of public incentives for technology transfer, but still with very scarce results. In the CEMI survey Portugal is among the countries with the lowest results in terms of licensing number and licensing income as well as industry sponsored research contracts (Conti and Gaule, 2008). An exception was the number of start-ups created in which Portugal borderlines the average of respondents (Conti and Gaule, 2008).

Additionally, in terms of average staffing levels Switzerland TTOs relate closely to the Portuguese ones, ranging from 6 to 8 full time equivalents employees, and were established in approximate periods of time, with the majority of Switzerland TTOs being established between 1998 and 2002 and Portuguese TTOs in the period ranging from 2003 to 2007.

For the above mentioned reasons we elect Switzerland and Portugal as the countries to compare innovation policies in order to determine their potential influence in technology transfer efficiency at the level of technology transfer offices.

3.3. The policy analysis: explaining the option for the European Inventory of Research and Innovation Policy Measures (EIRIPM)

The European Inventory of Research and Innovation Policy Measures (EIRIPM) was created by the European Commission with the aim of facilitating access to information on research and innovation policies and measures within Europe and beyond.[19] This joint inventory brings together national-level information on research and innovation policies, measures and programmes collected and presented by both INNO-Policy TrendChart and ERAWATCH.[20] It aims to ensure a high degree complementarity between the two policy monitoring platforms in order to harmonise the collection and presentation of information and also a practical division of responsibility to avoid unnecessary duplication of effort.[21]

The INNO-Policy TrendChart (previously TrendChart on Innovation), is an initiative of the European Commission, Enterprise & Industry Directorate General, running, since January 2000 to serve the 'open policy coordination approach' laid down by the Lisbon Council in March 2000 (European_Commission(a), 2008). The core of the INNO-Policy Trendchart is to improve understanding at European level of how member states design and deliver policies (European_Commission(a), 2008). Its findings are summarised in an extensive inventory of innovation policy information and policy measures in all participating countries and inform the annual country reports and an annual European Innovation Progress Report, which provide an in-depth analysis of the situation of innovation policy in the covered period.[22] It also produces a European Innovation Scoreboard (EIS) which measures innovation performances across the European Union. Initially covering only the EU-15, by 2006 the INNO-Policy TrendChart database of policy measures had grown into a repository of information on innovation policy in an ever-expanding group of countries, including the EU-27 plus candidate and associate European countries as well as progressively non-European competitors (European_Commission(a), 2008). As more countries joined the policy monitoring exercise and as innovation policy grew in importance the number of measures introduced by the network of national correspondents grew steadily (cf. Figure 9).

[19] In http://cordis.europa.eu/erawatch/index.cfm?fuseaction=about.collaboration, accessed 10th April 2009.
[20] In http://cordis.europa.eu/erawatch/index.cfm?fuseaction=about.collaboration, accessed 10th April 2009.
[21] In http://cordis.europa.eu/erawatch/index.cfm?fuseaction=about.collaboration, accessed 10th April 2009.
[22] In http://www.proinno-europe.eu/index.cfm?fuseaction=page.display&topicID=104&parentID=52, accessed 15th March 2009.

The ERAWATCH® is a long term initiative jointly carried out by the European Commission's Directorates-General for Research and Joint Research Centre - Institute for Prospective Technological Studies (IPTS) based in Seville.[23] Its objective is to provide knowledge and a better understanding of national and regional research systems and of the environment in which they operate. ERAWATCH collects data on national and regional research profiles, organisations, support measures and documents.[24] It organises and structures the information within its Research Inventory service and it develops further analysis and reporting activities on policies, trends and the factors influencing them within its Intelligence service.[25]

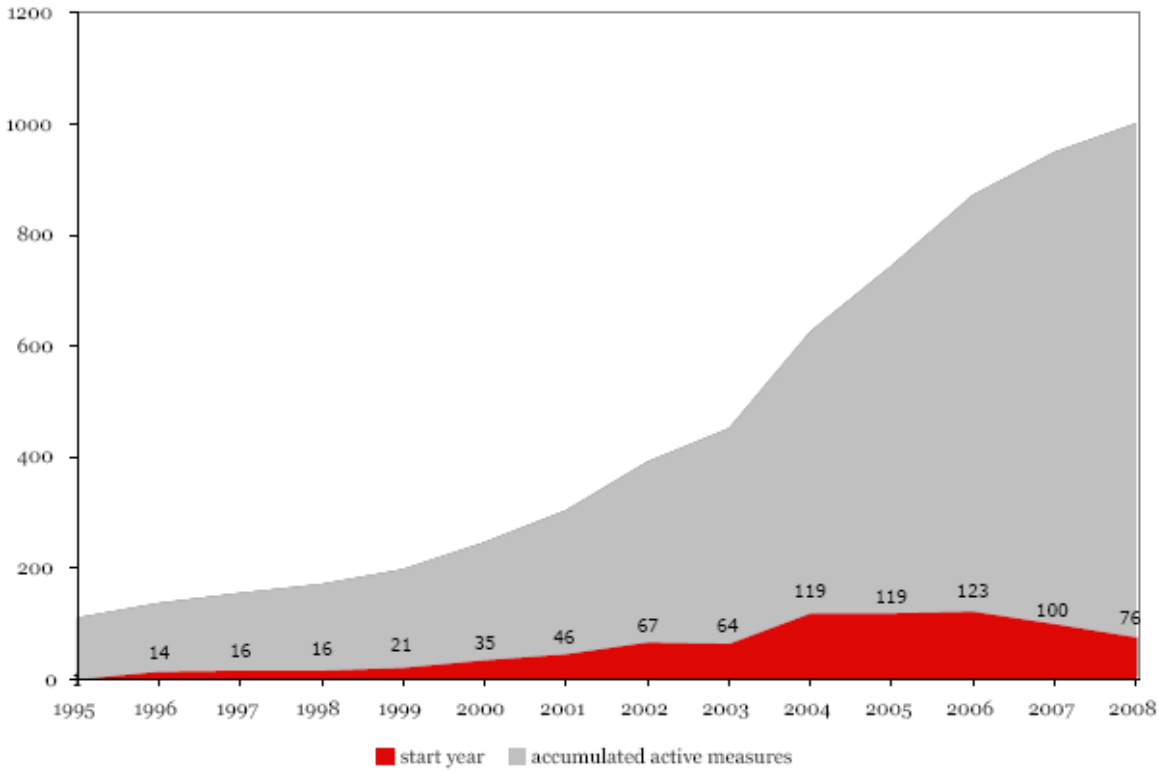


Figure 9: Evolution of the TrendChart-ERAWATCH database of support measures.
Note: The chart includes only the measures that have not been archived by mid-December 2008. The numbers over the red area indicate the number of new measures introduced to the TrendChart-ERAWATCH database in a given year. The grey area illustrates an accumulated number of measures.
Source: (European_Commission(a), 2008)

This information is collected and classified into five main sections according to specific policy priorities (see Table 5):[26] Section 1 "Governance and horizontal research and innovation policies" refers to information pertaining to governance and horizontal policies affecting both research and innovation policy developments, for example as embodied in

[23] In http://cordis.europa.eu/erawatch/index.cfm?fuseaction=about.home, accessed 10th April 2009.
[24] In http://cordis.europa.eu/erawatch/index.cfm?fuseaction=about.home, accessed 10th April 2009.
[25] In http://cordis.europa.eu/erawatch/index.cfm?fuseaction=about.home, accessed 10th April 2009.
[26] In http://cordis.europa.eu/erawatch/index.cfm?fuseaction=about.home, accessed 11th April 2009.

official government policy documents, and to funding for horizontal support measures; Section 2 "Research and technologies" deals with information covering core R&D policies and related measures aimed at both science and industry and at the interlinkages between them; Section 3 "Human resources" (education and skills) refers to all policies addressing the adequate supply, development and mobility of human resources for research and innovation; Section 4 "Enterprises" is centred on innovation and entrepreneurial activity in the private sector, including support to innovation management, non-technological innovation and access to risk and venture capital; Section 5 "Markets and innovation culture" refers to information on policy initiatives to foster and support innovation culture and the market for innovation including the stimulation of new markets, the diffusion of new technologies, enhancement of intellectual property protection and standards and impact assessments of new legislative or regulatory proposals on innovation. Table 5 also illustrates the policy breakdown by priority for Portugal and Switzerland that will be analysed in more detail in section 4.2.2.

To our knowledge, the EIRIPM is the most comprehensive database of innovation policies in Europe and, as such, a natural choice to access information for innovation policy analysis.

Table 5: Policy framework for the European Inventory on research and innovation policies measures

Number and title of innovation policy	Specific objective addressed	Incidence	
		PT	CH
1. Governance & horizontal research and innovation policies			
1.1. Support to policy making (policy intelligence)	1.1.1 Strategy policy documents (official documents, policy consultation papers, green or with papers, Operational Programmes of Structural Funds)	0	0
	1.1.2 Activities of official advisory and consultative forum	0	0
	1.1.3 Policy Advisory services (technology foresight, scoreboard type activities, cluster mapping, sectoral studies of innovation)	0	0
1.2 Research and Innovation Strategies	1.2.1 Strategic Research policies (long-term research agendas)	1	6
	1.2.2 Innovation strategies	1	1
1.3 Horizontal programmes/measures	1.3.1 Cluster framework policies	0	2
	1.3.2 Horizontal measures in support of financing	3	2
	1.3.3 Other horizontal policies (ex. Society-driven innovation)	2	0
2. Research and Technologies			
2.1. Research organisations	2.1.1 Policy measures concerning excellence, relevance and management of research in Universities	0	12
	2.1.2 Public Research Organisations	0	5
	2.1.3 Research and Technology Organisation (private non-profit)	0	0
	2.1.4 Research Infrastructures	0	5
2.2 Science-Industry linkages	2.2.1 Support infrastructure (transfer offices, training of support staff)	1	2
	2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)	1	5
	2.2.3 R&D cooperation (joint projects, PPP with research institutes)	5	23
2.3 State aid measures in support of business R&D	2.3.1 Direct support of business R&D (grants and loans)	3	1
	2.3.2 Indirect support to business R&D (tax incentives and guarantees)	1	0
3. Human Resources (education and skills)			
3.1. S&T education	3.1.1 Awareness creation and science education	0	2
	3.1.2 Relation between teaching and research	0	2
	3.1.3 Stimulation of PhDs	1	7
3.2 Research personnel	3.2.1 Recruitment of researchers (e.g. fiscal incentives)	2	1
	3.2.2 Career development (e.g. long term contracts for university researchers)	0	0
	3.2.3 Mobility of researchers (e.g. brain-gain, transferability of rights)	2	1
3.3 Skills development and recruitment	3.3.1 Job training (LLL) of researchers and other personnel involved in innovation	5	4
	3.3.2 Recruitment of skilled personnel in enterprises	4	0
4. Promote and sustain the creation and growth of innovative enterprises			
4.1. Support to sectoral innovation programmes	4.1.1 Support to sectoral innovation in manufacturing	4	4
	4.1.2 Support to innovation in services	4	1
4.2 Support to entrepreneurial innovation	4.2.1 Support to innovation management and advisory services	7	9
	4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc	8	0
	4.2.3 Support to technology transfer between firms	0	4
4.3 Support to start ups and access to finance	4.3.1 Support to innovative start-ups incl. gazelles	8	6
	4.3.2 Support to risk capital	7	1
5. Markets and innovation culture			
5.1. Measures in support of innovation culture	5.1.1 Support to the creation of favourable innovation climate (ex. Roadshows, awareness campaigns)	2	1
	5.1.2 Innovation prizes incl. design prizes	0	0
5.2 Support to the creation of new markets	5.2.1 Fiscal incentives in support of the diffusion of innovative technologies, products and services	1	3
	5.2.2 Support and guidelines on innovative Green Public Procurement (GPP)	0	0
	5.2.3 Impact assessments (on research and innovation issues) of new legislative or regulatory proposals in any policy field	0	0
5.3 Intellectual property protection and standards	5.3.1 Measures to raise awareness and provide general information on IPR	2	0
	5.3.2 Consultancy and financial incentives to the use of IPR	2	0
	5.3.3 Support to the innovative use of standards	0	0

Note: According to data downloaded from the EIRIPM inventory on the 10th of April 2009. A single support measure can be assigned up to four policy priorities

3.4. Correlating innovation policies with the efficiency of technology transfer offices: the procedure undertaken

The empirical analysis presented in the next chapter is based on data downloaded from the database of innovation policy measures included in the EIRIPM from March until May 2009. A total of 61 innovation policy measures - of which 27 belonging to Portugal (PT) and 34 to Switzerland (CH) - were analysed and scrutinized translating the qualitative information listed in the EIRIPM (see Annexes) into an usable database which permitted the statistical analyses performed (using SPSS 17).

For Portugal it was originally considered 29 policy measures but we realized that some policies were, as for the case of PT70 NEOTEC and PT69 NEST, so these were excluded from analysis. In order to verify the statistical significance of the differences between the policies measures adopted in Portugal and Switzerland we resort to the non parametric test of Kruskal Wallis.[27] The p-value associated to this test indicates whether we can reject the null hypothesis (of equal population medians). More specifically if p-value is not higher than 10%, we can reject the null hypothesis of equal population means and so to conclude that differences exist between Portuguese and Switzerland policies for the given variable/item. All the measures considered in the present study are included in Annex 1.

The EIRIPM inventory was not specifically designed to assess policy elements that might impact on technology transfer efficiency. Using the inventory for this purpose required a categorization of individual variables from the policies into the inventory in order to select which ones could be created for the purpose of assessing policy impact in technology transfer. The variable selection was constrained by the categories included in the policy description, explicitly: keywords; policy overview (aims and main goals); background and rationale for creation; policy priorities; research and technology fields addressed; policy tenure and inspiration for its creation; groups targeted and eligibility for funding; forms of funding and sources of co-financing of policies, evaluation practices and findings.

[27] Parametric tests are either based on a normal distribution or on, e.g., t,t or $\chi 2$ distributions, which are related to and can be derived from normal-theory-based procedures. That is, the parametric tests require that a sample/group analyzed is taken from a population that meets the normality assumption. Non-parametric tests are used when assumptions required by the parametric counterpart tests are not met or are questionable. The Kruskal-Wallis test is the non-parametric analog of a one-way ANOVA. The Kruskal-Wallis test is used to compare independent samples, and tests the hypothesis that several populations have the same continuous distribution, at least as far as their medians are concerned. The use of nonparametric tests is often required when one of the three following cases arises: 1) Small sample sizes; 2) The variables collected are not continuous in nature; 3) The requirements of traditional methods, such as the assumption of normally distributed data, are not satisfied.

However, defining the adequate variables was not the unique aspect to be accounted for. We had to have sufficient information in the database, for both countries, to be able to construct the adequate typology of the variables. Thus an exploratory overview of the different innovation policies was implemented to determine the depth and extension of the data contained in the policy description. Additionally, we consulted INNO-Policy TrendChart 2008 Policy Trends and Appraisal Reports for both Portugal and Switzerland. There were nevertheless, some questions that have been categorically not filled in. For instance, the questions concerning the contribution of policy to Lisbon objectives and policy budget breakdown. Accordingly, the analysis of innovation policies could not take into account their weight, in line with the importance of their budgets, due to lack of data in the EIRIPM.

Chapter 4. Innovation Policies and the TTO efficiency: empirical findings from the comparison between Portugal and Switzerland

4.1. Initial considerations

The present chapter details the results of the innovation policies analysis. Policies from both countries are compared to produce a picture of major policy characteristics and issues that may lead to a better performance of technology transfer offices. We aim to determine first, whether the different dimensions and items of the policies from Portugal and Switzerland show statistically significant differences for the variables analysed, and second whether those differences may explain the distinct performance of technology transfer offices in both countries, measured by the produced outputs. Section 4.2 presents the results for the following variables: policy keywords, aims and rationale; policy priorities; thematic focus of the policies; policy tenure; policy creation main inspiration; target groups and eligibility for funding; aspects of innovation process addressed; typologies of funding and eligible expenses; funding sources and evaluation practices. On the basis of the results obtained, Section 4.3 focuses on the main differences and similarities between the policies and their expected relation with technology transfer outputs.

4.2. Descriptive analysis of policy measures between Portugal and Switzerland

4.2.1. Technology transfer and policy keywords, aims and rationale

The creation of a policy and associated funding mechanisms is done in response to a specific challenge or failure (European_Commission(a), 2008). By analyzing the keywords, goals and nature of policy and reasoning for its creation in the search of an explicit mention to technology transfer or any of the its dimensions in focus, licensing, industry-university collaboration, patents and spin-offs, we aimed to assess whether they represented a concern or were envisaged as a direct or indirect target of policy intervention.

Our data and analyses show (cf. Table 6), based on the non parametric test of Kruskal Wallis, that statistically significant differences exist between Switzerland and Portugal regarding the variables ‘Policy aims targeting licensing’ (26.5% of policies against 7,4% for Portugal), ‘Policy aims targeting industry-university collaboration’ (35.3% against 7.4% for Portugal),

and the variable 'Reasoning for creation of policy', where Switzerland reveals a higher concern with licensing activities (23.5% versus 7,4%).

Table 6: Explicit reference to technology transfer (or its dimensions) in the keywords, aims and reasoning for creation of the policies

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Keywords	Refer explicitly to knowledge or technology transfer (1=Yes; 0=No)	33.3	44.1	0.721	0.396	
Aims [refers explicitly to: licenses; industry-university collaboration; patents and spin offs/venture capital (1=Yes; 0=No)]	Licenses	7.4	**26.5**	3.639	0.056	*
	Industry-University collaboration	7.4	**35.3**	6.510	0.011	**
	Patents	7.4	0.0	2.561	0.110	
	Spin offs/venture capital	18.5	29.4	0.947	0.330	
Reasoning for the creation of the policy [refers explicitly to: licenses; industry-university collaboration; patents and spin offs/venture capital (1=Yes; 0=No)]	Licenses	7.4	**23.5**	2.807	0.094	*
	Industry-University collaboration	7.4	17.6	1.362	0.243	
	Patents	3.7	0.0	1.259	0.262	
	Spin offs/venture capital	18.5	23.5	0.222	0.638	

Note: Mean values represented as %; Values in bold signal results with statistical relevance. References were counted as existing or not existing. Frequency of reference was not taken into account. n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

Patents, both for the variables of aims (7.4%) and reasoning (3.7%), represent the only dimensions for which Portuguese policies report a higher emphasis than Switzerland (cf. Figure 10), but such 'differences' failed to emerge as statistically relevant.

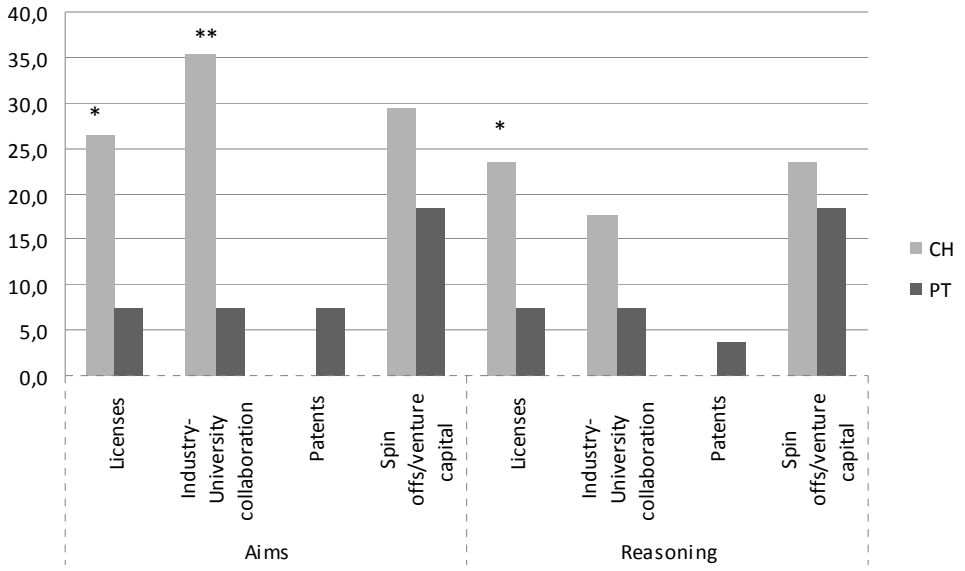


Figure 10: Relative Importance (% total) in each country's aims and reasoning of policy measures of references to licenses, industry-university collaboration, patents, spin-offs and venture capital
Note: In this analysis are included 61 policy measures

As illustrated by Figure 10, the majority of policy measures from Portugal included references to spin-offs and venture capital, although in a still considerably lower extent than Switzerland policies. Industry-university collaboration and licenses represented the dimensions in which higher discrepancies between Switzerland and Portugal could be observed, particularly in the variable "aims".

4.2.2. Policy priorities

Policy priorities give an overview of the focus and specific objective of each innovation policy (cf. Section 2.2). A single policy measure can be assigned up to four priorities reflecting the objectives of policy design and the relative importance each priority represents to the overall policy mix. In Table 7, the list of policy priorities addressed by Portugal and Switzerland policies is presented. The top 3 key policy priorities most often addressed by Portugal were, by decreasing order of importance, '4.2.2 Support to organisational innovation' (29.6%); '4.2.1 Support to innovation management and advisory services' (25.9%) and '4.3.1 Support to innovative start-ups incl. gazelles' (22.2%). As for Switzerland, the top 3 most addressed priorities included '2.2.3 R&D cooperation' (67.6%); '2.1.1 Policy measures concerning excellence, relevance and management of research in Universities' (35.3%), and '4.2.1 Support to innovation management and advisory services' (26.5%).

In what concerns the priority group "Research and Technologies (P_RT)", statistical significant differences exist between Portugal an Switzerland for priorities: '2.1.1: Policy measures concerning excellence, relevance and management of research in Universities', with 35.3% for Switzerland comparing to 0% for Portugal; '2.1.2: Public Research Organisations', and '2.1.4: Research Infrastructures', both priorities accounting for 14.7% for Switzerland and 0% for Portugal, and '2.2.3: R&D cooperation', in which Switzerland includes 67.6% of its total policy measures against 18.5% in Portugal.

Such evidence points to a higher concern in Switzerland compared to Portugal (and even the EU-27 average policy mix) with policy measures targeting research and public universities or research centers.

Table 7: Priorities addressed by policy measures in Portugal and Switzerland

Groups of variables	Variable	Mean value of the variable analyzed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Priorities - governance & horizontal research and innovation policies (P_GRIP) (1=Yes; 0=No)	1.2.1: Strategic Research policies	3.7	14.7	2.020	0.155	
	1.2.2: Innovation strategies	3.7	2.9	0.027	0.869	
	1.3.1: Cluster framework policies	0.0	5.9	1.615	0.204	
	1.3.2 Horizontal measures in support of financing	1.1	5.9	0.538	0.463	
	1.3.3: Other horizontal policies	7.4	0.0	2.561	0.110	
Priorities - Research and Technologies (P_RT) (1=Yes; 0=No)	2.1.1: Policy measures concerning excellence, relevance and management of research in Universities	0.0	**35.3**	11.669	0.001	***
	2.1.2: Public Research Organisations	0.0	**14.7**	4.254	0.039	**
	2.1.4: Research Infrastructures	0.0	**14.7**	4.254	0.039	**
	2.2.1: Support infrastructure (transfer offices, training of support staff)	3.7	5.9	0.150	0.698	
	2.2.2: Knowledge Transfer (contract research, licenses, research and IPR)	3.7	14.7	2.020	0.155	
	2.2.3: R&D cooperation (joint projects, PPP with research institutes)	18.5	**67.6**	14.388	0.000	***
	2.3.1: Direct support of business R&D (grants and loans)	11.1	2.9	1.612	0.204	
	2.3.2: Indirect support to business R&D (tax incentives and guarantees)	3.7	0.0	1.259	0.262	
Priorities – Human Resources (P_HR) (1=Yes; 0=No)	3.1.1: Awareness creation and science education	0.0	5.9	1.615	0.204	
	3.1.2: Relation between teaching and research	0.0	5.9	1.615	0.204	
	3.1.3: Stimulation of PhDs	3.7	**20.6**	3.703	0.054	*
	3.2.1: Recruitment of researchers	7.4	2.9	0.631	0.427	
	3.2.3 Mobility of researchers (e.g. brain-gain, transferability of rights)	7.4	2.9	0.631	0.427	
	3.3.1 Job training of researchers and other personnel involved in innovation	18.5	11.8	0.537	0.464	
	3.3.2 Recruitment of skilled personnel in enterprises	**14.8**	0.0	5.302	0.021	**
Priorities - Enterprises (P_E) (1=Yes; 0=No)	4.1.1 Support to sectoral innovation in manufacturing	14.8	11.8	0.121	0.728	
	4.1.2 Support to innovation in services	**14.8**	2.9	2.773	0.096	*
	4.2.1 Support to innovation management and advisory services	25.9	26.5	0.002	0.962	
	4.2.2 Support to organisational innovation incl. e-business	**29.6**	0.0	11.405	0.001	***
	4.2.3 Support to technology transfer between firms	0.0	**11.8**	3.344	0.067	*
	4.3.1 Support to innovative start-ups incl. gazelles	22.2	17.6	0.196	0.658	
	4.3.2 Support to risk capital	**18.5**	2.9	4.050	0.044	**
Priorities - markets and innovation culture (P_MIC) (1=Yes; 0=No)	5.1.1 Support to the creation of favourable innovation climate	7.4	2.9	0.631	0.427	
	5.2.1 Fiscal incentives in support of the diffusion of innovative technologies, products and services	3.7	11.8	1.278	0.258	
	5.3.1 Measures to raise awareness and provide general information on IPR	3.7	0.0	1.259	0.262	
	5.3.2 Consultancy and financial incentives to the use of IPR	7.4	0.0	2.561	0.110	

Note: Mean values represented as %; Values in bold signal results with statistical relevance; n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

In fact, as we can observe in Figure 11, Switzerland appears highly distanced from the average EU-27 in its concern with R&D cooperation (2.2.3) and policy measures concerning excellence, relevance and management of research in Universities (2.1.1). Policies concerning priorities '2.2.1: Support infrastructure' and '2.2.2: Knowledge Transfer' also show higher values for Switzerland compared to Portugal (5.9% vs. 3.7% and 14.7% vs. 3.7%, respectively), although without statistical relevance.

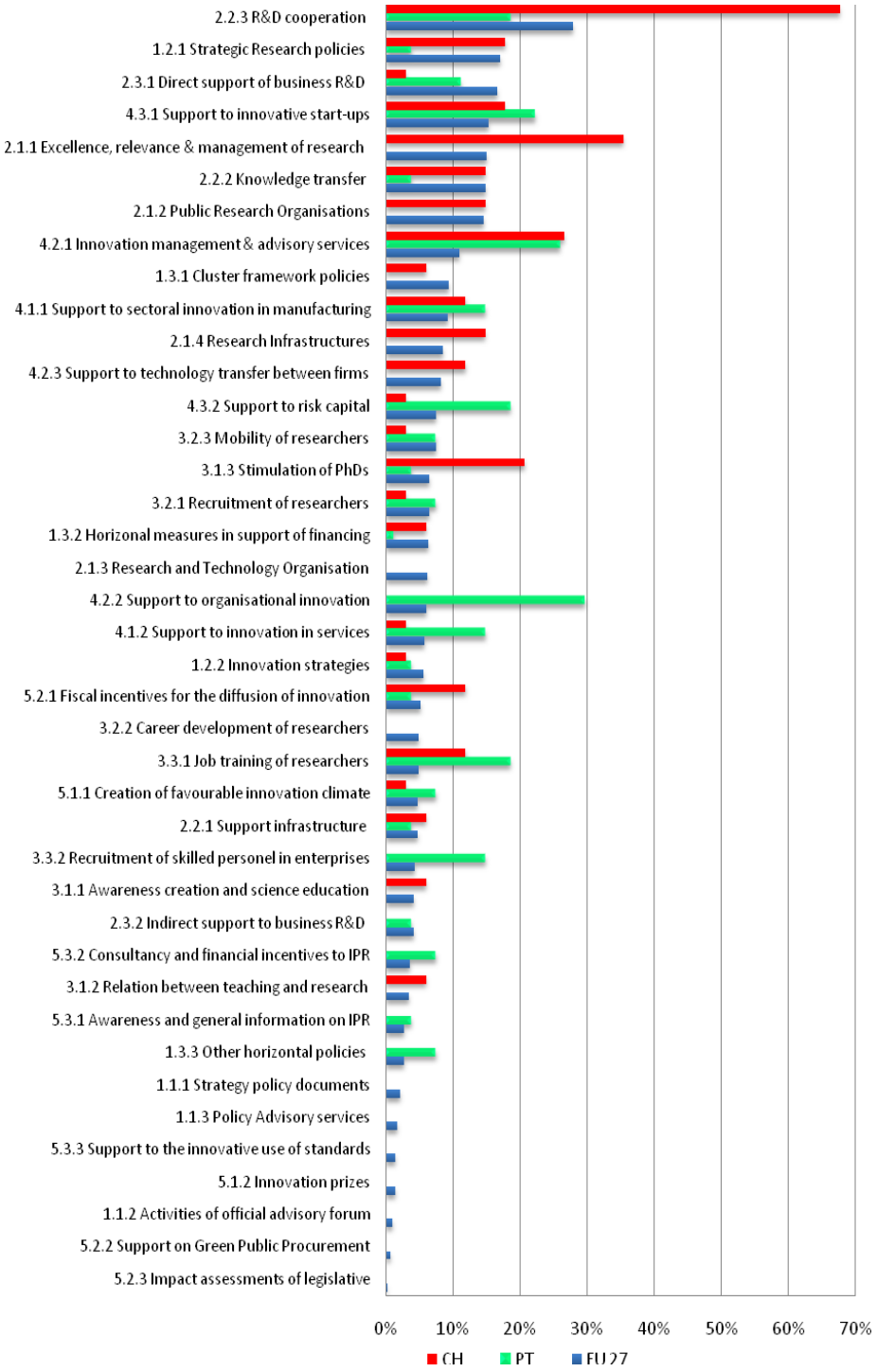


Figure 11: Comparison between policy priorities for Switzerland, Portugal and the EU-27

Note: According to data downloaded from the EIRIPM inventory on the 10th of April 2009. Percentages refer to the share of measures addressing a given policy priority. Data for EU-27 policy priorities taken from the EIPR 2008(European_Commission(a), 2008)

Priority group "Human Resources (P_HR), which relates to policies addressing education, skills and mobility of human resources towards research and innovation, reveals significant differences in the priorities '3.1.3: Stimulation of PhDs', with Switzerland leading ahead in terms of policy measures volume (20.6%) and '3.3.2 Recruitment of skilled personnel in enterprises' in which Portuguese policies denote a stronger emphasis (14.8% vs. 0% of Switzerland).

Not surprisingly, Portugal reports more measures than Switzerland to promote and sustain the creation and growth of innovative companies and entrepreneurial activity, included in priority group "Enterprises P_E". In the cases were statistical differences exists Portuguese figures are even higher than that of the EU-27 (cf. Figure 11), namely in what regards to priorities '4.1.2: Support to innovation in services' (14.8%), '4.2.2: Support to organisational innovation' (29.6%) and '4.3.2 Support to risk capital' (18.5%). The relative stronger concern with supporting technology transfer in Switzerland is demonstrated by the statistical relevant differences for priority '4.2.3 Support to technology transfer between firms', with 11.8% against 0% for Portugal.

4.2.3. Thematic focus of the support measures

The majority of Portuguese policies (91.7%) does not have a focus on a specific theme or technological area, as demonstrated in Table 8 and Figure 12.

Table 8: Technology fields addressed by innovation policy

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Targeted research and technology fields	No specific focus	91.7	16.7	9.91	0.020	**
	ICT	0.0	8.3			
	Nanoscience and nanotech	0.0	16.7			
	Biotechnology	0.0	8.3			
	Social economics & humanities	0.0	8.3			
	Health	0.0	16.7			
	Energy	0.0	8.3			
	Food, agriculture and fisheries	8.3	0.0			
	Materials	0.0	8.3			
	Other	0.0	8.3			

Note: Mean values represented as %; n=61
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

This is consistent with the findings of the EIPR, in which it is reported that only 12% of all EU-27 measures were targeted to support a precise technological field (European_Commission(a), 2008). An exception was the field of "food, agriculture and

fisheries", in which Portugal reported one policy (8.3%), to be precise "PT 76: Innovation Support System – Innovation Projects". As for Switzerland the most targeted research areas have been Nanosciences and nanotechnologies (16.7%) and health (16.7%).

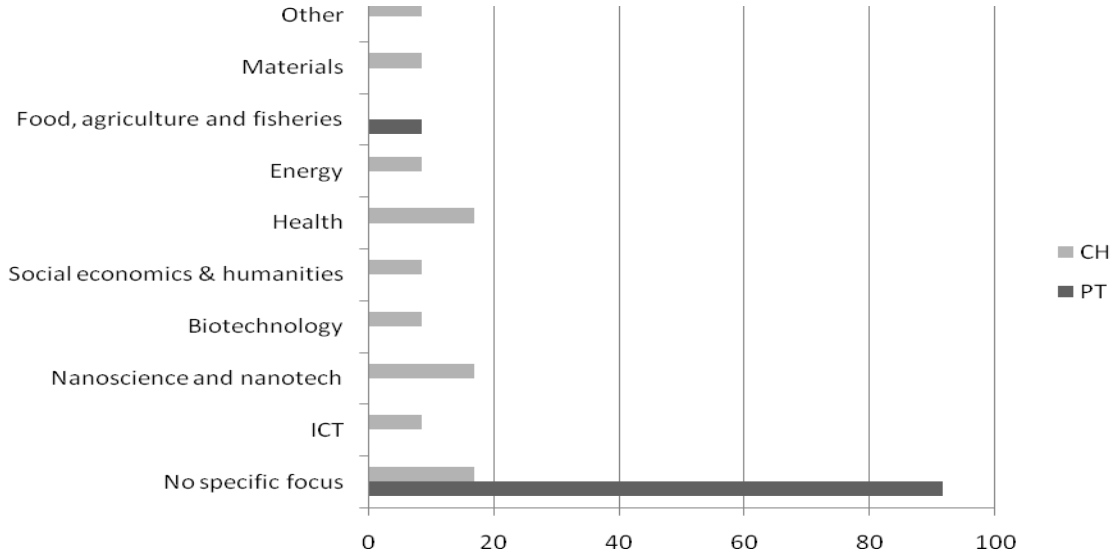


Figure 12: Thematic focus of innovation policies (in % of total)
Note: In this analysis are included 61 policy measures

4.2.4. Policy tenure

Policy tenure reflects the year of creation of a determined innovation policy as well as its longevity in years. Logically, given the time it can take for a specific policy to take effect, a minimum period of implementation time is necessary before deciding to replace or discontinue such policy. Hence, through this variable we aimed to assess the soundness of policies and the stability of the policy making system. As Table 9 exemplifies, Switzerland had an earlier concern with the design and implementation of its policies than Portugal. The majority of Switzerland policies started between the time period ranging from 1995 to 2005 in opposition to Portuguese policies with higher incidence from 2000 to 2009 (see also Figure 13).

Table 9: Average policy tenure

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Policy tenure	Starting year group (1: [1995;1999]; 2: [2000;2004]; 3: [2005; 2009])	2.333	1.910	5.455	0.020	**
	duration (years)	3.963	7.087	14.509	0.000	***

Note: n=61
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

Additionally, the average duration of Switzerland policies is of 7.1 years against Portuguese policies with roughly 4 years. Due consideration should be taken nevertheless regarding residual policies that remain in the database without indication of its state (active or inactive). Most policies analysed did not stipulate an ending date and in the case they are not regularly updated it may very well impact in policy duration analysis.

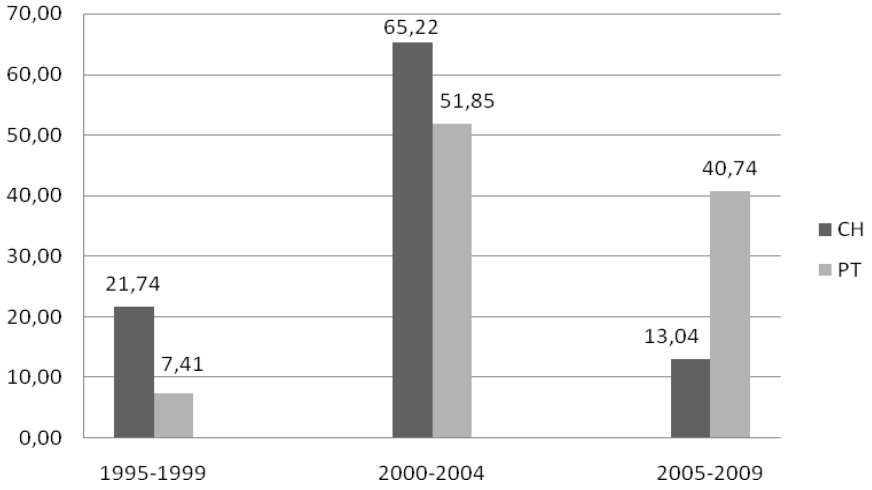


Figure 13: Amount of policy measures (in % of total) by average starting period
Note: In this analysis are included 61 policy measures

4.2.5. Policy creation

Portuguese policies (cf. Table 10 and Figure 14) are inspired mainly by national policy debate (78.3%), followed by the need to meet EU level policy objectives (43.5%) and an existing policy of another EU country (21.7%).

Table 10: Inspiration for policy creation

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Policy creation inspiration	National policy debate	78.3	90.6	1.616	0.204	
	Need to meet EU level policy objectives	**43.5**	3.1	13.372	0.000	***
	Existing measure of another EU country	**21.7**	3.1	4.684	0.030	**
	Other	13.0	18.8	0.313	0.576	

Note: Mean values represented as %; Values in bold signal results with statistical relevance; n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

The same tendency is observed for Switzerland policies for which national policy debate represents the main inspiration for policy creation (90.6%). However, significant differences are observed in the variable "need to meet EU level policy objectives" accounting only for 3.1% of Switzerland polices against 43.55% of Portuguese policies and

in the variable "existing measure of another EU country" (3.5% for Switzerland in comparison to 21.7% for Portugal). These differences may be explained by the fact that Switzerland does not belong to the European Union not being therefore as much influenced by the EU objectives or other policies developed by EU member states as Portugal.

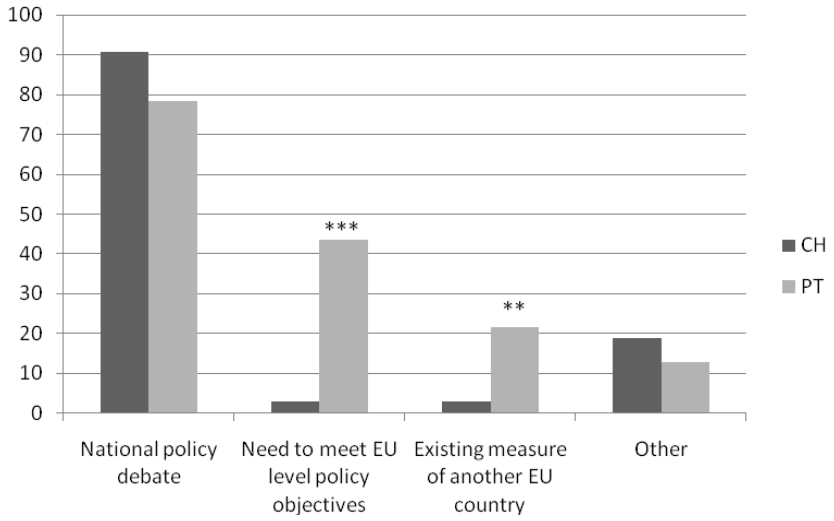


Figure 14: Inspiration for policy creation (in % of total policy measures)
Note: In this analysis are included 61 policy measures
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

4.2.6. Target groups and eligibility for funding

Policies from Portugal are above all concerned with companies and in particular with SMEs (81.5% of the corresponding total). In contrast, as Table 11 describes, Switzerland policies preferably target research performers, with nearly 91% of the total measures focused in higher education institutions, 84.8% in other non-profit research institutions, and 45.5% in individual researchers. On average, only 22.2% of Portuguese innovation policies target research organisations and individual researchers (cf. Figure 15).

The same tendency is shown in the target group "eligibility for funding", with Switzerland focusing their policies incentives mainly on researchers (80%), higher education institutions and research organisations (both with 60%). Portugal funds essentially SMEs, encompassing 68.4% of policies, although in this regard Switzerland follows closely the Portuguese figure with 60% (cf. Figure 15).

Table 11: Groups targeted by the support measures and their eligibility for funding

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Target groups	Researchers as individuals	22.2	**45.5**	3.464	0.063	*
	Higher education institutions	22.2	**90.9**	28.705	0.000	***
	Research organisations	22.2	**84.8**	23.323	0.000	***
	SMEs	81.5	63.6	2.290	0.130	
	Business organisations	22.2	21.2	0.009	0.925	
	Big companies	44.4	42.4	0.024	0.876	
	Consultancies and other private service providers (non-profit)	11.1	18.2	0.573	0.449	
	Technology innovation centres	22.2	33.3	0.888	0.346	
	Private institutions for education	0.0	**12.1**	3.448	0.063	*
	Other public education institutions (secondary)	3.7	12.1	1.354	0.245	
	Other	25.9	42.4	1.747	0.186	
Eligible for funding	Researchers as individuals	26.3	**80.0**	4.665	0.031	**
	Higher education institutions	10.5	**60.0**	5.630	0.018	**
	Research organisations	15.8	**60.0**	3.954	0.047	**
	SMEs	68.4	60.0	0.121	0.728	
	Business organisations	21.1	20.0	0.003	0.960	
	Technology innovation centres	15.8	20.0	0.048	0.826	
	Big companies	26.3	20.0	0.081	0.776	
	Consultancies and other private service providers (non-profit)	11.1	20.0	0.261	0.610	
	Other public education institutions (secondary)	5.3	20.0	1.078	0.299	
	Other	36.8	20.0	0.484	0.487	

Note: Mean values represented as %; Values in bold signal results with statistical relevance; n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

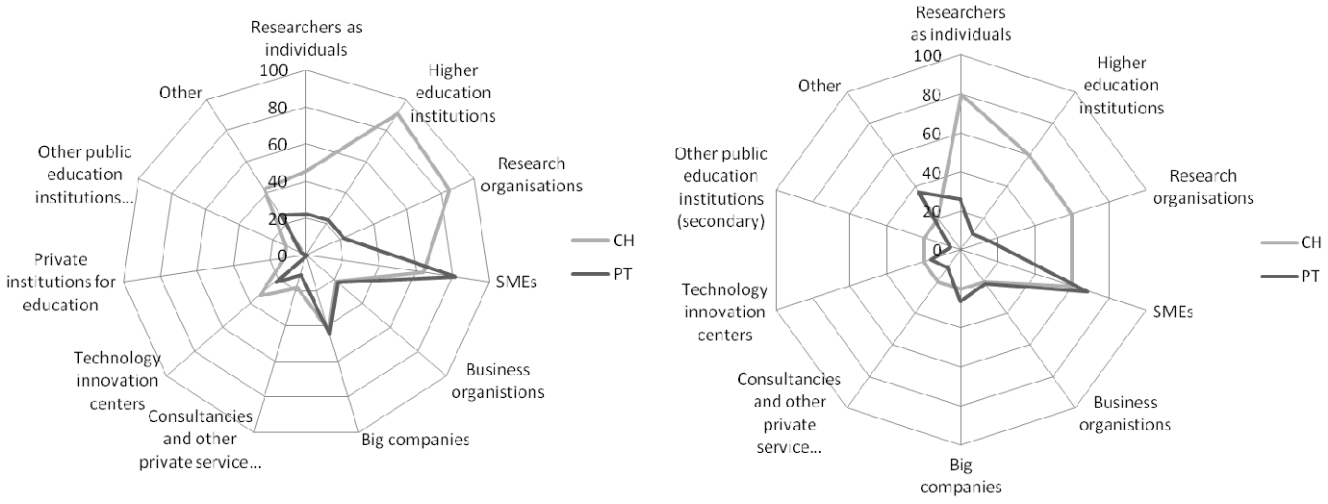


Figure 15: Target groups and eligibility for funding of different target groups
Note: In this analysis are included 61 policy measures

Cooperation between actors of the innovation system is highly stressed by Switzerland, with 89.7% of policies reporting collaboration as mandatory for funding eligibility, when more than one target group is identified (see Table 12 and Figure 16). Policies from Portugal either leave cooperation as optional (41.2%) or as not required for funding eligibility (23.5%).

Table 12: Importance of cooperation and networking for eligibility criteria

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
	Cooperation for eligibility [0: no; 1: optional; 2: mandatory]	1,118	1,897	15,551	0,000	***

Note: n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

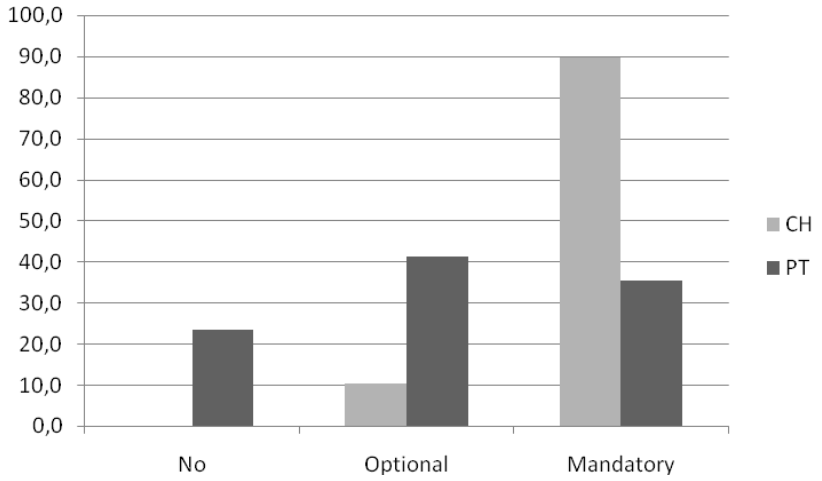


Figure 16: Incidence (in % of total policy measures) of cooperation and networking requisite in innovation policies for funding eligibility
Note: In this analysis are included 61 policy measures

4.2.7. Aspects of innovation process

In respect to the different possible stages of the innovation process our data shows (cf. Table 13) that the aspect most oftenly targeted by Switzerland policies included applied industrial research (52.9%) and prototype development and creation (47.1%). This is consistent with the findings of the EU-27 EIPR (2008) in which prototype creation and applied industrial research were reported as the most addressed stages of the innovation process (European_Commission(a), 2008). As for Portugal, pre-competitive research (34.6%), awareness raising amongst firms on innovation (26.9%) and innovation management tools (26.9%) were the most envisaged aspects.

Table 13: Aspects of innovation process targeted by support policies

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Aspects of innovation process	Awareness raising amongst firms on innovation	26.9	35.3	0.469	0.493	
	Prototype creation	7.7	**47.1**	10.691	0.001	***
	Industrial design	15.4	14.7	0.005	0.942	
	Improving legal environment	11.5	8.8	0.119	0.731	
	Entrepreneurship and incubators	19.2	5.9	2.505	0.113	
	Basic research	3.8	**20.6**	3.514	0.061	*
	Problem driven basic	11.5	20.6	0.854	0.355	
	Pre-competitive research	34.6	32.4	0.033	0.855	
	Diffusion of technologies in enterprises	11.5	20.6	0.854	0.355	
	Applied industrial research	23.1	**52.9**	5.384	0.020	**
	Knowledge transfer between researchers	15.4	**38.2**	3.726	0.054	*
	Human research development	0.0	**35.3**	11.279	0.001	***
	International collaboration	15.4	26.5	1.049	0.306	
	Networking	15.4	**38.2**	3.726	0.054	*
	Commercialisation of innovation (IPR)	7.7	**32.4**	5.191	0.023	**
	Social sciences research	0.0	8.8	2.375	0.123	
	Cooperation, promotion and clustering	3.8	**20.6**	3.514	0.061	*
	Innovation management tools	**26.9**	5.9	5.031	0.025	**

Note: Mean values represented as %; Values in bold signal results with statistical relevance; n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

The differences were statistically significant (with Switzerland reporting the higher figures) for basic research (20.6%); human research development (35.3%); knowledge transfer between researchers (38.2%); networking (38.2%) and cooperation, promotion and clustering (20.6%). Innovation management tools represented the only variable in which policies from Portugal statistically significantlly surpassed Switzerland policies, involving 26.9% of total (cf. Figure 17). According to the EIPR (2008), innovation management is in fact one of the innovation processes emphasised by moderate innovators, as is the case of Portugal, in the EU-27 countries (European_Commission(a), 2008).

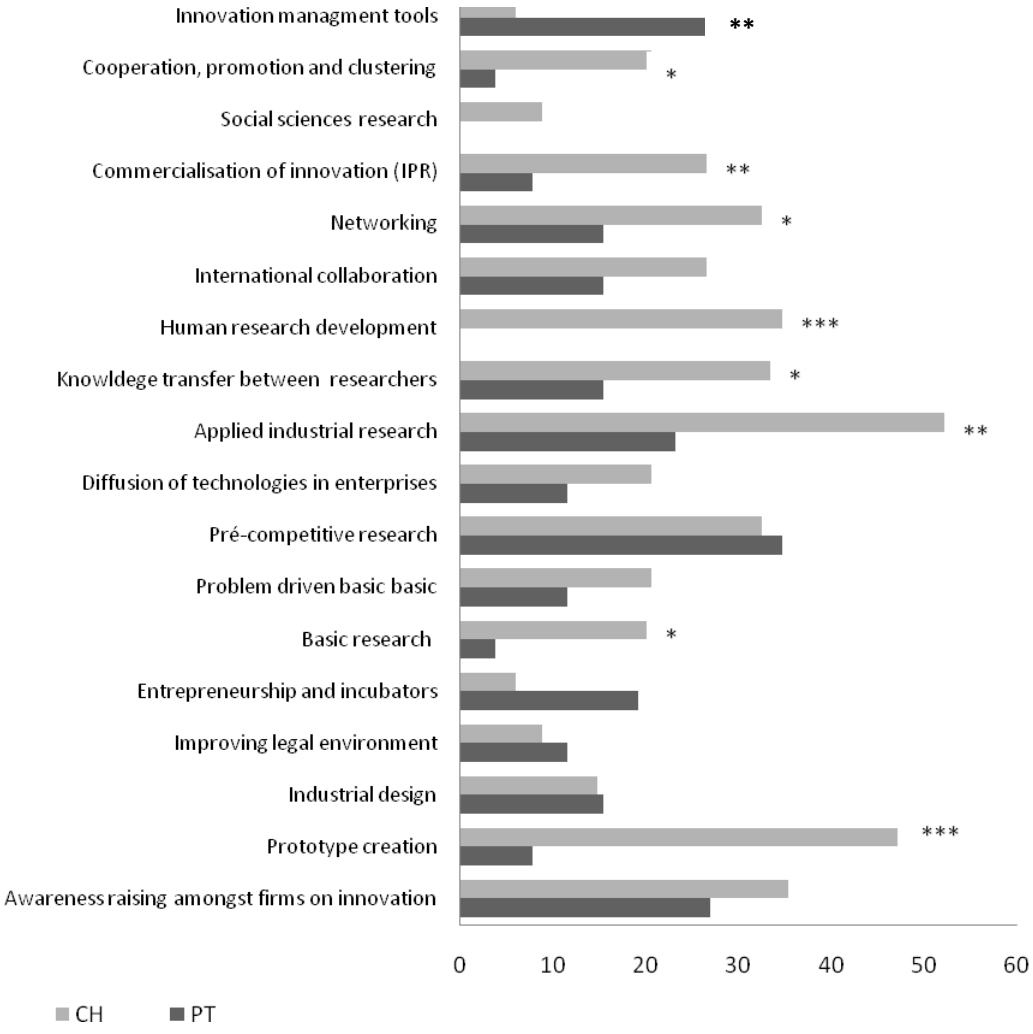


Figure 17: Aspects of innovation process targeted by policies
Note: In this analysis are included 61 policy measures
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

4.2.8. Typologies of funding and eligible expenses

Direct grants represent the most common form of innovation policies funding, both for Portugal (57.7%) and Switzerland (54.5%) (cf. Table 14).

Statistically relevant differences (Table 14 and Figure 18) exist for indirect funding, mainly in the form of tax incentives, reported as the second most applied typology of funding in Switzerland (42.4% of measures), and subsidized loans with higher incidence in Portugal (15.4%). Such evidence corroborates EIPR (2008), which underlines that subsidised loans have been most often used by moderate innovators while, in the last couple of years there have been relatively less supporting measures introduced using tax incentives (European_Commission(a), 2008).

Table 14: Forms of funding and eligible costs for funding

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Form of funding (when applicable)	Grants	57.7	54.5	0.057	0.811	
	Indirect funding (tax incentives, certification, etc.)	7.7	**42.4**	8.725	0.003	***
	Subsidized loans	**15.4**	3.0	2.813	0.093	*
	Venture capital	15.4	6.1	1.360	0.243	
	Other	23.1	27.3	0.133	0.716	
Eligible costs	Labour	41.7	**83.9**	10.462	0.001	***
	Equipment	37.5	54.8	1.602	0.206	
	Infrastructures	0.0	9.7	2.412	0.120	
	Training	**54.2**	22.6	5.726	0.017	**
	IPR	**25.0**	3.2	5.669	0.017	**
	Technology transfer agreements	**12.5**	0.0	4.024	0.045	**
	External expertise	50.0	38.7	0.688	0.407	
	Other	**66.7**	12.9	16.590	0.000	***

Note: Mean values represented as %; Values in bold signal results with statistical relevance; n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

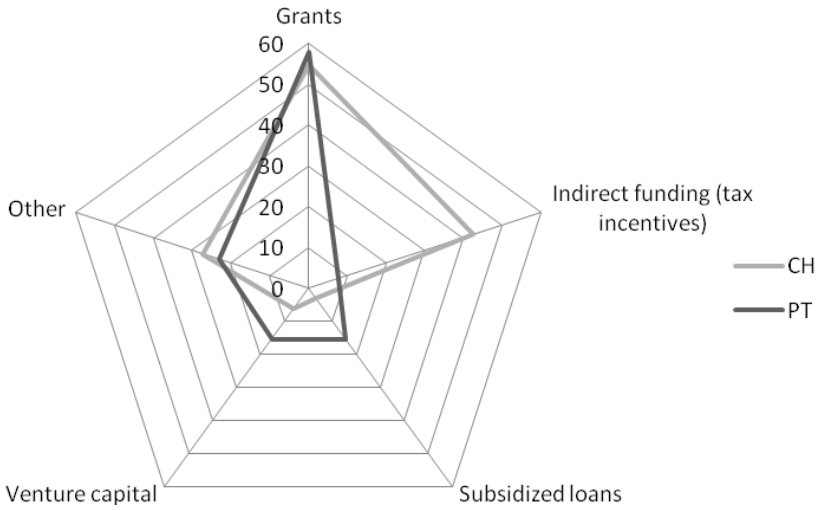


Figure 18: Typologies of funding of innovation policies
Note: In this analysis are included 61 policy measures

Regarding the eligibility of cost (cf. Table 14 and Figure 19), when direct funding is provided, Switzerland policies seem to prefer supporting costs related, essentially, with labour (83.9%) and equipment (54.8%), a trend that is probably connected with the policies' focus in research institutions and individual researchers, as observed in Section 4.2.6. On the other side, Portugal elects training (54.2%) and other costs (66.7%) as the most common categories of costs to be supported by policy incentives. Surprisingly, IPR (25.0%) and technology transfer agreements (12.5%) have been reported more than once as eligible typology of costs for Portugal policies

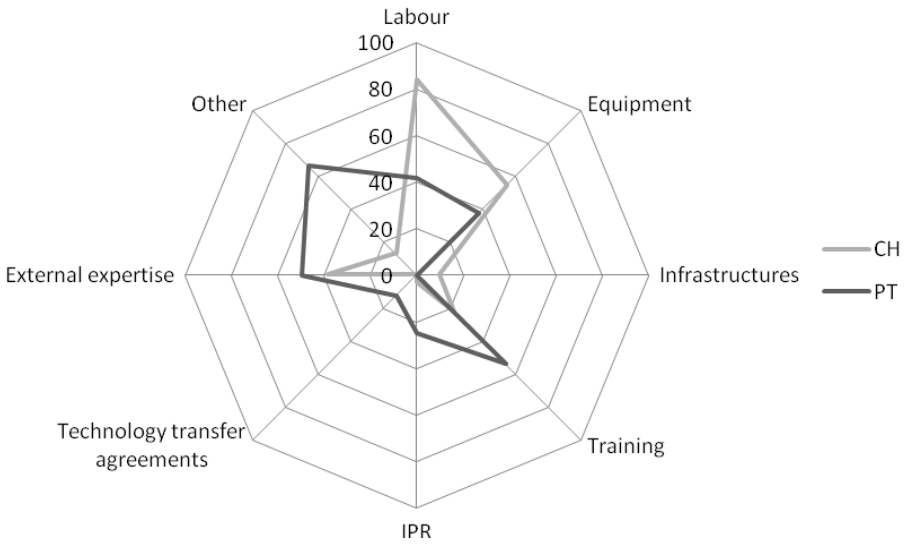


Figure 19: Eligible costs for funding of innovation policies
Note: In this analysis are included 61 policy measures

4.2.9. Funding Sources

Significant differences exist between funding sources of Switzerland and Portuguese policies (cf. Table 15). While Portuguese measures are mostly co-financed by structural funds (78.5%) and marginally by private (13.0%), a mix of both private and structural funds (4.3%) and other forms of funding (4.3%), Switzerland policies are almost totally supported by private funds (see also Figure 20). This may be explained by the fact that Switzerland, not being part of the European Union, is not entitled to the Structural Fund Operational Programmes (OPs).

Table 15: Sources of co-financing

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
	Financing_sources_3.6 [0: private; 1: structural funds; 2: other; 3: mix]	1.000	0.167	22.833	0.000	***

Note: n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

Notwithstanding, the EIPR (2008) also reports that only 4% of all innovation measures in innovation leaders and 12% in innovation followers have been co-financed by Structural Funds, demonstrating that countries with more mature science and technology innovation policies are not so dependent on structural funds (European_Commission(a), 2008).

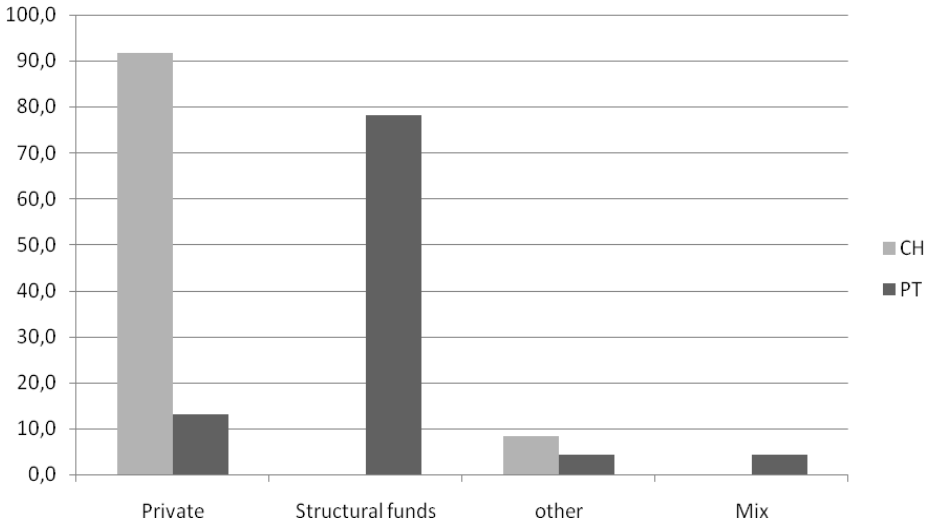


Figure 20: Sources of co-financing of innovation policies
Note: In this analysis are included 61 policy measures

4.2.10. Policy evaluation

Evaluation is crucial to analyse policy performance and formulate policy "best practices". The scope and methods of evaluation differ according to the questions to be addressed and the character of the policy measure, thus, they can be retrospective (ex-post), current or prospective (mid-term and ex-ante), producing information that can be used in the assessment of past policies, the monitoring of ongoing initiatives or the forward planning of innovation policies (Papaconstantinou and Polt, 1997). In comparing evaluation practices for Portuguese and Switzerland policies, significant distinct results (cf. Table 16) were observed in the use of ex-ante indicators for the measurement of results (89.5% of Portuguese policies in comparison to 16.7% for Switzerland).

Table 16: Evaluation of innovation policies

Groups of variables	Variable	Mean value of the variable analysed		Kruskal-Wallis Test		Statistically significant differences
		PT	CH	Qui-Square	p-value	
Ex-ante Indicators	Using ex-ante indicators	**89.5**	16.7	21.974	0.000	***
Evaluation procedures	Ex-ante evaluation	40.9	22.6	2.012	0.156	
	Mid-term evaluation	31.8	48.4	1.428	0.232	
	Ex-post evaluation	4.5	12.9	1.032	0.310	
Evaluation findings	Description of official evaluation findings [0: negative; 1: too recent; 2: inconclusive; 3: positive]	1.889	2.889	11.447	0.001	***
	Description of unofficial evaluation findings [0: negative; 1: too recent; 2: inconclusive; 3: positive]	1.350	2.346	14.171	0.000	***

Note: Mean values represented as %; Values in bold signal results with statistical relevance; n=61.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

The specification of ex-ante indicators seems to have an impact in the afterwards evaluation procedure, since Portugal tend to evaluate most policies ex-ante (40.9%) while Switzerland adopts a preferred mid-term evaluation of policies (48.4%) (cf. Figure 21). Ex-post evaluation is the least used form of evaluation by both countries (4.5% for Portugal and 12.9% for Switzerland), possibly because some policy measures are still in progress and, hence, have not had the opportunity to undergo a final evaluation.

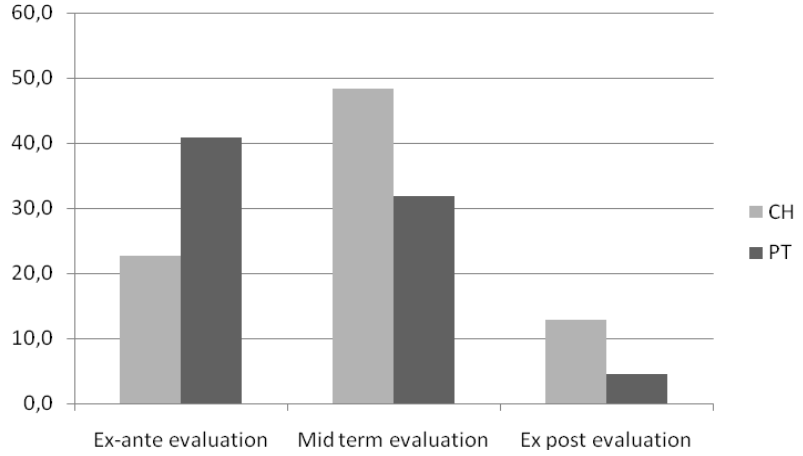
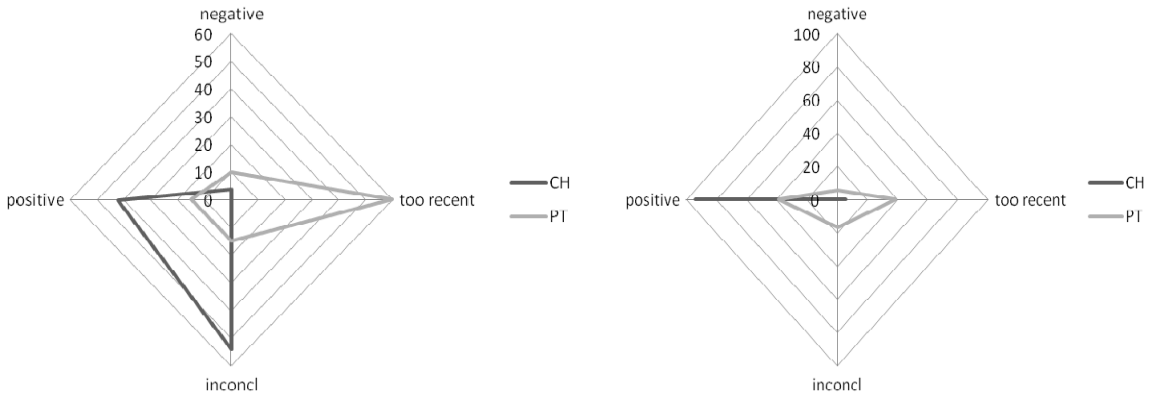


Figure 21: Evaluation procedures for innovation policies
Note: In this analysis are included 61 policy measures

Statistically significant differences are found both for the results of official and unofficial evaluation of policies (cf. Table 16 and Figure 22). Where an official evaluation has taken place, while most Switzerland policies report inconclusive (53.8%) and positive (42.3%) as the main findings, the majority of Portuguese policies (60%) are included in the "too recent for appraisal of success" category. On the other hand, when no official evaluation has been undertaken, 94.4% of Switzerland policies demonstrate evidence of a positive appraisal of the measure against 38.9% of Portuguese policies.



Official evaluation **Unofficial evaluation**

Figure 22: Official and unofficial evaluation findings for innovation policies
Note: In this analysis are included 61 policy measures

4.3. Policy measures and technology transfer outputs. Are they related?

It is clear from the literature that the context in which technology transfer takes place and, in particular, policy incentives play a key role in motivating universities and public research institutes to engage in technology transfer. The different policies applied by Portugal and Switzerland have had an effect on the technology transfer environment in each country and therefore on the variables identified in this study. Table 17 summarises the key similarities and differences in the results of this study. It is interesting to notice that there are many more differences than similarities listed.

Analysing first the support to technology transfer in keywords, aims and rationale, both Portugal and Switzerland policies included references to the major technology transfer outputs identified, although to different degrees. It is apparent that Switzerland policies are very much concerned with the collaboration between industry and university and include higher explicit references to licensing activities. Innovation policies such as CH20 – Knowledge and Technology Transfer (KTT), funding the implementation of 5 KTT centers in Switzerland with the aim to reinforce demand of companies for university knowledge and research result, may have contributed to the results observed.

Both countries' policies emphasize support to spin-off creation and venture capital funds, notably in the reasoning for policy creation. Portuguese policies are the only ones to refer patents, which may be explained by the consistent low performance of Portugal regarding the 'intellectual property' dimension (EPO and USPTO patents), in the European Innovation Scoreboard, which in turn could have increased the awareness of Portuguese economic agents to the strategic relevance of patenting (European_Commission(b), 2008). According to OECD Science, Technology and Industry Outlook 2008, the number of triadic patents per million population [28] in Portugal was 1.07 while in Switzerland it reached 107.56 (OECD, 2008). As a consequence innovation policies specifically targeted at increasing the usage of IPR, such as the GAPI - Industrial Property Support Offices (PT 26) and SIUPI - Industrial Property Use Incentive System (PT 18), have been implemented in Portugal.

[28] Triadic patents are a set of patents taken at the European Patent Office, the Japan Patent Office and the US Patent and Trademark Office that protect the same invention. The use of triadic patents as an indicator eliminates the problems of home advantage and influence of geographical location that are encountered with single-office patent indicators and thus improves the international comparability of the data OECD. (2008) Science, Technology and Industry Outlook 2008 OCDE.

Table 17: Key similarities and differences in policy analysis:

Key variables	Similarities	Differences
Support to technology transfer	▪ References to spin-offs and venture capital in reasoning	▪ Keywords referring to technology transfer higher in CH; ▪ Higher emphasis to licensing in CH policy aims and reasoning* ▪ Industry-University collaboration higher in CH, in aims** and reasoning ▪ References to patents higher in PT
Priorities most addressed	▪ Support to innovation management and advisory services ▪ Support to innovative start-ups	▪ R&D cooperation higher in CH*** ▪ Higher concern with excellence of research in universities in CH*** ▪ Stimulation of PhDs in CH* ▪ Support to public research organisations ** and research infrastructures ** higher in CH ▪ Support to organisational innovation higher in PT*** ▪ Support to risk capital higher in PT **
Thematic focus of the measure addressed		▪ No specific focus for PT policies** ▪ Nanosciences, nanotechnologies and health targeted higher by CH policies**
Policy tenure		▪ CH policies started earlier in time** ▪ CH policies have a higher duration in years***
Main reason for policy creation	▪ National policy debate	
Main target groups		▪ PT targets above all companies ▪ CH targets above all universities***, research organisations *** and individual researchers *
Funding eligibility		▪ PT funds above all SMEs ▪ CH funds above all universities**, research organisations ** and individual researchers**
Importance of cooperation		▪ Cooperation mandatory for funds eligibility in CH***
Aspects of innovation process most addressed	▪ Pre-competitive research	▪ Applied industrial research higher in CH** ▪ Prototype creation higher in CH*** ▪ Innovation management tools higher in PT** ▪ Awareness raising amongst firms on innovation higher in PT ▪ Networking* and knowledge transfer between researchers* higher in CH
Forms of funding	▪ Grants	▪ Tax incentives in CH*** ▪ Subsidized loans in PT*
Most common eligible Costs		▪ Labour *** and equipment in CH ▪ Training ** and other*** in PT
Funding sources		▪ Private for CH*** ▪ Structural funds for PT***
Main evaluation findings		▪ Too recent for PT*** ▪ Positive or inconclusive for CH***

Note: Only the key aspects of policy analysis were included in the Table. Not all similarities are listed and accordingly not all differences, even if statistically relevant are listed.
Legend: *** (**) [*] statistically significant at 1% (5%) [10%]

Similarities may be found in policy priorities to support innovation management and advisory services as well innovative start-ups. Portuguese policies put higher emphasis on the support given to companies and in creating conditions for the existence of venture capital. This may possibly explain why spin-off creation is the technology transfer output that Portugal ranks better in the CEMI survey (see Section 3.2). On the other hand, Switzerland policies prioritise research excellence, stimulation of PhDs, R&D cooperation and technology transfer between firms. The importance of R&D cooperation in Switzerland policies is also stressed in the requirements for funds eligibility in which collaboration is mandatory when more than one target group is identified. Joint projects between industry and university are characterised by a critical amount of face-to-face contact, which enables the transfer of the implicit parts of knowledge that are crucial for technology development and creation (European_Commission, 2001). So, the higher the support to R&D collaboration the higher the probability to originate research results with potential to be transferred. Intensive interaction with industry brings also its own benefits such as additional revenues, exchange of experiences, access to laboratories, increased possibilities for students and graduates to find jobs, etc. (European_Commission(b), 2004).

While Portuguese policies tend to be open in terms of technological areas addressed, Switzerland policies focus mainly in emergent technological areas, such as nanotechnologies and health, with potential for commercial application. The broadening of the innovation definition beyond the traditional manufacturing sector is also one direction the Swiss innovation policies are aiming (European_Commission(c), 2008). GSK-initiative (CH 24) can be seen as an example of good practice in Switzerland, since it aims at expanding innovation activities to further industries, more concretely the field of humanities, social sciences and cultural sciences.

Policies from both countries also differ in terms of year of implementation and average duration. This variable, altought usefull to determine stability of the policy making system, does not seem to directly affect technology transfer. The same applies for the variable "policy creation" in which both countries report the predominance of national policy debate as main inspiration for policy creation but which, directly, does not impact technology transfer efficiency.

As for the target group addressed by policy measures and eligibility for funding, Portugal concentrates its policies in supporting SMEs, possibly reflecting a need to restructure the

industrial fabric, increasing its competitiveness and an emerging predisposition to support innovative start-ups [reflected in measures such as NEOTEC Initiative (PT 51); FINICIA-High Innovation Content Projects (PT 56), and NEST New Technology Based Companies (PT 34)]. Switzerland focuses on research performers such as universities, research organisations and researchers [evidence of which may be found in measures such as MedTech - Life Science (CH 5); National Centers of Competence in Research -NCCR (CH 40); NCCR Nanoscale Science (CH 32) and NRP No. 47: "Supramolecular Functional Materials" (CH 37)].

Research is a precondition for technology transfer and thus the volume of research in a country is an indication of the potential for technology transfer. When accessing the number of scientific articles per million population,[29] Portugal counts 251,41 and Switzerland 1.153,54 (OECD, 2008). However, this indicator should be used with caution since a predisposition to publish research may result in less patented technology being available to license or sell to industry (Decter et al., 2007). TTOs are predominantly a department-type organisation (53%) followed by the subsidiary-type (33%) and the independent-type (14%) (European_Investment_Fund, 2005). One may assume that higher flows of funding for the university may also allow a higher budget for TTO operations and staffing with implications at efficiency level. On the other hand, lower incentives for industrial R&D may lead to the need to outsource R&D activities thus increasing the level of contract research and industry-science collaboration.

As for the most often addressed aspects of the innovation process, both countries report a high focus of policies in pre-competitive research, which represent research results that are not immediately marketable even though in a closer stage of originating new products and processes. While Portuguese policies are directed towards factors such as awareness raising amongst firms on innovation and innovation management tools, Switzerland policies are more concerned with developing applied industrial research and prototype creation. One of the most acknowledged obstacles to the technology transfer process has been the existing funding gap to bring technologies to the market (Decter et al., 2007; European_Investment_Fund, 2005) policies that support proof of concept or prototype development should undoubtedly contribute to increase technology transfer efficiency. To reinforce this trend, human research development and commercialisation of IPR were also

[29] Scientific articles per million population is an indicator often used to highlight the scientific "productivity" of countries and is an important measure of research output, since publication is the main means of disseminating and validating research results Ibid.

included amongst the five top aspects of the innovation process targeted by Switzerland policies. The low education level of the labour force is seen as a serious constraint for a stronger bet on knowledge-intensive activities and, as a consequence, technology transfer activities (OECD, 2004).

Grants are the most common form of funding applied by both countries, followed by indirect funding in Switzerland and venture capital in Portugal. Again, it is visible the emphasis set by Portuguese policies in promoting entrepreneurship and the creation of innovative start-ups with the development of the venture capital business, as it is shown by the various measures taken on this regard, including the new legislative framework for the activities of venture capital companies, venture capital funds and venture capital investors (Decree-Law nº 375/2007, of November 8) (European_Commission(b), 2008). Notwithstanding, according to the Innovation Scoreboard for 2008, Portugal still has a relative weakness in the dimension "linkages & entrepreneurship",[30] with 'early stage venture capital", reaching 0.067% of GDP, below EU average (0.107%) and Switzerland (0.141%) (European_Commission, 2009). Eligible costs for funding in Portugal are focused in training and other costs while Switzerland policies refer more often labour and equipment.

Structural funds are the prime source of co-financing innovation policies in Portugal while in Switzerland the private sector takes this role. Increasing the share of private R&D investment is a main target of the EU policy. The "3% initiative" decided at the Barcelona Summit of March 2002, identified the crucial role of R&D and innovation, notably from the private sector, in closing the competitiveness gap between Europe and the US or Japan, and also to keep a competitive edge versus potent newcomers on the global innovation scene, such as China or India (European_Investment_Fund, 2005). Finally policy evalution, official as well as evidence of success from unofficial sources, indicates overall better results for Switzerland policies.

[30] Linkages & entrepreneurship dimension captures entrepreneurial efforts and collaboration efforts among innovating firms and also with the public sector, European_Commission. (2009) European Innovation Scoreboard 2008. Comparative Analysis of Innovation Performance. In ProInno Europe InnoMetrics.

Conclusions

Discussions about technology transfer often lead to a quest for assessing the efficiency of the technology transfer process and for comparisons between organisations and countries (Chapple et al., 2005; Siegel et al., 2007; Thursby and Kemp, 2000). It is very difficult to describe the technology transfer process adequately and to monitor it with simple indicators. As mentioned earlier, research in technology transfer still remains an incipient and rather opaque universe, there are few standard definitions, and little data is collected in a systematic way. Nevertheless, indicators interpreted in context can lead to an informed discussion aimed at improving knowledge about technology transfer efficiency. Understanding the determinants that affect university technology transfer may furthermore lead to changes in university policies and organizational practices and public policy conducive to an increased technology transfer efficiency (Friedman and Silberman, 2003).

Framework conditions, and notably public innovation policies, have been referred as an important determinant for technology transfer efficiency (European_Commission(b), 2004; Falk, 2007; Friedman and Silberman, 2003; Goldfarb and Henrekson, 2003). Although, these policies have been in place in some countries for several years (European_Commission, 2001; Georghiou, 1997; Siegel et al., 2007), little work as been done to estimate their impact, at least in what concerns technology transfer.

The present study contributes with two main elements to the existing literature. First, a comprehensive appraisal of the different dimensions and items included in the innovation policies from technology transfer laggard (Portugal) and frontier (Switzerland) countries, including the corresponding statistical differences. Second, an assessment on how those differences can explain the distinct performance of technology transfer offices in both countries, measured by the produced outputs of licensing, industry university collaboration, patents and spin-off creation.

Results corroborate our initial hypothesis that higher technology transfer efficiency levels are associated to innovation policies more supportive to technology transfer efforts. As expected, Switzerland policies overall include more references to knowledge and technology transfer, in the form of licenses, R&D collaboration and spin-offs, than Portuguese policies. One exception was the case of patents (and intellectual property rights in general) with stronger weight in Portuguese policies and, to some extent, the support to spin-off creation and venture capital. The findings have also highlighted significant

differences in variables with impact in technology transfer as for the priorities addressed, target groups and funding eligibility, aspects of the innovation process targeted and forms of funding.

Our aim was not to evaluate the policy quality but rather to understand which policy features would lead to a better performance of TTOs. Given this, and based on our results, we argue that if a country wishes to increase technology transfer efficiency a set of factors should be taken into account in the policy design. Those factors include: a mandate for R&D cooperation between different actors, a priority to fund cutting edge science and research performers and a higher emphasis on applied industrial research and prototype creation aspects of the innovation process.

A final remark, if technology transfer moves up in the political agenda two observations should be kept in mind. First, the establishment of a successful technology transfer office takes time; efficiency will not improve just by changing institutional norms or investing large amounts of funds in the TTO. Second, appropriate policies are supportive, but not of sole relevance. Obviously, other determinants as for internal structures, procedures, priorities, research objectives and the university culture have to be adapted to internalise a real commitment to technology transfer.

The work has two important limitations. First, the work is dependent on the subjectivity of country's respondents when filling up the policy information and the asymmetric availability of information in policies, since not all fields were answered and the same level of detail was not applied to all policies. Second, the limited correspondence we were able to establish between policies and specific technology transfer outputs, apart from the variables keywords, aims and rationale. Although to a limited extent, determinants such as age of TTO and size of staff were controlled, we did not control for other technology transfer determinants and technology transfer inputs, as for size or research endowment of the universities. The extension of the analysis to include innovation policies from other countries with both high and low TTO performance, in order to enlarge the results observed would constitute an interesting path for future research.

References

Anderson, R., Daim, U., and Lavoie, F. (2007) Measuring the efficiency of university technology transfer. Technovation 27, 306-318.

APAX. (2005) Understanding technology transfer: Apax Partners Ltd/The Economist Intelligence Unit.

Arnold, E. (2004) Evaluating research and innovation policy: a systems world needs systems evaluations. Research Evaluation, 13(1), 3–17.

Bercowitz, J., Feldman, M., Feller, I., and Burton, R. (2001) Organizational Structure as a Determinant of Academic Patent and Licensing Behavior: An Exploratory Study of Duke, Johns Hopkins, and Pennsylvania State University. Journal of Technology Transfer, 26, 21-35.

Bozeman, B. (2000) Technology transfer and public policy: a review of research and theory. Research Policy, 29, 627-655.

Chapple, W., Lockett, A., Siegel, D., and Wright, M. (2005) Assessing the relative performance of U.K. university technology transfer offices: parametric and non-parametric evidence. Research Policy, 34, 369-384.

Charles, D.R., Nauwelaers, C., Mouton, B., and Bradley, D. (2000) Assessment of the Regional Innovation and Technology Transfer Strategies and Infrastructures (RITTS) Scheme In Final Evaluation report: European Commission.

Colyvas, J., Crow, M., Gelijns, A., Mazzoleni, R., Nelson, R., Rosenberg, N., and Sampat, N. (2002) How do university inventions get into practice? Management Science, 48, 61-72.

Conti, A., and Gaule, P. (2008) The CEMI Survey of University Technology Transfer Offices in Europe. In CEMI Report: École Polytechnique Fédérale de Lausanne: College of Management of Technology.

Conti, A., Gaule, P., and Foray, D. (2007) Academic Licensing: a European Study. In CDM Working Papers Series, CEMI-WORKINGPAPER-2007-001, Lausanne: CEMI.

Debackere, K., and Veugelers, R. (2005) The role of academic technology transfer organizations in improving industry science links. Research Policy, 34 321-342.

Decter, M., Bennett, D., and Leseure, M. (2007) University to business technology transfer - UK and USA comparisons. Technovation, 27, 145-155.

European_Commission. (2001) Benchmarking Industry-Science Relations -The Role of Framework Conditions: FINAL REPORT: Enterprise DG and Federal Ministry of Economy and Labour, Vienna/Mannheim, Austria.

European_Commission. (2002) Future directions of innovation policy in Europe. In Innovation papers No 31 Directorate-General for Enterprise, Brussels

European_Commission. (2007) GREEN PAPER - The European Research Area: New Perspectives, Brussels, COM(2007) 161 final.

European_Commission. (2009) European Innovation Scoreboard 2008. Comparative Analysis of Innovation Performance. In ProInno Europe InnoMetrics.

European_Commission(a). (2004) Technology Transfer Institutions in Europe: an Overview. In Improving Institutions for the Transfer of Technology from Science to Enterprise (BEST PROJECT "ITTE" 1.11/2002): European Commission, Enterprise Directorate-General.

European_Commission(a). (2008) European Innovation Progress Report 2008. In Inno Policy Trendchart: Enterprise Directorate-General.

European_Commission(b). (2000) Innovation Policy in a Knowledge-Based Economy: ENTERPRISE DIRECTORATE GENERAL.

European_Commission(b). (2004) Improving institutions for the transfer of technology from science to enterprises. In Expert group report: Conclusions and recommendations (BEST PROJECT ITTE 1.11/2002): European Commission - Enterprise Directorate-General.

European_Commission(b). (2008) INNO-Policy TrendChart - Policy Trends and Appraisal Report: PORTUGAL: Enterprise Directorate-General.

European_Commission(c). (2008) INNO-Policy TrendChart - Policy Trends and Appraisal Report: SWITZERLAND: Enterprise Directorate-General.

European_Investment_Fund. (2005) Technology Transfer Accelerator (TTA) Final report September 2005, Contract n° SDCP-CT-2004-516812: European Investment Fund.

Falk, R. (2007) Measuring the effects of public support schemes on firms' innovation activities. Survey evidence from Austria. Research Policy, 36 665-679.

Freeman, C. (2003) Policies for Developing New Technologies. In SPRU Electronic Working Paper Series: Paper No. 98, Brighton: SPRU – Science and Technology Policy Research.

Friedman, J., and Silberman, J. (2003) University Technology Transfer: Do Incentives, Management, and Location Matter? Journal of Technology Transfer, 28, 17-30.

Georghiou, L. (1997) Chapter 3: Issues in the Evaluation of Innovation and Technology Policy. In Policy Evaluation in Innovation and Technology: Towards Best Practices: OECD.

Georghiou, L. (2001) Evolving frameworks for European collaboration in research and technology. Research Policy(30), 891-903.

Goldfarb, B., and Henrekson, M. (2003) Bottom-up versus top-down policies towards the commercialization of university intellectual property. Research Policy, 32, 639-658.

Grande, E., and Peschke, A. (1999) Transnational cooperation and policy networks in European science policy-making. Research Policy, 28, 43-61.

Gulbrandsen, M., and Etzkowitz, H. (1999) Convergence Between Europe and America: The Transition from Industrial to Innovation Policy. Journal of Technology Transfer(24), 223-233.

Kuhlmann, S. (2001) Future governance of innovation policy in Europe—three scenarios. Research Policy, 30, 953-976.

Kuhlmann, S., and Edler, J. (2003) Scenarios of technology and innovation policies in Europe: Investigating future governance. Technological Forecasting & Social Change, 70, 619-637

Lane, J.P. (1999) Understanding Technology Transfer. Assistive Technology, 11 (1), 5–19.

Laranja, M. (2009) The development of technology infrastructure in Portugal and the need to pull innovation using proactive intermediation policies. Technovation, 29, 23-34.

Lemola, T. (2002) Convergence of national science and technology policies: the case of Finland. Research Policy, 31, 1481-1490.

Leydesdorff, L., Cooke, P., and Olazaran, M. (2002) Technology Transfer in European Regions: Introduction to the Special Issue. Journal of Technology Transfer(25), 5-13.

Link, N., Scott, T., and Siegel, S. (2003) The economics of intellectual property at universities: an overview of the special issue. International Journal of Industrial Organization, 21(9), 1217-1225.

Lundquist, G. (2003) A Rich Vision of Technology Transfer. Technology Value Management. Journal of Technology Transfer, 28, 265-284.

Macho-Stadler, I., Pérez-Castrillo, D., and Veugelers, R. (2007) Licensing of university inventions: The role of a technology transfer office. International Journal of Industrial Organization, 25, 483-510.

Mings, J.M. (1998?) Technology Transfer: A Shortcut in Danger of Short Circuit. Journal of Technology Transfer, 23(3), 3-6.

Mothe, J.d.l. (2004) The institutional governance of technology, society, and innovation Technology in Society, 26(2-3), 523-536

Mytelka, L.K., and Smith, K. (2002) Policy learning and innovation theory: an interactive and co-evolving process. Research Policy, 31, 1467-1479.

OECD. (2004) Science and Innovation Policy: Key Challenges and Opportunities In Meeting of the OECD Committee for Scientific and Technological Policy at Ministerial level 29-30 January 2004.

OECD. (2008) Science, Technology and Industry Outlook 2008 OCDE.

Papaconstantinou, G., and Polt, W. (1997) Chapter 1. Policy Evaluation in Innovation and Technology: an Overview. In Policy Evaluation in Innovation and Technology, Paris: OECD.

Pavitt, K. (1998) The inevitable limits of EU R&D funding. Research Policy(27), 559–568.

Proton-Europe. (2005) Proton Europe Annual Survey. Financial Year 2004 Results Report.

Rasmussen, E. (2008) Government instruments to support the commercialization of university research: Lessons from Canada. Technovation 28, 506–517.

Rothaermel, F.T., Agung, S.D., and Jiang, L. (2007) University entrepreneurship: a taxonomy of the literature. Industrial and Corporate Change, 16(4), 691-791.

Shapira, P., Klein, H., and Kuhlmann, S. (2001) Editorial: Innovations in European and US innovation policy. Research Policy(30), 869-872.

Siegel, Donald S., Veugelers, R., and Wright, M. (2007) Technology transfer offices and commercialization of university intellectual property: performance and policy implications. Oxford Review of Economic Policy, 23(4), 640-660.

Siegel, D.S., Waldman, D., and Link, A. (2003) Assessing the impact of organizational practices on the relative productivity of university technology transfer offices: an exploratory study. Research Policy, 32(1), 27-48.

Smith, K. (2000) Innovation as a Systemic Phenomenon: Rethinking the Role of Policy. Enterprise & Innovation Management Studies, Vol. 1(1), 73-102.

Sorensen, J.A.T., and Chambers, D.A. (2008) Evaluating academic technology transfer performance by how well access to knowledge is facilitated—defining an access metric. Journal of Technology Transfer, 33, 534-547.

Stone, V.I. (2003) Systematic Technology Transfer: A Case Study in Assistive Technology. Journal of Technology Transfer, 28, 319-332.

Swamidass, P.M., and Vulasa, V. (2008) Why university inventions rarely produce income? Bottlenecks in university technology transfer. In Journal of Technology Transfer.

Thursby, J.G., and Kemp, S. (2000) Growth and productive efficiency of university intellectual property licensing. Research Policy, 31, 109–124.

Trune, D.R., and Goslin, L.N. (1998) University Technology Transfer Programs: A Profit/Loss Analysis. Technological Forecasting and Social Change, 57, 197-204.

Whitelegg, K., Weber, M., Reinhold Hofer, and Polt, W. (2008) Strategic Governance of R&D Related Policies Brussels: Erawatch (http://cordis.europa.eu/erawatch/).

Annex I

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures result

34 Policy measures found

Switzerland

Ref	Title	Last Update
CH 13	Venturelab - Fast Track for Start ups	27/04/2009
CH 20	Knowledge and Technology Transfer - KTT	01/04/2009
CH 23	KTI-CTI-Invest	01/04/2009
CH 15	energy-cluster.ch	01/04/2009
CH 57	Euresearch	30/03/2009
CH 33	CTI Promotion of Biotechnology - Life Sciences	30/03/2009
CH 36	CTI Promotion of Medtech - Life Sciences	30/03/2009
CH 39	NRP 59 Benefits and Risks of the Deliberate Releas	30/03/2009
CH 59	NCCR Manep	30/03/2009
CH 2	CTI Start-up	27/02/2009
CH 1	Biotechnology - Life Science	21/11/2008
CH 5	MedTech - Life Science	21/11/2008
CH 26	DORE	21/11/2008
CH 40	National Centers of Competence in Research (NCCR)	21/11/2008
CH 16	NRP 57- non ionising radiation, environment and he	21/11/2008
CH 6	Nanotechnology and Microsystemtechnic	07/07/2008
CH 7	Enabling Technologies (Soft[net], ICT (Information	07/07/2008
CH 8	Discovery Projects	07/07/2008
CH 10	Innovation for Successful Ageing	07/07/2008
CH 14	Science et Cité	07/07/2008
CH 18	KTI-Asia	07/07/2008
CH 19	ERA-NETs	07/07/2008
CH 21	ManuFuture	07/07/2008
CH 22	R&D Consortia	07/07/2008
CH 24	GSK-Initiative	07/07/2008
CH 25	Seventh Framwork Programme (FP7) of the EU	07/07/2008
CH 37	NRP No. 47: "Supramolecular Functional Materials"	01/07/2008
CH 34	CTI Promotion of Enabling Technologies	01/07/2008

CH 35	CTI Promotion of Nanotechnology and Microsystems	24/06/2008
CH 38	NRP No. 50: "Endocrine Disruptors: Relevance to Hu	23/06/2008
CH 30	NCCR Quantum Photonics	11/03/2008
CH 32	NCCR Nanoscale Science	11/03/2008
CH 29	NCCR Structural Biology	11/03/2008
CH 31	NCCR Neuro	11/03/2008

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 13 Date created: 02/11/2004 Date Updated: 27/04/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure Venturelab - Fast Track for Start ups

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Venturelab - Fast Track for Start ups

1.3 Keyword(s) Venturelab
Start-up
Management Education
Entrepreneurship

1.4 Overview (nature, main goals) Venturelab is an initiative launched by the innovation promotion agency KTI/CTI in order to promote entrepreneurship in Switzerland. It is carried out in co-operation with the federal institutes of technology, universities and universities of applied sciences. Venturelab provides customised education tools to promote innovative young entrepreneurs and to inspire students for entrepreneurship. The offered services for students include semester courses to sensitise the students for entrepreneurship and workshops where important tools for prospective entrepreneurs are taught. For existing start-ups, venturelab offers 5 day intensive courses and advisory services. Finally, Venturelab offers 20 entrepreneurs each year to participate in a workshop in Boston that offers opportunities for networking beside of providing education. The initiative focuses on the best projects, accompanies them with professional consulting paying more attention to practice rather than theoretical concepts. It is organised at a regional level. This measure should be addressed to approximately 1500 students. Furthermore 500 entrepreneurs should be trained in management per year.

1.5 Background and rationale (Analytical reasoning why this measure is being created) The lack of "entrepreneurial spirit" is an major weakness of the Swiss innovation system, as it is indicated by measures such as the availability of early stage venture capital. The GEM report 2007 shows that the Swiss establishment quota is in the midfield of rich countries. Venturelab addresses this weakness and aims at promoting entrepreneurship in Switzerland. Furthermore this initiative should inspire students and entrepreneurs to improve their skills in management.

1.6 Policy Priorities 3.3.1 Job training (LLL) of researchers and other personnel involved in innovation
4.2.1 Support to innovation management and advisory services
4.3.1 Support to innovative start-ups incl. gazelles

2. Detailed information on duration and targets of measure

2.1 Start date 2004

2.2 Expected ending No End Date Planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure
Other (Please explain)
This measure was introduced as an extension to the measure CTI-Start-up, which adresses existing start-ups by providing coaching and network opportunities. Venturelab complements the offered services by providing more general education and sensibilising potential entrepreneurs.

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Tthe measure was introduced because the Education-, Research-, and Technology (ERT) message 2004-2007, the most relevant policy document in respect to research and innovation policy, has defined the promotion of entrepreneurial spirit as one goal of the KTI/CTI.

2.4 Geographic coverage (National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓
Scientists / researchers (as individuals)	✓	✓
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	
Other public education institutions (secondary,etc...)	✓	
Private institutions for education / lifelong learning	✓	
Technology and innovation centres (non-profit)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking optional (e.g. associating SMEs as users)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation Development/prototype creation Commercialisation of innovation (including IPR)
Promotion of entrepreneurship/start up (including incubators)	Industrial design Diffusion of technologies in enterprises Improving the legal and regulatory environment

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The Swiss Innovation Promotion AgencyKTI/CTI administers the measure.
Openness to EU countries	Yes
Openness to third countries	Yes
3.4 In what form is funding provided ?	No direct funding provided Other Specify other: Support in the form of courses and workshops is provided.
3.7 Overall budget	Overall budget in EUR **n.a.** further information **Venturelab has 12 employees.**

4. Results, evaluation and impacts CH 13

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

There has been an internal evaluation, which was finalised in November 2007. It states that a need for the initiative exists and affirms the utility of the measure. It was found that 90% of the participants consider the seminars suitable to achieve the programme goals, Furthermore, 80% of the overall interviewed user base corroborated that the offerings were of value. Since the start of the programme in 2004, 7500 potential entrepreneurs have profited from the venturelab workshops and courses. Reference: Koci, Martin, Wolfram Kägi and Stefanie Hof (2007): Evaluation „KTI-Initiative Entrepreneurship, Education and Training (Programm venturelab)", conducted by B,S,S., mandated by Federal Office for Professional Education and Technology (OPET).

5 How to find out more about the measure ? CH 13

5.1 Information Souce/Reference	Website: http://www.venturelab.ch/dt/home.asp Uploaded document(s):
5.2 Legal basis	Education- Research and Technology message 2004-2007 (ERT-message 2004-2007)
5.3.1 Launching Agency	Swiss Innovation Promotion Agency KTI/CTI

PRO INNO EUROPE

Trendchart Support measures detail

CH 20 Date created: 20/04/2006 Date Updated: 01/04/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	Knowledge and Technology Transfer - KTT
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Knowledge and Technology Transfer - KTT
1.3 Keyword(s)	Knowledge and Technology Transfer KTT consortiums KTI/CTI trigger function cross sectional measure
1.4 Overview (nature, main goals)	This measure fulfills a kind of "trigger" function for knowledge and technology transfer (KTT) in Switzerland. It should promote KTT between public science institutions and private firms in order to foster innovation and new market products. There have been built five consortiums consisting of KTT service centers. Theses service centers aim at reinforcing demand of companies for university knowledge and research results, enabling companies to better identify existing knowledge and future requirements, reinforcing companies, above all SMEs, in their contact with universities, improving ability of universities to transfer their knowledge to companies, improving joint development of problem resolutions between universities and business. More concretely the five regional focused consortiums should link KTT offices at the universities, universities of applied sciences and the federal institutes of technology on a regional level. The KTI/CTI KTT experts promote transparency between the consortiums and promote "good practices". So far five contracts has been made, i.e. consortia 'Mittelland W6', 'Nordwestschweiz WKNW', 'Alliance', 'Umwelt und Energie', and 'CHost'.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	The valorisation of knowledge (CH_4) is an important innovation policy strategy in Switzerland. It has been promoted by the Federal Government and the Parliament in its last ERT-message (2004 - 2007). Swiss universities produce a very good research output. Although on a rather high-level, the Swiss innovation performance is stagnating. Policy makers believe that intensifying KTT would contribute positively to the innovativeness of firms in Switzerland. In fact, some studies on KTT in Switzerland prove the positive impact of KTT on the innovation performance of a firm. Thus, it was decided to launch a further measure (measure of assistance) to promote KTT. A commission of experts form the Federal Office for Professional Education and Technology and the State Secretariat for Education and Research - led by the Innovation Promotion Agency - was created to set up and implement this KTT measure.
1.6 Policy Priorities	1.3.1 Cluster framework policies

5.3.2 Agency administering	Swiss Innovation Promotion AgencyKTI/CTI
5.3.3 Funding Agency	Swiss Innovation Promotion AgencyKTI/CTI
5.3.4 Manager(s) responsible for the measure	Schilling Beat - (Venturelab.ch)

back to top

	2.2.1 Support infrastructure (transfer offices, training of support staff) 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 4.2.1 Support to innovation management and advisory services

2. Detailed information on duration and targets of measure

2.1 Start date	2005
2.2 Expected ending	No End Date Planned
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	Novel (no relation to previous) measure
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	(National)
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Scientists / researchers (as individuals)	✓	✓
Higher educations institutions research units/centres	✓	✓
Other non-profit research organisations (not HEI)	✓	✓

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation Pre-competitive research
Promotion of entrepreneurship/start up (including incubators)	Development/prototype creation Diffusion of technologies in enterprises
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	beside others: quality and originality, KTT service centres have to be involved, qualification of the coordinator, educational function, good practices are used, use of availabel data, information sources, information platforms, and statistics etc.
Openness to EU countries	No
Openness to third countries	No
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **6,000,000** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.65** Overall budget in national currency **10,000,000** further information **Governmental funding for the budget period 2004-2007**

4. Results, evaluation and impacts CH 20

4.1 Were any indicators specified ex ante for the	Yes Linking KTT offices at universities, universities of applied sciences

measurement of the results	and federal institute of technologies at a regional level, comparative advantages should be used and duplication should be prevented. The KTT systems should be adjusted to: transparent and fair conditions for the KTT partners, KTT service centres have to adapt to the market forced circumstances of a firm and its time requirements, lead-managed by the business partner new insights should be created together and existing knowledge/technologies should be applied.
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	KTI/CTI is an experienced funding organisation and the appointed group of experts guarantee a success of this measure.

5 How to find out more about the measure ? CH 20

5.1 Information Souce/Reference	Website: http://www.bbt.admin.ch/print/kti/gebiet/wtt/e/index.htm Uploaded document(s):
5.2 Legal basis	ERT-message
5.3.4 Manager(s) responsible for the measure	Ramseyer Lorenz - (KTI (Innovation Promotion Agency))

back to top

1.6 Policy Priorities	2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes) 3.3.1 Job training (LLL) of researchers and other personnel involved in innovation 4.3.1 Support to innovative start-ups incl. gazelles 4.3.2 Support to risk capital
1.9 Addressing innovation-related Lisbon guideline elements	5. Better access to domestic and international finance.

2. Detailed information on duration and targets of measure

2.1 Start date	2003
2.2 Expected ending	No End Date Planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	(National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation Pre-competitive research Development/prototype creation
Promotion of entrepreneurship/start up (including incubators)	Commercialisation of innovation (including IPR) Industrial design Improving the legal and regulatory environment Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?	No compulsory list of criteria. Holder of KTI/CTI start up lables are admitted for sure.
Openness to EU countries	yes
Openness to third countries	yes
3.4 In what form is funding provided ?	Venture capital (including subordinated loans) Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Other all kind of costs - it is about venture capital
3.7 Overall budget	Overall budget in EUR **Not specified**

4. Results, evaluation and impacts CH 23

4.1 Were any indicators specified ex ante for the	No

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 23 Date created: 11/05/2007 Date Updated: 11/03/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	KTI-CTI-Invest

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** KTI-CTI-Invest

1.3 Keyword(s)	venture capital business angles KTI/CTI Co-operation
1.4 Overview (nature, main goals)	CTI/KTI Invest aims to close the financing gap in the initial phase of getting a new company off the ground. CTI Invest is a private, independent association of investors and offers start-ups a platform on which to present their business ideas to a broad audience of business angels as well as both national and international venture capital firms. The goal of CTI Invest is to convince not only other business angels but most importantly foreign firms of Swiss innovation power. It stages regular events at which young entrepreneurs can present their firms to potential investors (so-called match-making events). It also organises so-called networking events, whose emphasis is on the transfer of knowledge and information.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	According to national and international experts venture capital is rather scarce in Switzerland. Innovative firms are supported in developing their business plans and may also get some indirect funding from the KTI/CTI if they submit a promising project. Also start-ups get some public support. However there remains a financial gap that is not filled by available public support or the regular capital markets, the so called venture capital market. In other countries this gap is filled through venture capitalist or so called business angels. They help a firm to reach an adequate size and be adequately equipped with capital in order to occupy a niche in a market until new products are commercialised or reach a certain maturity in the market to enable a firm to be self-preserving.

measurement of the results	
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	Until 2006 the measure caused venture money of 44 mio. Euros for start-up / young firms.

5 How to find out more about the measure ? CH 23

5.1 Information Souce/Reference	Website: http://www.cti-invest.ch/ English website: http://www.cti-invest.ch/ Uploaded document(s):
5.2 Legal basis	ERT-Message 2008-2011
5.3.4 Manager(s) responsible for the measure	Bopp Martin - (The Innovation Promotion Agency (CTI))

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 15 Date created: 30/03/2005 Date Updated: 11/03/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure energy-cluster.ch

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** energy-cluster.ch

1.3 Keyword(s) sustainable energy production
co-operation
further education
technology innovation
coaching

1.4 Overview (nature, main goals) The measure 'energy-cluster.ch' is a club founded by large firms, educational organisations and public authorities. It comprises about 200 members. It aims at the promotion of innovation in order to increase energy efficiency, to stimulate demand for sustainable energy products, to reduce not renewable energies and CO2 emission and to promote renewable energies, to interlink suppliers of energy products, services and to increase demand.
It intends to do so by providing networking platforms to its members. Furthermore it takes care of promotion activities in Switzerland and abroad to improve the visibility and image of energy producers in Switzerland. It also organises education events and offers advice to start-ups.

1.5 Background and rationale (Analytical reasoning why this measure is being created) The energy sector is responsible for about 10% of total value added. Around CHF200m are invested in R&D and enormous efficiency potentials could be detected. Export markets grow between 5% and 10% annually. Energy production and usage causes 11 to 16 billion external costs. Despite these facts, the acceptance of new energy technologies is still lacking in the society, both in Switzerland and abroad. In order to improve this situation and the location marketing in general, the founding members joined in this association.

1.6 Policy Priorities

1.3.2 Horizonal measures in support of financing
4.1.1 Support to sectoral innovation in manufacturing
4.2.1 Support to innovation management and advisory services

5.2.1 Fiscal incentives in support of the diffusion of innovative technologies, products and services

1.8 Targeted research and technology fields Energy,

1.9 Addressing innovation-related Lisbon guideline elements 2. The creation and development of innovation poles, networks and incubators bringing together universities, research institutions and enterprises, including at regional and local level, helping to bridge the technology gap between regions.

2. Detailed information on duration and targets of measure

2.1 Start date 2004

2.2 Expected ending No End Date Planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure

2.4 Geographic coverage (National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	✓
Consultancies and other private service providers (non-profit)	✓	✓
Scientists / researchers (as individuals)	✓	✓
Higher educations institutions research units/centres	✓	✓
Other non-profit research organisations (not HEI)	✓	✓
Higher education institutions (education function)	✓	✓
Other public education institutions (secondary,etc...)	✓	✓
Private institutions for education / lifelong learning	✓	✓
Technology and innovation centres (non-profit)	✓	✓
Business organisations (Chambers of Commerce...)	✓	✓
Trade Unions	✓	✓
Other		✓

2.5.3 If more than one target group is eligible, is Co-operation/networking optional (e.g. associating SMEs as users)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Awareness raising amongst firms on innovation
Pre-competitive research
Development/prototype creation

Promotion of entrepreneurship/start up (including incubators) Commercialisation of innovation (including IPR)
Industrial design
Diffusion of technologies in enterprises
Innovation management tools (incl quality)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: It is an independent association.

Openness to EU countries No

Openness to third countries No

3.4 In what form is funding provided ? Grants
Subsidized loans (including interest allowances)
Other
Specify other: awards, interlinkage industry and research

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Equipment
Training (including study trips)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **0.67**

Year :

2004	€375,000
2005	€560,000
2006	€536000

4. Results, evaluation and impacts CH 15

4.1 Were any indicators specified ex ante for the measurement of the results No

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **Yes**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

The measure has been evaluated favourably. The evaluation concludes that the association offers products that reflect the needs of its members. It further shows that "energy-cluster.ch" has an influence in respect to network development and innovation behaviour.

5 How to find out more about the measure ? CH 15

5.1 Information Souce/Reference Website: http://www.energie-cluster.ch/web
Uploaded document(s):
Produkteliste_EnergieCluster.pdf

5.2 Legal basis Statutes of the association

5.3.1 Launching Agency Swiss Federal Office of Energy (SFOE)

5.3.3 Funding Agency The biggest donator among governmental agencies is the SFOE which has donated €77,000 in 2006.

5.3.4 Manager(s) responsible for the measure Schriber Gerhard - (Swiss Federal Office for Energy)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 57 Date created: 28/01/2009 Date Updated: 30/03/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	Euresearch
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Euresearch
1.3 Keyword(s)	European research Information network
1.4 Overview (nature, main goals)	Euresearch is an information network that informs Swiss researchers and firms about European research and assists them in orienting themselves in the EU policy framework, e.g. concerning tenders in the Framework and COST initiatives. It is organized as a network of regional offices located at the universities and a head office in Berne.Furthermore, the network contains an office in Brussel, called SwissCore. Information services it offers include one-to-one coaching, information events and answering of questions in respect to European Research.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	The network is intended as an information platform in respect to recent developments and trends in European research, innovation and education policies. Furthermore it offers advice in questions concerning organisation, management and administrative procedures of European research, innovation and education programmes. Finally, it facilitates contacts to EU institutions and representations of research organisations and relevant interest groups in Brussels
1.6 Policy Priorities	1.3.2 Horizonal measures in support of financing 2.1.1 Policy measures concering excellence, relevance and management of research in Universities 2.1.2 Public Research Organisations
1.8 Targeted research and technology fields	No specific thematic focus,

2. Detailed information on duration and targets of measure

2.1 Start date	before 1995
2.2 Expected ending	no end date planned
2.3.2 If the measure is novel was it mainly	Other (Please explain) Switzerland started participating in the EU

	frameworkprograms
2.4 Geographic coverage	Switzerland

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Consultancies and other private service providers (non-profit)	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	
Other public education institutions (secondary,etc...)	✓	
Private institutions for education / lifelong learning	✓	
Technology and innovation centres (non-profit)	✓	
Business organisations (Chambers of Commerce...)	✓	
Trade Unions	✓	

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure **Promotion of entrepreneurship/start up (including incubators)**	Not applicable/other
If you have additional comments on the targeted fields, please provide them here:	The targeted activity depends on what aspect of european policy is at hand.
2.6.2 Type of Research Activity targeted:	Basic research Problem driven (basic) research Pre-competitive research Applied industrial research Social sciences research Knowledge transfer (between researchers) Human research development International research collaboration Networking
If you have any additional comments on the targeted fields, please provide them here:	The targeted activity depends on what aspect of european policy is at hand.

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The information is to a large extent gathered by SwissCore, the branch of Euresearch in Brussel. The dissemination is organized as a network. Beside of the head office in Bern, there is an office in most Swiss

	universities.
Management structure:	Euresearch is mandated by the State Secretariat for Education and Research (SER) and operates in close collaboration with SwissCore, the liaison office in Brussels of the Swiss National Science Foundation (SNSF) and the SER.
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Though exceptions might exist, the service is intended to support Swiss researchers and firm representatives.
Openness to EU countries	No
Openness to third countries	No
3.3. What State Aid framework is applied to the measure	Euresearch is mandated by the State Secretariat for Education and Research (SER)
3.4 In what form is funding provided ?	Specify other:
3.7 Overall budget	Overall budget in EUR **not available** Overall budget in national currency **not available**

Year :

0	
0	
0	
0	
0	

4. Results, evaluation and impacts CH 57

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

In an evaluation in the year 2003, the management structure is assessed positively because it allows the development of entrepreneurial initiative. it notes though, that the framework agreement between the SER and EUresearch should be formulated more accurately. The evaluators further find that EUresearch has the right target audience and offers products that are useful for the customers shown by the high customer satisfaction. The networks awareness level is good as well.

5 How to find out more about the measure ? CH 57

5.1 Information Souce/Reference	Website: http://www.euresearch.ch/ English website: http://www.euresearch.ch/ Uploaded document(s):
5.3.1 Launching Agency	State Secretariat for Education and Research (SER)
5.3.2 Agency administering	The Swiss branches are administered by the State Secretariat for Education and Research (SER). SwissCore, the branch in Brussel, is administered by the Swiss National Science Foundation (SNSF)
5.3.3 Funding Agency	The Swiss branches are funded by the State Secretariat for Education and Research (SER). Swisscore is is the Brussels-based contact office of the Swiss National Science Foundation (SNSF). It is also co-financed by the SER and the Federal Office for Professional Education and Technology (OPET).
5.3.4 Manager(s) responsible for the measure	Direktor: Olivier Küttel

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 33 Date created: 25/04/2006 Date Updated: 11/03/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure CTI Promotion of Biotechnology - Life Sciences

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** CTI Promotion of Biotechnology - Life Sciences

1.3 Keyword(s)

Biotech start-ups
Biotechnology
Knowledge diffusion in Life Sciences
Life Sciences

1.4 Overview (nature, main goals)

This programme is part of an initiative of the "Innovation Promotion Agency" (KTI/CTI) aiming at strengthening the link between science and industry in selected fields of strategic importance for the Swiss economy.

The results of a biotechnology priority programme of the Swiss National Science Foundation (SNSF) (1992-2001) indicated a large potential for applied R&D in biotechnology. The CTI-Biotech program was launched to exploit this potential. The goals of this measure are: a) promoting the fast growing Swiss biotech industry by further optimisation know-how and technology transfer; b) targeted and efficient support for the creation of new biotech companies; c) facilitating the economic exploitation of innovative techniques and products emerging from basic and application-oriented R&D in biotechnology.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

Switzerland has a competitive advantage in the biotechnology and pharmaceutical industry which is growing very fast. The CTI programme "Biotechnology" is part of a mixed strategy to push the Swiss capabilities in this sector even further. Whereas the SNSF (Swiss National Science Foundation) supports almost exclusively basic research, the KTI programme is more application-oriented: promotion of (applied) R&D, support of scientific networking, improvement of biotech support infrastructure, facilitation of innovation and technology transfer, creation of spin-offs and start-ups.

1.6 Policy Priorities

2.2.1 Support infrastructure (transfer offices, training of support staff)
2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)
2.2.3 R&D cooperation (joint projects, PPP with research institutes)
4.3.1 Support to innovative start-ups incl. gazelles

If other, please specify

Within the biotech field, applicants (firms co-operating with universities) define the topic of the project (bottom-up principle). Project quality as assessed by experts is the prime criterion rather than the topic in itself.

2. Detailed information on duration and targets of measure

2.1 Start date 2002

2.2 Expected ending no end date planned

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Inspired by experience from the SNSF Priority Programme "Biotechnology", a programme targeted to a larger extent to basic research.

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Trade Unions	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted:

Pre-competitive research
Applied industrial research
Knowledge transfer (between researchers)
Human research development
Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The KTI/CTI is responsible for the programme. It approves proposals of science-industry co-operation partners based on (partly external) expert knowledge. Funding goes to the university partner, with the industry partner (s) financing at least 50% of the project (with some exceptions, e.g. start-ups); hence, industry is subsidised only indirectly. The industry partner is responsible for the project management

Subprogramme structure: none

Management structure: See overall implementation structure

Review of progress: Monitoring only at the project level (intermediate and final assessments by KTI and experts). Too early for an evaluation of the whole programme. An ex ante analysis showed the large potential of such a programme.

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Compulsory:
a) co-operation with a university (of applied science) , b) at least 50% self-funding.

Moreover, CTI has some general (not compulsory) guidelines for project evaluation. E.g. competence profile of the applicants (knowledge, formal qualifications, resources, etc.), commercial-technical goals, business-plan, property rights, but also cost-benefit ratios, project length and neutrality of the measure in the target group.

Openness to EU countries No direct funding of foreign institutions

Openness to third countries Same as EU countries

Selection of projects / participants Application is possible at any time. Evaluation by (primarily) external experts.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR **open-ended programme**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable (non-Euro zone) **1.46**
Overall budget in national currency **open-ended programme**
further information **Phase II (2004-2007)**

Year :

2005	€4.4m
2006	€6.5m
2007	€3.7m
0	?
0	?

4. Results, evaluation and impacts CH 33

4.1 Were any indicators specified ex ante for the measurement of the results No
Goals and deliverables as formulated by the applicants and agreed upon by KTI

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **Yes**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? There is a systematic reporting of the outcomes of each finished project.

5 How to find out more about the measure ? CH 33

5.1 Information Souce/Reference Website: http://www.bbt.admin.ch/kti/projektfoerderung/00240/index.html?lang=de
English
website: http://www.bbt.admin.ch/kti/projektfoerderung/00240/index.html?lang=en
Uploaded document(s):

Relevant further information the programme is open-ended

5.2 Legal basis Government budget decision on the KTI/CTI activities in the period 2008-2011 (based on parliamentary approval)

5.3.2 Agency Innovation Promotion Agency (CTI), in German: Kommission für Technologie

administering und Innovation (KTI)

5.3.3 Funding Agency Innovation Promotion Agency (CTI), in German: Kommission für Technologie und Innovation (KTI)

back to top

Important legal notice

PRO INNO EUROPE

Password reminder

Trendchart Support measures detail

CH 36 Date created: 26/04/2006 Date Updated: 11/03/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure CTI Promotion of Medtech - Life Sciences

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** CTI Promotion of Medtech - Life Sciences

1.3 Keyword(s)

Life Sciences
Medical instruments
Precision instruments

1.4 Overview (nature, main goals)

This programme is part of an initiative of the Innovation Promotion Agency (CTI) aiming at strengthening the link between science and industry in selected fields of strategic importance for the Swiss economy.

Although Swiss economy is very competitive in the medical instruments industry, the potential is not yet fully exploited. One reason is the fact that the path from laboratory to market may be very costly in this field. In particular for small firms it often is difficult to commercialise their research output. Therefore MedTec encourages private companies and scientific partners (universities, universities of applied sciences) to co-operate in specific projects. They are invited to combine their knowledge in order to generate original products and/or product ideas with a high market potential.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

The Swiss economy is endowed with outstanding capabilities in the field of precision instruments (incl. watchmaking); the same holds for the relevant disciplines at universities. Since medical instruments is a growth sector and links to two strong sectors of the Swiss economy (pharmaceutical industry, health sector) the potential of medical technology is very high in this country. There are already over 500 companies, half of which are small or medium-sized, which are involved in medical technology. To strengthen their position even further, they have to make use of the fast scientific progress. Technology transfer, in particular in case of SME, is therefore of particular importance and may open up new opportunities for start-up and other small firms.

1.6 Policy Priorities 2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)
2.2.3 R&D cooperation (joint projects, PPP with research institutes)
3.3.1 Job training (LLL) of researchers and other personnel involved in innovation
4.3.1 Support to innovative start-ups incl. gazelles

If other, please specify

Within the field of medical instruments, applicants (firms co-operating with universities) define the topic of the project (bottom-up principle). Project quality as assessed by experts is the prime criterion rather than the topic in itself.

2. Detailed information on duration and targets of measure

2.1 Start date 2000

2.2 Expected ending no end date planned

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Fraunhofer ISI, Karlsruhe, has been consulted to design a programme fostering the MedTech sector.

See also: "Background and Rationale"

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Trade Unions	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: Applied industrial research
Networking

If you have any additional comments on the targeted fields, please provide them here: Support of commercialisation in case of start-ups and other small firms

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The responsibility for the programme is at CTI. It approves proposals of science-industry co-operation partners based on (partly external) expert knowledge. Funding goes to the university partner, with the industry partner(s) financing at least 50% of the project (with some exceptions, e.g. start-ups); hence, industry is subsidised only indirectly. The industry partner is responsible for the project management.

Subprogramme structure: none

Management structure: see overall management structure

Review of progress: Monitoring at the project level (intermediate and final assessments by CTI and experts).

Evaluation of phase I (2000-2003) of the programme in 2004; see below.

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Compulsory: a) co-operation with a university (of applied science) , b) at least 50% self-funding.

Moreover, CTI has some general (not compulsory) guidelines for project evaluation. E.g. competence profile of the applicants (knowledge, formal qualifications, resources, etc.), commercial-technical goals, business-plan, property rights, but also cost-benefit ratios, project length and neutrality of the measure in the target group.

Openness to EU countries no direct funding of EU firms/institutions

Openness to third countries same as EU

Selection of projects / participants Application is possible at any time. Evaluation by (primarily) external experts.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR **open-ended programme**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.55**
Overall budget in national currency **open-ended programme**
further information **The budget of phase II (2004-2007) is 26 Mio. EUR (40 Mio. SFR)**

4. Results, evaluation and impacts CH 36

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **Yes**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

The programme was evaluated by international experts in 2004: The evaluation aimed at providing an expertise about the realisation of the programme and its impact (outcome). It turned out that the programme was basically well designed (by the Fraunhofer ISI, Karlsruhe) and met the needs of the applicants. However, the experts suggested some modifications: In assessing the submitted project proposals, the promoting agency (Commission for Technology and Innovation (CTI)) should draw more intensively on international expertise. The experts recommend to stick to a rather broad definition of the field of MedTech in view of the rapid technical progress (wide range of potential projects). The programme (e.g. aim, goals, intentions) should become more research-oriented. Furthermore, the programme management should also take

accompanying measures such as awareness building, monitoring, etc.

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? No published report

5 How to find out more about the measure ? CH 36

5.1 Information Souce/Reference Website: http://www.bbt.admin.ch/kti/projektfoerderung/index.html?lang=de
English
website: http://www.bbt.admin.ch/kti/projektfoerderung/index.html?lang=en
Uploaded document(s):

Relevant further information The programme is open-ended

5.2 Legal basis Second phase of the programme: Government budget decision on the CTI activities in the period 2004-2007 (based on parliamentary approval)

5.3.2 Agency administering Innovation Promotion Agency (CTI), in German: Kommission für Technologie und Innovation (KTI)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 39 Date created: 04/07/2007 Date Updated: 11/03/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure NRP 59 Benefits and Risks of the Deliberate Release of Genetically Modified Plants (GMP)

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** NRP 59 Benefits and Risks of the Deliberate Release of Geneti Modified Plants (GMP)

1.3 Keyword(s)

Plant biotechnology
Risk analysis
social aspects of plant biotechnology

1.4 Overview (nature, main goals)

One of the main objectives of sustainable agriculture is to increase productivity while decreasing the negative impact on environment and human and animal health. Negative impacts stem mainly from the use of herbicides, pesticides and fertilisers as well as from land use management. The application of gene technology to modify plants may significantly contribute to solve such problems, but may involve risks to public health and the environment.

In order to support well-informed decision making on the regulation of the application of GM plants, this "National Research Programme" (NRP), funded by the Swiss National Science Foundation (SNSF), aims at a comprehensive evaluation of costs and benefits of GM plants taking account of the specific conditions of Switzerland (small-scale agricultural system; high densitiy of population, etc.).

More specifically, the programme adresses three topics:
- To what extent and how can GM plant contribute to achieving Swiss agricultural and environmental policy goals?
- How can the co-existence of GM plant and non-GP plant crops managed?
- The legal and administrative framework for research on and commercial application of GM plants needs to be assessed. The same holds for related risk-assessment,

risk-analysis, and decision-making procedures as well as monitoring.

The emphasis lies in the application of existing results from worldwide research in the specific Swiss context. At the same time, this NRP should ensure the top-quality research in this field in Switzerland, which, if unduly restricted by politics, may be in danger (decreasing attractiveness of Switzerland for top-researchers)
Public debates associated with the commercial use of genetically modified (GM) plants has shown that the majority of the population remains very sceptical with regard to the the benefits of GM plants and is concerned about potential risks. Consequently, a five-year moratorium of application was approved at the end of 2005 by popular vote. This period should be used to increase knowledge about costs and benefits of GM plants. In 2009/10 it will be decided whether to end or extend the moratorium.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

The Swiss scientific community is well placed to meet the objectives mentioned above (see "overview"). It holds a highly competitive international position in plant molecular biology and physiology, development genetics, environmental siences, etc. Considering the short time frame and limited funding this NRP emphasises the applicability of existing knowledge in the Swiss context (e.g. agriculture in Switzerland is not comparable to large-scale farming in countries like USA).

1.6 Policy Priorities

1.2.1 Strategic Research policies (long-term research agendas)
2.1.1 Policy measures concering excellence, relevance and management of research in Universities
2.2.3 R&D cooperation (joint projects, PPP with research institutes)

If other, please specify
See overview

Genetics, plant pysiology, biotechnology, agricultural sciences, environmental sciences, social sciences and humanities

2. Detailed information on duration and targets of measure

2.1 Start date 2007

2.2 Expected ending 2011

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Public debates associated with the commercial use of GM plants has shown that the majority of the population remains very sceptical with regard to the the benefits of GM plants and is concerned about potential risks. Consequently, a five-year moratorium of application was approved at the end of 2005 by popular vote. This period should be used to increase knowledge about costs and benefits of GM plants. In 2009/10 it will be

decided whether to end or extend the moratorium.

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	

2.6.2 Type of Research Activity targeted:
Problem driven (basic) research
Social sciences research
Knowledge transfer (between researchers)
Human research development

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The programme is strategically managed by a Steering Commitee representing leading national and international experts. Operational magement is at the Swiss National Science Foundation (SNSF), and an implementation officer, appointed by the Research Council of the SNSF, is responsible for the management of communication to the public, media, policy-makers and other stakeholders.

Subprogramme structure: None

Management structure: see "overall implementation structure"

Review of progress: Submission of an annual report to the SNSF, which then is assessed by international experts

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Scientific quality and originality; feasability and compliance with the objectives of the programme; applicability (implementation-oriented); adequate infrastructure and personnel

Openness to EU countries No direct funding of foreign research institutions, but these may profit from linking to the programme (collaboration with researchers taking part at EU programmes and research initiatives of other countries such as Germany and the UK).

Openness to third countries Same as EU

Selection of projects / participants Fixed call by the SNSF for projects contributing to the objectives of the programme which are, in the aftermath of the moratorium for GM plant, defined at a general level by the Federal Government. Submission of pre-proposals which are subject to peer review. On this basis the steering commitee selects a number of projects for which a full proposal may be worked out. The full proposals are reviewed by international experts. If the assessment is positive, the principal investigator has to present the planned project to the steering commitee and a panel of international experts who may ask for adjustments. The final decision on the projects is made by the Research Council of the SNSF.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Training (including study trips)

3.7 Overall budget Overall budget in EUR **€8.2m**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.46**
Overall budget in national currency **CHF12m**
further information **No yearly budget.**

Year :

0	
0	
0	
0	
0	

4. Results, evaluation and impacts CH 39

4.1 Were any indicators specified ex ante for the measurement of the results No
Milestones and deliverables formulated by the applicants and agreed upon by the SNF.

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **Yes**

4.3 If the programme was evaluated, what were the main findings?
The programme just started

5 How to find out more about the measure ? CH 39

5.1 Information Souce/Reference Website: http://www.nrp59.ch/d_index.cfm
English website: http://www.nrp59.ch/e_index.cfm
Uploaded document(s):

5.2 Legal basis Government decision based on a recommendation of the SNSF

5.3.1 Launching Agency Swiss National Science Foundation (SNSF)

5.3.2 Agency administering Swiss National Science Foundation (SNSF)

5.3.3 Funding Agency Swiss National Science Foundation (SNSF)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 59 Date created: 10/03/2009 Date Updated: 30/03/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure NCCR Manep

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** NCCR Manep

1.3 Keyword(s) Crystal growth
Industrial applications
materials with complex electronic structures
Strongly interacting electrons
Superconductivity

1.4 Overview (nature, main goals) This programme is part of a large-scale research initiative of the Swiss National Science Foundation (SNSF) aiming at establishing and funding of "National Competence Centres of Research" (NCCR). In the last twenty years, numerous new electronic materials have been discovered that have interesting and often complex crystalline structures and new electronic properties. The main goals of MaNEP are to develop a basic understanding of these new materials, to prepare for their applications, and to train young scientists in this important field for future electronic applications.

1.5 Background and rationale (Analytical reasoning why this measure is being created) The rationale behind this measure is that numerous new electronic materials have been discovered over the last few decades. They do not only challenge our basic understanding of condensed matter, but also have a strong potential for applications. Therefore the purpose of the measure is to:
1. Promotion of long term cutting-edge research projects in an area (Life Sciences) that is of vital strategic importance for Swiss science, economy and society.
2. Tightening and expanding research networks in Switzerland (as well as links with foreign partners).
3. Further developing the present top-level competence of research in this field.
4. Intensifying research-based training for promising young researchers (with special emphasis on women).
5. Fostering knowledge transfer to industry.

1.6 Policy Priorities 2.1.1 Policy measures concering excellence, relevance and management of research in Universities
2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)
3.1.3 Stimulation of PhDs

1.8 Targeted research and technology fields Materials,

2. Detailed information on duration and targets of measure

2.1 Start date 2001

2.2 Expected ending 2009

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how
Research-internal logic matching the strategic goals of national research policy (cutting-edge research in strategic research fields).

2.4 Geographic coverage Switzerland

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Higher education institutions (education function)	✓	
Other	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Applied industrial research
Promotion of entrepreneurship/start up (including incubators) Development/prototype creation

2.6.2 Type of Research Activity targeted: Basic research
Pre-competitive research
Applied industrial research
Knowledge transfer (between researchers)
Human research development
Networking

If you have any additional comments on the targeted fields, please provide them here: International research collaboration is not an immediate target but it is obvious that a NCCR has extensive international links (and aims at deepening the already existing network)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The responsibility for the programme is at a so-called "home institution" (University of Geneva) that co-ordinates a series of research groups of (own institution, other Swiss as well as foreign research groups). There are six sub-programmes/main research areas: "Strongly interacting electrons, low-dimensional and quantum fluctuation dominated systems" "Superconductivity, unconventional mechanism and novel materials" "Crystal growth" "Novel materials" "Thin films, artificial materials and novel devices" "Industrial applications and pre-application development".

Subprogramme structure: none

Management structure: See overall implementation structure

Review of progress: Submission of an annual report (self-evaluation) to the SNSF, which then is assessed by an international review panel (complemented by a site visit)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? 1. Competence: outstanding, internationally recognised quality;
2. Active knowledge and technology transfer activities;
3. Contribution to the education of young scientists and the attraction of promising foreign researchers in the field;
4. Contribution to the strenghtening of the national research system (embedded in the international research community).

Openness to EU countries No direct funding for foreign research institutions, but these may profit from linking to the programme.

Openness to third countries Same as EU countries

Selection of projects / participants Fixed calls (about every second year) without pre-determined topic. Detailed submissions are evaluated by international experts from a purely scientic point of view. Afterwards, the SNSF takes into account some additional criteria mentioned above and presents its recommendation to the Government that takes the final decision.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Equipment
Training (including study trips)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector
Other co-financing

3.7 Overall budget Overall budget in EUR **€72.6m**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.46**
Overall budget in national currency **CHF106.2m**
further information
The overall budget (€72.8m, CHF106.2m) contains €39.1m of Phase II (2005-2008). About two third of the funds stem from other sources than the SNSF (mostly partners of the programme).

Year :

2005	€11.3m
2006	€9.7m
2007	€9.5m
2008	€8.8m
0	

4. Results, evaluation and impacts CH 59

4.1 Were any indicators specified ex ante for the measurement of the results Yes
Goals and deliverables as formulated by the applicants and agreed upon by the SNSF.

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **Yes**

4.3 If the programme was evaluated, what were the main findings?
The international review panel was highly positive about the quality of work in terms of all criteria mentioned in Section "Elegibility". Furthermore it noticed that a MaNEP doctoral
school has been installed at the University of Geneva. The SNSF followed the suggestion of the panel to finance the continuation of the programme for the next phase (2005-2008)

5 How to find out more about the measure ? CH 59

5.1 Information Souce/Reference Website: http://www.manep.ch/
English website: http://www.manep.ch/
Uploaded document(s):

5.2 Legal basis Government decision based on a recommendation of the SNSF

5.3.2 Agency administering Swiss National Science Foundation (SNSF)

5.3.3 Funding Agency Swiss National Science Foundation (SNSF)

5.3.4 Manager(s) responsible for the measure Prof. Øystein Fischer

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 2 Date created: 27/09/2004 Date Updated: 27/02/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure CTI Start-up

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** CTI Start-up

1.3 Keyword(s) Start-ups
entrepreneurial spirit
technology transfer
education
KTI
Start-ups
entrepreneurial spirit
education
KTI/CTI

1.4 Overview (nature, main goals) The goal of the measure is to increase the number of Start-ups significantly, particularly in the high-tech industries. Furthermore the measure intends to support entrepreneurs to manage the early stage of firm development successfully. Concrete measures include the provision of coaches that teach entrepreneurs essential skills like the drawing of a business plan, granting access to networking events and certification of promising start-ups with the CTI start-up label.

1.5 Background and rationale (Analytical reasoning why this measure is being created) In order to keep the high-quality of life in Switzerland and to remain competitive on an international level, it is necessary to intensify the entrepreneurial spirit and to develop a culture for innovation (that means to shorten the way from the idea to the market). Therefore innovation policy has to emphasise the interaction between education, research and technology. To transform Switzerland's excellence in science into products and services needs an entrepreneurial spirit within the society.

1.6 Policy Priorities 3.1.2 Relation between teaching and research
3.3.1 Job training (LLL) of researchers and other personnel involved in innovation
4.3.1 Support to innovative start-ups incl. gazelles
5.1.1 Support to the creation of favourable innovation climate (ex. roadshows, awareness campaigns)

1.8 Targeted research and technology fields No specific thematic focus,

2. Detailed information on duration and targets of measure

2.1 Start date 1996

2.2 Expected ending No End Date Planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures? Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure
Other (Please explain)
The extension of the measure KTI start-up (extension: entrepreneurial spirit) has been inspired by peer review (international and national experts) of KTI/CTI in Spring 2002

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	
Scientists / researchers (as individuals)	✓	✓
Higher educations institutions research units/centres	✓	✓
Other non-profit research organisations (not HEI)	✓	✓
Other public education institutions (secondary,etc...)	✓	
Private institutions for education / lifelong learning	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking optional (e.g. associating SMEs as users)

Other (please specify)
Only start-ups are eligible for the coaching process and the CTI-Start-up label.

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Awareness raising amongst firms on innovation
Development/prototype creation
Industrial design
Improving the legal and regulatory environment

Promotion of entrepreneurship/start up (including incubators) Promotion of entrepreneurship/start up (including incubators)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: This measure is managed by KTI/CTI.

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Supported start-ups are selected in a peer-review process. There are 5 evaluation criteria: Opportunities in the targeted market; applicability and novelty of the technology; feasability; Adequacy of the management team and legal obligations, e.g. in respect to patents.

Openness to EU countries No

Openness to third countries No

Selection of projects / participants Supported start-ups are selected in a peer-review process of national and international experts.

3.4 In what form is funding provided ? Grants
No direct funding provided
Other
Specify other: all forms of co-financing are possible

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
nfrastructure (buildings)
Equipment

3.6. Sources of financing (other than national public sources of funding) Other co-financing

3.7 Overall budget Overall budget in EUR **23.7 Mio (2004-2007)**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable (non-Euro zone) **1.56 CHF**
further information **2004 (5.1 Mio.), 2005 (5.8 Mio.) 2006 (6.4 Mio.), 2007 (6.4 Mio.)**

4. Results, evaluation and impacts CH 2

4.1 Were any indicators specified ex ante for the measurement of the results Yes
The KTI-Start-up programme was successful: 650 applications were evaluated until January 2004. 78 funded firms were awarded with the KTI-Start-up Award. 750 new jobs were created. 67 Start-ups are still in business (turnover 2003: 40.4 Mio Euros).

4.2 Where an evaluation has taken place, what were the main findings? On-going/Mid-term **Yes**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?
The KTI/CTI has been evaluated in 2002. International experts also looked at the different programmes run by KTI. The KTI start-up programme was evaluated positive and it was recommended to extend this programme. The Start-up Programme has been subject to an evaluation in 2006, of which only an executive summary is available. It was found that firms with the KTI/CTI Start-up label have a greater chance to survive than comparable non KTI/CTI promoted firms. Also according to firm key data (profit, turnover, employment growth, third-party funding, and profit turnover ratio), labelled firms are performing better than non-labelled firms. The picture according to some success factors is mixed; labelled firms are doing better in fund raising, they are also more advanced in product diversification, IPR, marketing and sales. Labelled firms are better in networking, and their competences in finance, strategy and organisation are favourable as well. In contrast, non-labelled firms performing better than label-firms in product characteristics, customer orientation, competitive position, employee satisfaction, and internal process organisation. The results are rather comprehensive. However it was not possible to cheque the applied methods based on the executive summary. Thus, the quality of the results cannot be evaluated by the correspondent.

5 How to find out more about the measure ? CH 2

5.1 Information Souce/Reference Website: http://www.bbt.admin.ch/kti/unternehmertum/00261/index.html?lang=de
English
website: http://www.bbt.admin.ch/kti/unternehmertum/00261/index.html?lang=en
Uploaded document(s):

5.2 Legal basis Government budget decision with respect to the activities of the KTI/CTI for the 2008-2011 period

5.3.1 Launching Agency KTI/CTI

5.3.2 Agency administering KTI/CTI

5.3.3 Funding Agency KTI/CTI

5.3.4 Manager(s) responsible for the measure Moser Vincent - (CTI Start up Initiative)

back to top

http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=detail&id... 11-03-2009

http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=detail&id... 11-03-2009

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 1 Date created: 27/09/2004 Date Updated: 21/11/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure Biotechnology - Life Science

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Biotechnology - Life Science

1.3 Keyword(s) biotechnology
KTI/CTI (Innovation Promotion Agency)
life science
priority programme
technology transfer

1.4 Overview (nature, main goals) The "biotechnology priority programme" from the Swiss National Science Foundation (SNF) (1992-2001) has explored the potentials of biotechnology in several individual projects. The results indicated a high potential for applied R&D in this field. Consequently the innovation promotion agency KTI/CTI has launched the KTI-Biotech program to exploit these potentials. The goals of this measure are: to promote the fast growing Swiss biotech industry by further optimisation of know-how and technology transfer and by targeted and efficient support for the creation of new biotech companies and to facilitate and optimise the economic exploitation of innovative techniques and products emerging from basic and application-oriented biotech R&D.

1.5 Background and rationale (Analytical reasoning why this measure is being created) Biotechnology (in combination with the pharmaceutical industry) is an important and growing sector in Switzerland. Its development should be supported, based on Switzerland's comparative advantage in this area. KTI-Biotech is part of a mixed strategy to push Biotech in Switzerland. This strategy is promoted by the KTI and the SNF (Swiss National Science Foundation) and shows the following characteristics: support R&D, support scientific networking, improvement of biotech support infrastructure, facilitation of innovation and technology transfer, creation of spin-offs and start-ups.

1.6 Policy Priorities 2.2.3 R&D cooperation (joint projects, PPP with research institutes)
4.1.1 Support to sectoral innovation in manufacturing
4.2.1 Support to innovation management and advisory services

1.7 Targeting specific sector --- --- Pharmaceuticals (2423)

1.8 Targeted research and technology fields Biotechnology,

2. Detailed information on duration and targets of measure

2.1 Start date before 1995

2.2 Expected ending no end date planned

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure	Not applicable/other Awareness raising amongst firms on innovation Pre-competitive research Applied industrial research Development/prototype creation
Promotion of entrepreneurship/start up (including incubators)	Co-operation promotion and clustering

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The responsibility for the programme is at the KTI/CTI. It apporves proposals of science-industry cooperation partners based on (partly external) expert knowledge. Funding goes to the university parter, with the industry partner(s) financing at least 50% of the project; hence, the industry is only indirectly subsidized.
Subprogramme structure:	None
Management structure:	The industry partner is responsible for the project management.
Review of progress:	Monitoring at the project level (intermediate and final assessments by KTI/CTI and external experts).
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	The KTI/CTI has no complete list of criteria for eligibility. However there are some good practices and necesseary conditions for eligibility, e.g. business plan, market potential
Openness to EU countries	no direct funding of EU firms/ institutions
Openness to third countries	same as EU
Selection of projects / participants	Applications are accepted all the time. The selection of projects/participants is primarily carried out by external experts.
3.4 In what form is funding provided ?	Guarantees Tax incentives (including reduction of social charges) No direct funding provided Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **€3.46m** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.56 CHF** Overall budget in national currency **CHF 5.4m (2007)**

Year :

0	
0	
0	
0	
0	

4. Results, evaluation and impacts CH 1

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **Yes** On-going/Mid-term **No** Final/Ex-post **No** **4.3 If the programme was evaluated, what were the main findings?** Ex-ante: Basic research oriented Swiss priority programme for biotechnology (1992-2001) showed further market-potentials in the biotech sector. International bibliographic studies show that Switzerland is highly ranked for the number of publications in several core biotech disciplines. More than 250 firms have their business in Switzerland, fully or partially focused on biotechnology.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	There are several success stories. See http://www.bbt.admin.ch/kti/gebiet/life/biotech/d/index.htm#success In the last five years more thant 50 biotech start-ups have been created.

5 How to find out more about the measure ? CH 1

5.1 Information Souce/Reference	Website: http://www.bbt.admin.ch/kti/dienstleistungen/00260/00353/index.html?lang=de English website: http://www.bbt.admin.ch/kti/dienstleistungen/00260/00353/index.html?lang=en Uploaded document(s):
5.2 Legal basis	ERT-message
5.3.1 Launching Agency	KTI/CTI
5.3.2 Agency administering	KTI/CTI
5.3.3 Funding Agency	KTI/CTI
5.3.4 Manager(s) responsible for the measure	Casey Jeannie KTI (Innovation Promotion Agency)

back to top

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 5 Date created: 27/09/2004 Date Updated: 21/11/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	MedTech - Life Science
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	MedTech - Life Science
1.3 Keyword(s)	KTI (Innovation Promotion Agency) Life Science Medical Innovation SME technology transfer
1.4 Overview (nature, main goals)	The path from laboratory to market may be very costly in the medical area. Especially for small firm it might be very difficult to commercialise their research output. Therefore MedTec supports interested economic and scientific partners to co-operate in a project that aims at the improvement of a product or process. This measure promotes the communication and collaboration between academic institutions, the Universities of Applied Sciences, and the relevant companies. They are invited to combine their knowledge in order to generate original product ideas. While in the short run this measure should improve products and production processes, in the long run it aims at integrating new technologies with the products. It is also important that the project creates new and highly qualified jobs.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	Switzerland's knowledge base provides the country with competitive advantages in high tech industries. E.g. the Swiss watch making tradition has endowed the country with an outstanding precision mechanics industry, and high-grade micro technology. Thus this competence might also show some potentials in the field of medical technology. There are already over 500 companies, half of which are small or medium-sized, which are involved with medical technology. To ensure their position at the forefront of tomorrow's promising medical technology market, they must apply state-of-the art scientific results.
1.6 Policy Priorities	2.2.3 R&D cooperation (joint projects, PPP with research institutes) 4.1.1 Support to sectoral innovation in manufacturing 4.2.1 Support to innovation management and advisory services 5.2.1 Fiscal incentives in support of the diffusion of innovative technologies, products and services
1.7 Targeting specific sector	--- --- Medical, precision and optical instruments (33)
1.8 Targeted research and technology fields	Health,

2. Detailed information on duration and targets of measure

2.1 Start date	2001
2.2 Expected ending	no end date planned
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure Other (Please explain) The Frauenhofer Institute (Germany) has been consulted to design MedTech.
2.4 Geographic coverage	
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Not applicable/other Applied industrial research Development/prototype creation Commercialisation of innovation (including IPR)
Promotion of entrepreneurship/start up (including incubators)	Diffusion of technologies in enterprises

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The responsibility for the programme is at CTI. It approves proposals of science-industry co-operation partners based on (partly external) expert knowledge. Funding goes to the university partner, with the industry partner(s) financing at least 50% of the project; hence, industry is subsidised only indirectly. The industry partner is responsible for the project management.
Subprogramme structure:	None
Management structure:	see overall management structure
Review of progress:	Monitoring at the project level (intermediate and final assessments by KTI/CTI and experts).
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	The KTI/CTI has some general, though not compulsory, guidelines for project evaluation, e.g. the competence profile of the applicants (knowledge, formal qualifications, resources, etc.), commercial-technical goals, business-plan (finance-plan) and property rights. Furthermore, there are program specific guidelines which include the following criteria: highly innovative, very risky, outstanding commitment, outstanding commercial potential in case of success.
Openness to EU countries	no direct funding of EU firms/institutions
Openness to third countries	same as EU
Selection of projects / participants	Applications are accepted at all times. The selection of projects/participants is primarily carried out by external experts.
3.4 In what form is funding provided ?	Guarantees Tax incentives (including reduction of social charges) Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **no overall budget** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.46** Overall budget in national currency **no overall budget**

Year :

2005	€6.3m
2006	€7.6m
2007	€7.0m
0	
0	

4. Results, evaluation and impacts CH 5

4.1 Were any indicators specified ex ante for the measurement of the results	No

4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **Yes** On-going/Mid-term **Yes** Final/Ex-post **No** **4.3 If the programme was evaluated, what were the main findings?** The Frauenhofer Institute (Germany) was consulted in order to design this programme. The programme was evaluated by international experts in 2004. The evaluation aimed at providing an expertise about the impact (outcome) and the realisation of the programme. The international experts stated that the programme is basically well designed and meets the need of the applicants. However, some modifications are suggested: International experts should be more involved in project evaluations. The MedTech programme should remain rather diverse in topics, and complemented with "accompanying research" (e.g. strength, goals and intentions of the programme). Furthermore the programme management has to be broadened (e.g. public relations, awareness building, monitoring).
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	There are several success stories for successful developments with positive economic impacts. See: http://www.bbt.admin.ch/kti/success/archiv/life/d/med.htm#MedTech

5 How to find out more about the measure ? CH 5

5.1 Information Souce/Reference	Website: http://www.bbt.admin.ch/kti/projektfoerderung/00240/00242/index.html?lang=de English website: http://www.bbt.admin.ch/kti/projektfoerderung/00240/00242/index.html?lang=en Uploaded document(s):
5.2 Legal basis	Government budget decision with respect to the activities of the KTI for the 2008-2011 period
5.3.2 Agency administering	KTI/CTI
5.3.4 Manager(s) responsible for the measure	Casey Jeannie KTI (Innovation Promotion Agency)

back to top

also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Higher educations institutions research units/centres	✓	

2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Co-operation promotion and clustering
Promotion of entrepreneurship/start up (including incubators)	
2.6.2 Type of Research Activity targeted:	Social sciences research

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The KTI/CTI and the SNF jointly manage the programme.
Subprogramme structure:	None
Management structure:	Not known
Review of progress:	Activity report every 4 years conducted by the SNSF (http://www.snf.ch/SiteCollectionDocuments/dore_bericht_04_06_d.pdf)
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Eligble for funding are UASs only. The project must consist of a cooperation between a UAS and a partner who finances at least 30% of the project. Further selection criteria are the scientificity, feasbility, professional competence and promotion of young scientists.
Openness to EU countries	No
Openness to third countries	No
Selection of projects / participants	Peer Review Selection
3.3. What State Aid framework is applied to the measure	Not applicable
3.4 In what form is funding provided ?	Tax incentives (including reduction of social charges) Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) nfrastructure (buildings) Equipment
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR €**7m (2004-2006)** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **0.6 CHF** Overall budget in national currency **CHF 11m**

Year :

0	
0	
0	
0	

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 26 Date created: 21/05/2008 Date Updated: 21/11/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	DORE
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	DORE
1.3 Keyword(s)	Cooperation KTI/CTI Social sciences Technology transfer Universities of applied sciences
1.4 Overview (nature, main goals)	<!--[if !supportLists]-->The DORE-initiative is a measure that is intended to promote applied research at UASs in the following fields: social work, health, music and theater, art, pedagogic, applied psychology and applied linguistics. The intention is to promote applied research in these areas at UASs until it reaches the critical mass to compete for resources on a competitive basis. It is a coordinated activity of the SNF and the KTI/CTI. The promotion is conditional upon the cooperation between a researcher at a UAS and a partner who finances at least 30% of the project. This ensures the projects relevance to practice. Furthermore the proposal is evaluated by external experts from Switzerland and abroad. If successful, the project is funded for a period between 1 and 3 years.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	<!--[if !supportLists]-->In 1995/1996 the Swiss innovation system has been evaluated by national and international experts. One recommendation was to enhance the innovation promotion activities to non-core technological fields, i.e. humanities, social sciences and cultural sciences. The evaluation of the promotion of UASs by the KTI came to the same conclusion. DORE fills this gap by adjusting the traditional form of technology transfer measure to the specific conditions in these fields.
1.6 Policy Priorities	2.1.1 Policy measures concering excellence, relevance and management of research in Universities 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 3.1.2 Relation between teaching and research 3.2.1 Recruitment of researchers (e.g. fiscal incentives)
1.7 Targeting specific sector	TOTAL SERVICES (50 -- 99)
1.8 Targeted research and technology fields	Socio-economic sciences and humanities, Services,
1.9 Addressing innovation-related Lisbon guideline elements	2. The creation and development of innovation poles, networks and incubators bringing together universities, research institutions and enterprises, including at regional and local level, helping to bridge the technology gap between regions.

2. Detailed information on duration and targets of measure

2.1 Start date	1999
2.2 Expected ending	2011
2.3.2 If the measure is novel was it mainly	Other (Please explain) Standard KTI/CTI funding procedure applied to a thematic focus
2.4 Geographic coverage	
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and	

0	

4. Results, evaluation and impacts CH 26

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No** **4.3 If the programme was evaluated, what were the main findings?** The measure has been evaluated by the means of a survey among researchers. It shows that UASs are aware of DORE and that the procurement of funds is considered as a quality indicator.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	A list of individual projects supported between 2004 and 2006 at http://www.snf.ch/SiteCollectionDocuments/dore_bericht_04_06_d.pdf. The document further contains a list of the resulting conferences and publications.

5 How to find out more about the measure ? CH 26

5.1 Information Souce/Reference	Website: http://www.snf.ch/D/foerderung/projekte/DORE/Seiten/default.aspx English website: http://www.snf.ch/E/funding/projects/DORE/Pages/default.aspx Uploaded document(s):
5.2 Legal basis	Not explicit legal basis
5.3.1 Launching Agency	KTI/CTI and SNF
5.3.2 Agency administering	KTI/CTI
5.3.3 Funding Agency	KTI/CTI and SNF
5.3.4 Manager(s) responsible for the measure	Buehler Roland KTI (Innovation Promotion Agency)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 40 Date created: 01/07/2008 Date Updated: 21/11/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure National Centers of Competence in Research (NCCR)

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** National Centers of Competence in Research (NCCR)

1.3 Keyword(s)

long-term research
strategy
targeted research

1.4 Overview (nature, main goals)

This programme is a large-scale research initiative of the Swiss National Science Foundation (SNSF) aiming at establishing and funding "National Competence Centres of Research" (NCCR). In 1999 and 2003 the SNSF has made a call for propositions for NCCRs to all people holding a permanent position at a Swiss academic institution. The proposals were evaluated by external experts, based on which the SNSF made a proposal to the Federal Department of Home Affairs and the Swiss University Conference, who had the final say in the choice of the NCCRs. The third call for proposals is taking place in 2008.
To date, there are about twenty of such NCCR, about half of them relevant in terms of S&T policy (i.e. strong orientation towards science relevant for the development of technologies). The current NCCR are the following:

a) STI relevant:
NCCR Climate - Climate Variability, Predictability and Climate Risks
NCCR CO-ME - Computer Aided and Image Guided Medical Interventions
NCCR Democracy - Challenges to Democracy in the 21st Century
NCCR FINRISK - Financial Valuation and Risk Management
NCCR Genetics - Frontiers in Genetics - Genes, Chronosomes and Development
NCCR Iconic Criticism - The Analysis of Image Processes
NCCR IM2 - Interactive Multimodal Information Management
NCCR MaNEP - Materials with Novel Electronic Properties
NCCR MICS - Mobile Information and Communication Systems
NCCR Molecular Oncology - Molecular Oncology - From Basic Research to Therapeutic Approaches
NCCR Nanoscale Science - Impact on Life Sciences, Sustainability, Information and Communication Technologies
NCCR Neuro - Neural Plasticity and Repair
NCCR Plant Survival - Plant Survival in Natural and Agricultural Ecosystems
NCCR Quantum Photonics - Quantum Photonics
NCCR Structural Biology - Molecular Life Sciences: Three Dimensional Structure, Folding and Interactions

b)other:

NCCR Affective sciences - Emotions in individual behaviour and social processes
NCCR Democracy - Challenges to Democracy in the 21st Century
NCCR FINRISK - Financial Valuation and Risk Management
NCCR Mediality - Mediality - Historical Perspectives
NCCR North-South: Research Partnerships for Mitigation Syndromes of Global Change
NCCR SESAM - Swiss Etiological Study of Adjustment and Mental Health (SESAM)
NCCR Trade Regulation - International Trade Regulation: From Fragmentation to Coherence

1.5 Background and rationale (Analytical reasoning why this measure is being created)

National Centres of Competence in Research promote long-term research projects in areas of vital strategic importance for the development of science in Switzerland. Namely, they promote long term cutting-edge research projects in an area thought to be of increasing and strategic relevance for Swiss science and economy. Furthermore they tighten and expand national and international research networks. Additionally they intend to develop the present top-level competence of research in particualr fields and intensify esearch-based training for promising young researchers (with special emphasis on women). They also contribute to the knowledge base of Swiss economy and promote start-ups.

1.6 Policy Priorities 1.2.1 Strategic Research policies (long-term research agendas)
2.1.1 Policy measures concering excellence, relevance and management of research in Universities
2.2.3 R&D cooperation (joint projects, PPP with research institutes)

1.8 Targeted research and technology fields Other,

2. Detailed information on duration and targets of measure

2.1 Start date 2001

2.2 Expected ending no end date planned

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

The SNSF has started to fund targeted research because politicians have realized that a small open economy like Switzerland cannot compete on the highest level in all areas.

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	
Other	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: Basic research
Problem driven (basic) research
Knowledge transfer (between researchers)
Human research development

International research collaboration
Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: Each NCCR has a so-called "home institution" that co-ordinates the NCCR, which is divided into smaller projects that are carried out by individual research groups. Eligible are research groups of the home institution as well as other Swiss and foreign research groups. The individual NCCR projects are managed and co-ordinated by the home institution that also corresponds with the SNSF.

Subprogramme structure: None

Management structure: See overall implementation structure

Review of progress: Submission of an annual report (self-evaluation) to the SNSF, which then is assessed by an international review panel (complemented by a site visit)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? 1. Competence: outstanding, internationally recognised quality;
2. Active knowledge and technology transfer activities;
3. Contribution to the education of young scientists and the attraction of promising foreign researchers in the field;
4. Contribution to the strenghtening of the national research system (embedded in the international research community).

Openness to EU countries No direct funding for foreign research institutions as a "home institution", but participation in a NCCR that is co-oridinated by a Swiss research group is possible.

Openness to third countries Same as EU countries

Selection of projects / participants Fixed calls (about every second year) without pre-determined topic. Detailed submissions are evaluated by international experts from a purely scientic point of view. Afterwards, the SNSF takes into account some additional criteria mentioned above and presents its recommendation to the Government that takes the final decision.

3.4 In what form is funding provided ? Grants

3.5. What are the eligible costs, where direct funding is provided ? Specify other:
Labour costs (including overheads)
Equipment
Training (including study trips)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector
Other co-financing

3.7 Overall budget Overall budget in EUR €**815m between 2005 and 2008**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable (non-Euro zone) **1.6**
Overall budget in national currency **CHF 1304m**
further information
Overall budget (815 Mio. Euro, 1304 Mio. SFR) contains 433 Mio. Euro of Phase II (2005-2008); more than half of the funds stem from other sources than the SNSF (mostly partners of the programme); between 2008 and 2011 the SNSF will use less than 12% of its budget to the funding of the NCCR, meaning that the main focus of the SNSF remains on the promotion of basic, non-oriented research.

Year :

2004	€110m
2005	€115m
2006	€108m
2007	€106m
2008	€102m

4. Results, evaluation and impacts CH 40

4.1 Were any indicators specified ex ante for the measurement of the results No
Goals and deliverables as formulated by the applicants and agreed upon by the SNSF.

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **Yes**

4.3 If the programme was evaluated, what were the main findings?
The international review panel was highly positive about the quality of work in terms of all criteria mentioned above, such as research quantity and quality (publications, conference contributions, etc.), embeddedness in international joint projects and networks, number of spin-offs, implementation of new graduate and doctoral programms as well as summer courses .
The SNSF followed the suggestion of the panel to finance the continuation of the programme for phase II (2005-2008)

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? see http://www.snf.ch/SiteCollectionDocuments/nccr_guide_07.pdf

5 How to find out more about the measure ? CH 40

5.1 Information Souce/Reference Website: http://www.snf.ch/E/targetedresearch/centres/Pages/default.aspx
English
website: http://www.snf.ch/E/targetedresearch/centres/Pages/default.aspx
Uploaded document(s):

5.2 Legal basis Government decision based on a recommendation of the SNSF

5.3.2 Agency administering Swiss National Science Foundation (SNSF)

5.3.3 Funding Agency Swiss National Science Foundation (SNSF)

back to top

Important legal notice

PRO INNO EUROPE

Trendchart Support measures detail

CH 16 Date created: 30/03/2005 Date Updated: 21/11/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure NRP 57- non ionising radiation, environment and health

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** NRP 57- non ionising radiation, environment and health

1.3 Keyword(s) environment
health
National research programme
non-ionising radiation

1.4 Overview (nature, main goals) Since the last seventies, the Swiss National Science Foundation (SNSF) funds problem-driven basic research in many different policy-relevant fields under the "heading" of "National Research Programme" (NRP). NRPs are selected through a "bottom-up" approach. Proposals for new research programmes must be submitted to the State Secretariat for Education and Research (SER) of the Federal Department of Home Affairs (FDHA). The SER evaluates the proposed topic and forwards it to the Federal Council which periodically selects and budgets one to three new NRPs and then forwards them the Swiss National Science Foundation (SNSF) for implementation.
This particular programm started in November 2006 and is running for three years. The main aim of this NRP will be to examine the effects of non-ionising radiation (NIR) which has become a topical issue, particularly with the rapid growth in the use of mobile telephones. Research will focus on characterising and assessing the risk to organisms of non-ionising radiation from different sources and of varying strengths, as well as on epidemiological and cell-biology studies and the related topics of risk management and risk communication.

1.5 Background and rationale (Analytical reasoning why this measure is being created) The National Research Programme on Non-ionising radiation, health and the environment originated as a proposal for the NRP review period 2002-2003. It was launched by the Federal Council in response to various parliamentary interventions and to the considerable degree of interest, particularly from the cantons.

1.6 Policy Priorities 1.2.1 Strategic Research policies (long-term research agendas)
3.1.1 Awareness creation and science education
3.1.3 Stimulation of PhDs

1.8 Targeted research and technology fields Health,

2. Detailed information on duration and targets of measure

2.1 Start date 2006

2.2 Expected ending 2009

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

see "Background and Rationale"

2.4 Geographic coverage

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: Problem driven (basic) research
Knowledge transfer (between researchers)
International research collaboration
Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The programme is strategically managed by a Steering Commitee representing leading national and international experts. Operational magement is at the Swiss National Science Foundation (SNSF), and an implementation officer, appointed by the Research Council of the SNSF, is responsible for the management of communication to the public, media, policy-makers and other stakeholders.

Subprogramme structure: None

Management structure: see "overall implementation structure"

Review of progress: Submission of an annual report to the SNSF, which then is assessed by international experts

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Scientific quality and originality; feasability and compliance with the objectives of the programme; applicability (implementation-oriented); adequate infrastructure and personnel

Openness to EU countries The measure does not provide direct funding to EU research institutions.

Openness to third countries The measure does not provide direct funding to foreign research institutions.

Selection of projects / participants **participants** Fixed call by the SNSF for projects contributing to the objectives of the programme which are, in the aftermath of the moratorium for GM plant, defined at a general level by the Federal Government. Submission of pre-proposals which are subject to peer review. On this basis the steering commitee selects a number of projects for which a full proposal may be worked out. The full proposals are reviewed by international experts. If the assessment is positive, the principal investigator has to present the planned project to the steering commitee and a panel of international experts who may ask for adjustments. The final decision on the projects is made by the Research Council of the SNSF.

Enter

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Equipment
External expertise (consultants, studies, etc.)

3.7 Overall budget Overall budget in EUR €**3.03m (2006-2009)**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.65 CHF**
Overall budget in national currency **CHF 5.0m**
further information **no yearly budget**

Year :

0	
0	
0	
0	
0	

4. Results, evaluation and impacts CH 16

4.1 Were any indicators specified ex ante for the measurement of the results No
Milestones and deliverables formulated by the applicants and agreed upon by the SNF.

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? see Swiss National Science Foundation

5 How to find out more about the measure ? CH 16

5.1 Information Souce/Reference Website: http://www.snf.ch/E/targetedresearch/researchprogrammes/currentNRP/Pages/_xc_nfp57.aspx
Uploaded document(s):

5.2 Legal basis Government decision based on a recommendation of the SNSF

5.3.1 Launching Agency Swiss National Science Foundation (SNSF)

5.3.2 Agency administering Swiss National Science Foundation (SNSF)

5.3.3 Funding Agency Swiss National Science Foundation (SNSF)

5.3.4 Manager (s) responsible for the measure Dr. Christian Mottas
Schweizerischer Nationalfonds
Abteilung IV
Wildhainweg 3
CH-3001 Bern
Phone 031 308 22 22/341
Fax 031 305 29 70
E-mail: cmottas@snf.ch

back to top

PRO INNO Europe: INNO-Policy Trendchart Page 3 of 3

http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=detail&id... 11-03-2009

PRO INNO Europe: INNO-Policy Trendchart Page 2 of 3

http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=detail&id... 11-03-2009

PRO INNO Europe: INNO-Policy Trendchart Page 1 of 3

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 6 Date created: 27/09/2004 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure Nanotechnology and Microsystemtechnic

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Nanotechnology and Microsystemtechnic

1.3 Keyword(s) KTI
Microsystemtechnic
Nanotechnology
Start-ups
Technology transfer

1.4 Overview (nature, main goals) In order to promote commercial use out of research competence in the nanometre-based technologies and to come up with innovative products, the ETH-Board launched the TOP NANO 21 Program in 2000. This programme was handed over to KTI (Innovation Promotion Agency) in 2004, which is now entrusted with the programme execution. The goals of the measure (program) are: to consolidate the Swiss economy by implementing new, nanometre-based technologies, to expand the scientific horizon at our universities and other academic institutions with a view to applying the nanometre in industry, to teach nanometre technology in order to promote young scientists, researchers, engineers and other specialists and to support start-ups.

1.5 Background and rationale (Analytical reasoning why this measure is being created) Switzerland's growth performance depends to some extent upon its market success in the field of modern technologies. Nanometre-technologies are rather new and accompanied with great opportunities for new products and processes. Switzerland's comparative advantages in modern technologies should be strengthened and the already existing research competence should be transformed into innovative market products.

1.6 Policy Priorities 2.2.3 R&D cooperation (joint projects, PPP with research institutes)
3.1.3 Stimulation of PhDs
4.2.1 Support to innovation management and advisory services

1.7 Targeting specific TOTAL MANUFACTURING (15 -- 37)

http://www.proinno-europe.eu/index.cfm?fuseaction=wiw.measures&page=detail&id... 11-03-2009

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 7 Date created: 01/11/2004 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure Enabling Technologies (Soft[net], ICT (Information and Communication Technology))

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Enabling Technologies (Soft[net], ICT (Information and Communication Technology))

1.3 Keyword(s)
Enabling Technologies
Information and Communication Technologies
Qualification
Software
University-Industry Co-operation

1.4 Overview (nature, main goals)
Switzerland mainly "consumes" software, although based on its technological capabilities it should be possible to be an innovative player in international software markets. This was reason enough to launch a measure to strengthen and focus the software (ICT) capabilities in this country. It should help to build up a national software industry with original and successful products and it should help to rise the qualification level of IT specialists. Funded projects should be carried out jointly by the software (ICT) sector and science. Switzerland should become an important location for research and production of modern ICT based on networks of competence between universities, universities of applied sciences and enterprises. The Soft[net] program stopped in 2004. Projects in this area are integrated in the "Enabling Technologies-Program"

1.5 Background and rationale (Analytical reasoning why this measure is being created)
Switzerland's reputation as a location with technological excellence should be added to modern technologies. This will strengthen its comparative advantages and will contribute to macroeconomic growth. Thus additional efforts have to be made in applied R&D and co-operations between science and business.

1.6 Policy Priorities
2.2.3 R&D cooperation (joint projects, PPP with research institutes)
4.1.2 Support to innovation in services
4.2.1 Support to innovation management and advisory services

sector

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly
Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure
Other (Please explain)
Follow-up programme of Top Nano 21 (2000-2003 conducted by ETH-Board)

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	

2.5.3 If more than one target group is eligible, is
Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure
Not applicable/other
Applied industrial research
Development/prototype creation
Commercialisation of innovation (including IPR)
Co-operation promotion and clustering

Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?
The KTI/CTI has no complete list of criteria for eligibility. However there are some good practices and necesseary conditions for eligibility, e.g. business plan, market potential

3.4 In what form is funding provided ?
Guarantees
Tax incentives (including reduction of social charges)
No direct funding provided
Specify other:

3.5. What are the eligible costs, where direct funding is provided ?
Labour costs (including overheads)

3.6. Sources of financing (other than national public sources of funding)
Co-financed by the private sector

3.7 Overall budget
Overall budget in EUR **89.6 Mio. (2004-2007)**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.56 CHF**
Overall budget in national currency **2004 (14.1 Mio.), 2005 (19.8 Mio.) 2006 (24.3 Mio.), 2007 (31.4 Mio.) Please no**

4. Results, evaluation and impacts CH 6

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly
Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Consultancies and other private service providers (non-profit)	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	

2.5.3 If more than one target group is eligible, is
Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure
Not applicable/other
Applied industrial research
Development/prototype creation
Co-operation promotion and clustering

Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?
KTI (Innovation Promotion Agency) has some general (not compulsory) guidelines for project evaluation. E.g. competence profile of the applicants (knowledge, formal qualifications, resources, etc.), commercial-technical goals, business-plan (finance-plan), property rights, but also cost-to-benefit ratios, project length and neutrality of the measure in the target group

3.4 In what form is funding provided ?
Guarantees
Tax incentives (including reduction of social charges)
No direct funding provided
Specify other:

3.5. What are the eligible costs, where direct funding is provided ?
Labour costs (including overheads)
Equipment

3.6. Sources of financing (other than national public sources of funding)
Co-financed by the private sector

3.7 Overall budget
Overall budget in EUR **ca 20 mio. CHF**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.55 CHF**
Overall budget in national currency **2003: ca. 20 Mio.**

4. Results, evaluation and impacts CH 7

4.1 Were any indicators specified ex ante for the measurement of the results
Yes
Softnet feasability study (1996/97), transition period (1998/99), old Soft[net] program 2000-2003

4.1 Were any indicators specified ex ante for the measurement of the results
No

4.2 Where an evaluation has taken place, what were the main findings?
Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?
Nanotechnology and Microsystemtechnic is a follow-on programme of Top Nano 21. Top Nano 21 was quite successful, thus there should be no risk of failure for the follow-on programme.

5 How to find out more about the measure ? CH 6

5.1 Information Souce/Reference
Website: http://www.bbt.admin.ch/dossiers/bildung/d/
Uploaded document(s):

5.2 Legal basis
Government budget decision with respect to the activities of the CTI for the 2004-2007 period

5.3.4 Manager(s) responsible for the measure
Zehringer Raymond The Innovation Promotion Agency (CTI)

back to top

4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	The Enabling Technology programme is an extension of the former Soft[net] programme. This can be understood as a kind of ex-ante evaluation of this programme.

5 How to find out more about the measure ? CH 7

5.1 Information Souce/Reference	Website: http://www.bbt.admin.ch/kti/gebiet/d/index.htm Uploaded document(s):
5.2 Legal basis	Government budget decision with respect to the activities of the KTI for the 2004-2007 period
5.3.4 Manager(s) responsible for the measure	Bachofner Thomas KTI (Innovation Promotion Agency)

back to top

2.6.1 Aspect of innovation process addressed by the measure	Not applicable/other Awareness raising amongst firms on innovation
Promotion of entrepreneurship/start up (including incubators)	Applied industrial research Development/prototype creation
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	very risky projects with a great commercial potential in case of success, competences of the project team are outstanding, in case of success commercialisation is feasable. The business partner (firm) has to have property rights in order to commercialise the R&D results.
3.4 In what form is funding provided ?	Guarantees Tax incentives (including reduction of social charges) No direct funding provided Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment
3.7 Overall budget	Overall budget in EUR **ca. 6.5 mio. annually** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.55 CHF** Overall budget in national currency **ca. 6.5 Mio. annuall. An upward adjustment of the financial framework after firs**

4. Results, evaluation and impacts CH 8

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**

5 How to find out more about the measure ? CH 8

5.1 Information Souce/Reference	Website: http://www.bbt.admin.ch/kti/download/d/discovery_d.pdf Uploaded document(s):
5.2 Legal basis	Government budget decision with respect to the activities of the KTI for the 2004-2007 period
5.3.4 Manager(s) responsible for the measure	Bachofner Thomas KTI (Innovation Promotion Agency)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 8 Date created: 01/11/2004 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	Discovery Projects
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Discovery Projects
1.3 Keyword(s)	new field of business radical innovations SME spinn-offs start-ups
1.4 Overview (nature, main goals)	The "discovery programme" of the KTI aims at the realisation of "radical innovations", the support of new fields of business for SMEs, of start-ups and spin-offs and a quick translation of basic research insights in market products and services. To reach this goals the KTI wants to strengthen the interface between basic research and research close to the market, and to fund medium-term and long-term projects as well. "Discovery projects" are essential in order to strengthen future competencies in new promising fields of science and technology.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	Very often firms are not in a position to contribute financially to projects in a rather early state of development. They seem to be too risky, although they might be quite promising in case the R&D project succeeds. In order to fill the (funding) gap, the KTI launched a programme called "discovery projects". Here the KTI funds very risky projects with a high market potential in case of success. A business partner which contributes at least 50% of the project costs is not necessary in order to be funded by the KTI.
1.6 Policy Priorities	2.3.1 Direct support of business R&D (grants and loans)

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6 Target activities	

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 10 Date created: 02/11/2004 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	Innovation for Successful Ageing
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Innovation for Successful Ageing
1.3 Keyword(s)	Ageing Population Demographic Change Innovation for Older People KTI New Technologies
1.4 Overview (nature, main goals)	An ageing population is a great challenge to society and social insurance systems but it does also open up new opportunities for the economy: there will be an increasing demand for products and services geared to the needs of older people. Products that support an active ageing process give rise to a higher level of social benefits (merit goods). Since the beginning of 2004 the KTI-ISA initiative "Innovation for Successful Ageing" has been targeting research and development projects which are expected to lead to innovative solutions in the market by taking account of the specific needs of older people; these innovations include new technologies, products and services
1.5 Background and rationale (Analytical reasoning why this measure is being created)	Switzerland is on the threshold of the greatest demographic change in its history: the over-fifties are the population group in Switzerland which are set to grow at most. In 2030 one out of three Swiss people will be over 60 yers old. This development creates market opportunities for innovative product and services in order to cover the specific needs of older people. The KTI (Innovation Promotion Agency) launched an initiative to stimulate firms' research interests for this specific area.
1.6 Policy Priorities	2.2.3 R&D cooperation (joint projects, PPP with research institutes) 4.2.1 Support to innovation management and advisory services 5.2.1 Fiscal incentives in support of the diffusion of innovative technologies, products and services

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	
2.5. Target groups	

Important legal notice

PRO INNO EUROPE

PRO INNO EUROPE

INNO POLICY TRENDCHART

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 14 Date created: 02/11/2004 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure Science et Cité

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Science et Cité

1.3 Keyword(s) Dialog between Society and Science
Network Building
Public Understanding of Science
Science Culture
Science et Cit?

1.4 Overview (nature, main goals) The foundation Science et Cité wants to promote the dialog between society and science. The society should increase its understanding of the goals and impact of science on society. Current developments in sciences (e.g. use of stem cells in research) should be discussed at national level including all sections of the society. Thus a number of events were organised within the last years to address possible public worries, doubts and hope related to new developments in science (e.g. stem cells, globalisation and climate change). Its public budget has increased from 1 Mio. CHF (2003) to 3.26 Mio. CHF (2004). The foundation decentralises its activities and co-operates with cantons interested in fostering and developing a "science culture". Furthermore non-scientific representatives of the different regions should be better integrated in the foundation, thus statutes may have to be changed. Also the principle of subsidiarity should be taken into consideration. In order to meet these goals the following measures are suggested: building a Swiss network including the civil society and its institutions (e.g. NGOs), frequent use of the public media, raising of private funding to support the initiative. In general the strategy of the foundation focuses to the public understanding of scientific issues and the public questioning of sciences as well.

1.5 Background and rationale (Analytical reasoning why this measure is being created) The development of science cannot be seen independent of societal development. Scientific results very often cause public worries. The public discussion about stem cells, biotechnology or electromagnetic radiation (mobile phones etc.) are visible signs of that development. This measure should promote the dialog between science and society in order to address public worries about new developments. Thus the social climate for innovation should be improved.

1.6 Policy Priorities 3.1.1 Awareness creation and science education

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	
Technology and innovation centres (non-profit)	✓	
Other	✓	

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Promotion of entrepreneurship/start up (including incubators)
Promotion of entrepreneurship/start up (including incubators)
Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? n.a.

3.4 In what form is funding provided ? Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Other
Events, conferences etc.

3.7 Overall budget Overall budget in EUR **5.1 Mio. (2004-2007)**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.55 CHF**
Overall budget in national currency **2003: 650.000 Euros 2004: 2.1 Mio. Euros 2005: 1.1 Mio. Euros 2006: 910.000 Euro**

4. Results, evaluation and impacts CH 14

4.1 Were any indicators specified ex ante for the No

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Not applicable/other
Awareness raising amongst firms on innovation
Applied industrial research
Promotion of entrepreneurship/start up (including incubators) Development/prototype creation
Commercialisation of innovation (including IPR)
Co-operation promotion and clustering
Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? The KTI/CTI has no complete list of criteria for eligibility. However there are some good practices and necessary conditions for eligibility, e.g. business plan, market potential, technological field.

3.4 In what form is funding provided ? Guarantees
Tax incentives (including reduction of social charges)
No direct funding provided
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Equipment

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR **not indicated**

4. Results, evaluation and impacts CH 10

4.1 Were any indicators specified ex ante for the measurement of the results No

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? The ageing population and the demographic change indicates some need for this kind of innovations.

5 How to find out more about the measure ? CH 10

5.1 Information Souce/Reference Website: http://www.bbt.admin.ch/kti/gebiet/isa/e/index.htm (in english language) a n d http://www.bbt.admin.ch/kti/gebiet/isa/d/brunner.pdf (in german language)
Uploaded document(s):

5.2 Legal basis In general: Government basic funding decision with respect to the activities of the KTI for the 2004-2007 period

5.3.4 Manager(s) responsible for the measure Bachofner Thomas KTI (Innovation Promotion Agency)

back to top

measurement of the results	
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	Science et Cit? starts its activities in 1998. Science et Cit? organised ca. 1000 events in 2001, which were attended by more than 300.000 people. Thus it is well adopted by the target group.

5 How to find out more about the measure ? CH 14

5.1 Information Souce/Reference	Website: http://www.science-et-cite.ch/projekte/de.aspx Uploaded document(s):
5.2 Legal basis	Government budget decision with respect to the activities of Science et Cit? for the 2004-2007 period
5.3.4 Manager(s) responsible for the measure	Veya Elisabeth Science et Cit?

back to top

Category	Target of measure	Eligible for funding
All companies	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Not applicable/other Applied industrial research Commercialisation of innovation (including IPR)
Promotion of entrepreneurship/start up (including incubators)	Co-operation promotion and clustering Diffusion of technologies in enterprises
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	The KTI criteria are applied (external experts evaluate the applications). The demonstratable benefit for both partners (Business and Science) is emphasised.
3.4 In what form is funding provided ?	Tax incentives (including reduction of social charges) No direct funding provided Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **Not yet specified** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **0.65** Overall budget in national currency **No end date specified**

4. Results, evaluation and impacts CH 18

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	The KTI is highly experienced in project evaluation and funding. Several evaluations of existing programmes proof it.

5 How to find out more about the measure ? CH 18

5.2 Legal basis	ERT-message

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 18 Date created: 05/04/2005 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	KTI-Asia
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	KTI-Asia
1.3 Keyword(s)	applied R&D Asia bottom-up funding cooperation Science Business KTI
1.4 Overview (nature, main goals)	This measure emphasises the internationalisation of applied R&D and the internationalisation of Knowledge and Technology transfer activites. The measure aims at fostering bilateral co-operations in the field of applied R&D with P.R. China. The projects are (partly) funded from both countries, China and Switzerland. Therefore the KTI follows the common bottom-up approach. Funded projects have to have a demonstratable benefit.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	Asia and especially China is a scientifically as well as economically growing area. It is an explicit goal of the Federal Government to enhance the international activities of research institutions as well as funding institutions in Switzerland.
1.6 Policy Priorities	2.2.3 R&D cooperation (joint projects, PPP with research institutes) 4.2.1 Support to innovation management and advisory services
1.9 Addressing innovation-related Lisbon guideline elements	3. The encouragement of cross-border knowledge transfer, including from foreign direct investment.

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 19 Date created: 08/04/2005 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure ERA-NETs

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** ERA-NETs

1.3 Keyword(s)

Agricultur
Material technology
Microsciences and Nanosciences
Photovoltaic
Transport

1.4 Overview (nature, main goals)

The ERA-NETs are part of the FP6 and the coming FP7. They aim at intensifying the cooperation between national innovation policy and funding organisations in specific policy fields. Similar research programmes in different countries should benefit from ERA-NET, personnel and financial resources should be bundled. The coordination of national and regional research programmes should contribute to a common European research area. Furthermore programmes should be planned and carried out in cooperation with other countries, mutual access to national research programmes, and complete transnational programmes. Switzerland joint a number of ERA-Nets, i.e. the MNT-ERA-Net (Micro- and Nanosciences, started 2004), MATERA (Material Technology, started 2005), PV-ERA-NET (solar photovoltaic technology), AirTN (air transport net), ERA-ARD (agricultural research for development), ERA-NET Road (coordination and implementation of road research in Europe), ERA Sage (European research area on societal aspects of genomics), HERA (Humanities in the european research area; as sponsoring partner), iMERA (implementing of metrology european research area), e-Tranet (promote the use of information and communication technologies in traditional manufacturing companies)

The European Research Area has as its core message the need to overcome the traditional fragmentation of research efforts in the EU through better coordination and cooperation. Switzerland is not part of the EU,

although it aggrees to the need of a common research area. Traditionally Switzerland has some comparative advantages in more sophisticated technologies. In order to keep these advantages, Switzerland has to be integrated in a wider research area. The ERA-NET is a scheme designe to support the long-lasting coordination of European research programmes across national boundaries, aimed at the funders and managers of national and regional research programmes. The ERA-Net scheme represents a significant step towards the creation of a fully functioning European research area

1.5 Background and rationale (Analytical reasoning why this measure is being created)

1.6 Policy Priorities

1.2.1 Strategic Research policies (long-term research agendas)
2.2.3 R&D cooperation (joint projects, PPP with research institutes)
4.2.3 Support to technology transfer between firms

1.9 Addressing innovation-related Lisbon guideline elements

3. The encouragement of cross-border knowledge transfer, including from foreign direct investment.

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly

Novel (no relation to previous) measure

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Other	✓	

2.5.3 If more than one target group is eligible, is

Co-operation/networking mandatory (e.g. cluster programme)

Other (please specify)
FP6: Government Agencies. Coordination costs are funded. FP7: Government Agencies. Firms with accepted projects for ERA-NET (plus) will be funded by the EU

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure

Not applicable/other
Pre-competitive research
Applied industrial research
Development/prototype creation
Commercialisation of innovation (including IPR)
Co-operation promotion and clustering
Diffusion of technologies in enterprises

Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?

Relevance to the objectives of the programme, Quality of the coordination, Potential impact, participants are key actors in national systems, foundation for a ?durable? cooperation, Quality of the consortium, Quality of the management, suitable governance at appropriate level, Mobilization of resources.

3.4 In what form is

funding provided ? Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Other
FP6: Government Agencies. Coordination costs are funded. FP7: In addition firms with accepted projects for ERA-NET (plus) will be funded by the EU

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR **Not specified**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **0.65**
Overall budget in national currency **extended to FP7**

4. Results, evaluation and impacts CH 19

4.1 Were any indicators specified ex ante for the measurement of the results No

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? KTI and other Swiss participants like Swiss Federal Office of Energy are very experienced agency. Basically good experiencec with FP4, FP5 and FP6 so far from a Swiss point of view.

5 How to find out more about the measure ? CH 19

5.1 Information Souce/Reference Website: http://www.cordis.lu/coordination/era-net.htm
Uploaded document(s):

5.2 Legal basis ERT-message

5.3.4 Manager(s) responsible for the measure Buehler Roland KTI (Innovation Promotion Agency)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 21 Date created: 20/04/2006 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure ManuFuture

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** ManuFuture

1.3 Keyword(s)

Action Plan
Expert group
Manufacturing
Strategy formulation

1.4 Overview (nature, main goals)

Within the European strategy, platforms on a national level are necessary to adapt the strategy to specific situations and individual challenges of each country. To this end a working group had been set up. Its members representing the industry (SMEs as well as large companies), industrial associations, authorities, and the public research sector. This working group aims at the following goals: In the field of policy making: to identify the pattern of change in industrial structures/sectors and related industrial strategies, to secure competitiveness and sustainability of Swiss industry within the European context. In the field of R&D: to identify priority domains and actions for research and innovation that promote the development of active knowledge production systems. Education: to identify the most appropriate skills for industry. The requisite change to existing educational systems. Action plan: to define a common vision leading to possible action plans for manufacturing technologies to ensure Swiss leadership by 2010-2015.

The Swiss economic structure emphasises manufacturing. The European Commission has launched a Technology Platform for the Future of Manufacturing in Europe called ManuFuture in the EC. Swiss representatives are members of this platform. Technology platforms are instruments for fostering R&D and innovation in the EU and the countries associated with the EU's FP like Switzerland. Their objective is to push for higher competitiveness and European leadership in well-defined areas. A large base of stakeholders forms

1.5 Background and rationale (Analytical reasoning why this measure is being

PRO INNO EUROPE

Trendchart Support measures detail

CH 22 Date created: 10/05/2007 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure R&D Consortia

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** R&D Consortia

1.3 Keyword(s) Knowledge and Technology Transfer
public research sector
R&D co-operation

1.4 Overview (nature, main goals) This measure is based on and enhances the national competence centres that were built to improve the competences at the universities of applied sciences. R&D consortia aim at bundling competences at the public research sector (universities, universities of applied sciences, federal institutes of technologies) with competences of firms, the administration, or non-profit organisations in order to develop new products and services or processes. The chosen R&D consortia are funded according to the KTI/CTI funding rules. Funding is performance-based, according to the R&D results of the consortia, i.e. funding is based on a target agreement process between each consortium and the KTI/CTI. The level of promotional subsidy is assessed according to the degree of achievement of objectives. Performance indicators are project success, project turnover and customer satisfaction.
Compared to the old competence networks (stopped in 2006), now these consortia can also be led by other partners than university of applied sciences. During the old regime there have been 12 R&D consortia installed. Under the new regime one more consortium has been installed.

1.5 Background and rationale (Analytical reasoning why this measure is being created) This instrument originally was indended to improve the competences at the 1998 founded universities of applied sciences (UAS). It was thought that this best can be done if the participating UAS is guiding this consortia. During the year 2006 the policy changed. The new R&D consortia measure still focuse on UAS but points more at the general advantage of R&D networks comprising public and private partners in order to improve applied R&D activities and fasten the commercialisation process. This way the knowledge and technology transfer between public research organisation and the private firms should be fostered in order to market new products to create value-added, employment and economic growth.

1.6 Policy Priorities 1.3.1 Cluster framework policies
2.2.3 R&D cooperation (joint projects, PPP with research institutes)
4.2.3 Support to technology transfer between firms

1.9 Addressing innovation-related Lisbon guideline elements 2. The creation and development of innovation poles, networks and incubators bringing together universities, research institutions and enterprises, including at regional and local level, helping to bridge the technology gap between regions.

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Other (Please explain)
Evaluation of the competence building activities at the UAS. It was found that the concept of competence networks, where an UAS has to run the network, has to be developed further. Thus within this measure every type of partner can lead the projec

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Technology and innovation centres (non-profit)	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Not applicable/other
Awareness raising amongst firms on innovation
Applied industrial research
Promotion of entrepreneurship/start up (including incubators) Development/prototype creation
Commercialisation of innovation (including IPR)
Co-operation promotion and clustering

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? KTI/CIT has some general (not compulsory) guidelines for project evaluation. E.g. competence profile of the applicants (knowledge, formal qualifications, resources, etc.), commercial-technical goals, business-plan (finance-plan), property rights. Furthermore, such a project is a real challenge and no routine work, in case of success the product will be really innovative. Applicants have to answer a list of questions related to the "mission", the potential market and the strategic goals. Furthermore a

created) the constituency of these Technology Platforms. They are lead by industry with participation of manufacturing, education, research and government institutions. Their aim is to establish a vision and a strategic research agenda. The support of this Technology Platform will com from regional, national and European levels with different ways of cooperation ranging from top-down to bottom-up actions. Within the European strategy, platforms on a national level should be implemented.

1.6 Policy Priorities 1.2.1 Strategic Research policies (long-term research agendas)
4.1.1 Support to sectoral innovation in manufacturing

1.7 Targeting specific sector TOTAL MANUFACTURING (15 -- 37)

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly Inspired by need to meet EU level policy objectives
Novel (no relation to previous) measure

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	
Technology and innovation centres (non-profit)	✓	
Business organisations (Chambers of Commerce...)	✓	
Trade Unions	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Awareness raising amongst firms on innovation
Applied industrial research
Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? no criteria stated.

3.4 In what form is funding provided ? Tax incentives (including reduction of social charges)
Specify other:

3.7 Overall budget Overall budget in EUR **n.a.**

4. Results, evaluation and impacts CH 21

4.1 Were any indicators specified ex ante for the measurement of the results No
The working group has set itself 4 objectives

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? The experienced members of the expert group.

5 How to find out more about the measure ? CH 21

5.1 Information Souce/Reference Website: http://www.manufuture.ch/
English website: http://www.manufuture.ch/
Uploaded document(s):

5.2 Legal basis ERT-message

5.3.4 Manager(s) responsible for the measure Boer Claudio R. KTI (Innovation Promotion Agency)

back to top

	business plan has to be submitted (including quantitative performance indicators). In addtion to these general guidlines R&D consortia have to agree on specific goals, set in co-operation with the KTI/CTI. Funding is performance-oriented.
3.4 In what form is funding provided ?	Guarantees Tax incentives (including reduction of social charges) No direct funding provided Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **not specified** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.65 CHF** Overall budget in national currency **Overall Budget for applied R&D funding of the KTI/CTI 2008: 46 mio. Euro 2009:**

4. Results, evaluation and impacts CH 22

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **Yes** On-going/Mid-term **No** Final/Ex-post **No** **4.3 If the programme was evaluated, what were the main findings?** The displaced measure (competence building at the UAS) has been subject to an evaluation. Based on this evaluation this new measure has been created. The evaluation team found that KTI/CTI set support programme goals and objectives which are partly beyond its own scope and means. It has hardly any means to facilitate a more strategic orientation of applied R&D at UAS. However the evaluation team confirmed that the KTI/CTI measure supported the competence building and strategic orientation of applied R&D. In order to improve the promotion impact on the economy it was recommended to broaden the notion of innovation, to strengthen the pre-competitive character of R&D, to ensure thematic oppenness, to support R&D co-operations, to improve access for SME, and to address the issue of human resources (for the results see Mayer et al. 2006, Evaluierung des Kompetenzaufbaus von angewandter FuE an Faschhochschulen durch die KTI/CTI 1998-2004).

5 How to find out more about the measure ? CH 22

5.2 Legal basis	ERT-Message 2004-2007

5.3.4 Manager(s) responsible for the measure	Schwarz Franziska KTI (Innovation Promotion Agency)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 24 Date created: 11/05/2007 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	GSK-Initiative
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	GSK-Initiative
1.3 Keyword(s)	cultural sciences humanities R&D co-operation service sector social sciences
1.4 Overview (nature, main goals)	GSK-Integration aims at improving applied R&D in the field of humanities, social sciences and cultural sciences. Therefore the KTI/CTI conducts a number of accompanying measures to encourage applied R&D especially at the universities of applied sciences (UAS). This way, the UAS do not only improve their competences in this field of research, they also stimulate R&D activities in firms and thus improve the innovation performance. The GSK area as well as other service industries (e.g. finance, tourism) are seen as a promising field for future innovation that may contribute to overall economic growth. Competences should be built through encouraging R&D co-operations between the public research sector and private institutions or firms. The KTI/CTI support will focus on accompanying measures to stimulate projects in this applied research field and to encourage firms to submit a funding proposal. These proposals are considered within in the regular bottom-up funding scheme of the KTI/CTI.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	The Swiss innovation system has been subjected to an evaluation by international and national experts in 1995/1996. In order to improve the impact of innovation activities on overall economic growth it was recommended to enhance the innovation promotion activities to non-core technological fields, like the service sector or more general, the field of humanities, social sciences, and cultural sciences. Switzerland has traditionally strong innovation abilities in manufacturing. However, there should be an effort to improve its

	innovation abilities also in the service sector in order to enhance the potentially strong effect of innovation on economic growth. Innovation promotion should not only focus on strengths, it should also address weaknesses.
1.6 Policy Priorities	2.1.1 Policy measures concering excellence, relevance and management of research in Universities 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 4.2.3 Support to technology transfer between firms
1.7 Targeting specific sector	TOTAL SERVICES (50 -- 99)
1.9 Addressing innovation-related Lisbon guideline elements	2. The creation and development of innovation poles, networks and incubators bringing together universities, research institutions and enterprises, including at regional and local level, helping to bridge the technology gap between regions.

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Not applicable/other Awareness raising amongst firms on innovation Applied industrial research
Promotion of entrepreneurship/start up (including incubators)	Development/prototype creation Commercialisation of innovation (including IPR) Co-operation promotion and clustering Innovation management tools (incl quality)
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	In a first step this measure is not accompanied with funding. It is more about raising awareness for more applied research in the field of humanities, social and cultural sciences and detect fields of commercialisation. In a second step formulated projects can be submitted to the KTI/CTI for funding. The KTI/CIT has some general (not compulsory) guidelines for project evaluation. E.g. competence profile of the applicants (knowledge, formal

	qualifications, resources, etc.), commercial-technical goals, business-plan (finance-plan), property rights. Furthermore, project is a real challenge and no routine work, in case of success product will be really innovative. Applicants have to answer a list of questions related to the "mission", the potential market and the strategic goals. Furthermore a business plan has to be submitted (including quantitative performance indicators).
3.4 In what form is funding provided ?	Guarantees Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Other in a first step no funding is provided
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **not specified**

4. Results, evaluation and impacts CH 24

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	GSK covers non-technology fields of investigations. In a first step public promotion activities focus on raising innovation awareness in this field of research. The KTI/CTI is responsible for this measure. It is an experienced institution and proved in other projects (e.g. KTI-start up, KTI-entrepreneurship, or venturelab) its abilties to encourage researchers, investors and managers to develop successful projects. The field of GSK is very specific and challenging for innovation and commercialisation, nevertheless one might expect that at least the first step of raising awareness will be successful. One has to see if the quality of the following projects is satisfactory.

5 How to find out more about the measure ? CH 24

5.2 Legal basis	ERT-message 2004-2007
5.3.4 Manager(s) responsible for the measure	Buehler Roland KTI (Innovation Promotion Agency)

back to top

All companies	✓	
Consultancies and other private service providers (non-profit)	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation Pre-competitive research Applied industrial research Development/prototype creation
Promotion of entrepreneurship/start up (including incubators)	Commercialisation of innovation (including IPR) Industrial design Co-operation promotion and clustering Diffusion of technologies in enterprises
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Depending on the programme
3.4 In what form is funding provided ?	Grants Venture capital (including subordinated loans) Guarantees Tax incentives (including reduction of social charges) No direct funding provided Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) nfrastructure (buildings) Equipment
3.7 Overall budget	Overall budget in EUR **54.6 billion**

4. Results, evaluation and impacts CH 25

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	The Swiss participation in the FP6 has been subject of an evaluation. In very general terms it found the Swiss firms and researchers benefited from the active participation in FP6. Thus there is no a priory reason to assume the contrary for FP7.

5 How to find out more about the measure ? CH 25

5.1 Information Souce/Reference	Website: http://www.sbf.admin.ch/htm/themen/international/7frp_en.html# Uploaded document(s):
5.2 Legal basis	Message on funding of the Swiss Participation on the EU Framework Programme in the field of research, technology development and demonstration for the years 2007 to 2013 (September 13, 2006)
5.3.4 Manager(s) responsible for the measure	Zinsli Paul-Erich State Secretariat for Education and Research

back to top

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 25 Date created: 21/08/2007 Date Updated: 07/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	Seventh Framwork Programme (FP7) of the EU
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Seventh Framwork Programme (FP7) of the EU
1.3 Keyword(s)	Bilateral Treaty Co-operation Framework EU Federal Government FP7
1.4 Overview (nature, main goals)	The FP7 comprises four specific programmes in order to promote the innovation behaviour within the EU and the associated countries; i.e. the 'cooperation programme' seeks to promote research cooperation and encourage international bonding of the spheres of private industry and research. The 'ideas programme' should intensify exploratory research, leading to discoveries that will fundamentally change our view of the world and the way we live. To this end, the recently formed European Research Council (ERC) will provide funding for the most ambitious and innovative research projects. The 'people programme' has set aside considerable funding to improve the professional opportunities available to researchers in Europe and attract a larger number of young and qualified researchers. The European Commission intends to promote training and mobility to fully tap the potential of the European research community. The 'capacity programme' should provide researchers with the resources they need to improve the quality and competitiveness of European research activities. This entails targeting of expenditures to develop research capacities in regions that conduct less research, establish regional research clusters and conduct research to benefit SMEs. The programme is also intended to stimulate international cooperation and bring science and society closer together.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	Switzerland is not member of the European Union. Nevertheless research takes place in international co-operations and networks. In order to improve the framework conditions for researchers and innovative firms and institutions in Switzerland, the Federal Government and the EU aggreed to relieve various restrictions for Swiss participants in the Framework Programmes.
1.6 Policy Priorities	1.2.1 Strategic Research policies (long-term research agendas) 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 3.2.3 Mobility of researchers (e.g. brain-gain, transferability of rights) 4.2.3 Support to technology transfer between firms

2. Detailed information on duration and targets of measure

2.3.2 If the measure is novel was it mainly	Inspired by an existing measure of another (EU) country Inspired by national policy debate (e.g study, consultation)
2.4 Geographic coverage	
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 37 Date created: 26/04/2006 Date Updated: 01/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	NRP No. 47: "Supramolecular Functional Materials"
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	NRP No. 47: "Supramolecular Functional Materials"
1.3 Keyword(s)	Application-driven design of supramolecular materials New functional materials Supramolecular synthesis
1.4 Overview (nature, main goals)	Since the last seventies, the Swiss National Science Foundation (SNSF) funds problem-driven research in many different policy-relevant fields under the "heading" of "National Research Programme" (NRP). The NRP supports the property- and application-driven design and synthesis of new molecular devices and supramolecular functional materials. These new materials with their tailor-made specific functions and properties will furnish the foundations for a future key-technology. The multidisciplinary approach of the supramolecular sciences requires close co-operation between chemistry and other scientific disciplines. Therefore the NRP strongly encourages interdisciplinary approaches with potential areas of application and collaboration at national and international level. Application aspects: Information storage, transport and processing; molecular imprinting, etc.; electron-, photon- and mass-transfer; chemical sensors; diagnostic tools; molecular magnets.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	Science, in particular chemistry, has had great success in manipulating atoms, or conglomerates consisting of several atoms, to synthesise new molecular compounds and crystalline solids, with a vast range of properties. Building on the existing strong research base, one goal of the new "Supramolecular Functional Materials" programme will be to stimulate new innovative projects in this rapidly growing field. It will promote basic research into novel supramolecular systems possessing well defined specific functions which offer a high degree of potential for particular applications. This NRP greatly contributes to the development of the Swiss competitive edge in nanosciences and is complementary to the research done in the NCCR "Nanoscale Science".
1.6 Policy Priorities	2.1.1 Policy measures concering excellence, relevance and management of research in Universities 2.1.4 Research Infrastructures 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 3.1.3 Stimulation of PhDs
1.8 Targeted research and technology fields	Nanosciences and nanotechnologies, Materials,

If other, please specify

The programme, within the overall theme, covers four moduls:
a) Information storage, molecular switches and wires;
b) Electron- and photon- transfer;
c) Sensors and diagnostic tools;
d) Molecular magnets.
The research involves participation of researchers from several disciplines (chemistry, physics, etc.).

2. Detailed information on duration and targets of measure

2.1 Start date	1998
2.2 Expected ending	2005
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Part of policy to further strengthen Swiss position in leading-edge technological fields

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6.2 Type of Research Activity targeted:	Problem driven (basic) research Knowledge transfer (between researchers) Human research development International research collaboration

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The programme is strategically managed by a Steering Commitee representing leading national and foreign scientists. Operational management is at the Swiss National Science Foundation (SNSF).
Subprogramme structure:	none
Management structure:	See overall management structure

Review of progress:	Submission of an annual report to the SNSF, which then is assessed by international experts

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?	Competence: outstanding, internationally recognised quality
Openness to EU countries	No direct funding for foreign research institutions, but these may profit from linking to the programme (collaboration in an EU framework programme")
Openness to third countries	Same as EU
Selection of projects / participants	The Federal Government defines the overall theme of the programme (based on recommendations of the SNSF and political priorities). Afterwards, there is a fixed call by the SNSF for projects contributing to the pre-determined theme. Submissions for the indivudual projects are evaluated by international experts in terms of scientific quality and the expected contribution to the problems to be investigated by the programme.
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment External expertise (consultants, studies, etc.)
3.7 Overall budget	Overall budget in EUR **9.7 Mio.** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.55** Overall budget in national currency **15 Mio SFR**

Year :

0	
0	
0	
0	
0	

4. Results, evaluation and impacts CH 37

4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? Very positive assessment based on the number and quality of scientific publications, the number of PhD theses, as well as other criteria relevant in basic research
4.4 If no official evaluation has been undertaken is there any evidence which	see http://www.nrp47.ch/

http://www.proinno-europe.eu/index.cfm?fuseaction=wiv.measures&page=detail&id... 11-03-2009

allows an appraisal of the success of the measure?

5 How to find out more about the measure ? CH 37

5.1 Information Souce/Reference	Website: http://www.nfp47.ch/html_d/nfp_frame_d.htm English website: http://www.nfp47.ch/html_e/nfp_frame.htm Uploaded document(s):
5.2 Legal basis	Government decision based on a recommendation of the SNSF
5.3.2 Agency administering	Swiss National Science Foundation (SNF)
5.3.3 Funding Agency	Swiss National Science Foundation (SNF)

back to top

http://www.proinno-europe.eu/index.cfm?fuseaction=wiv.measures&page=detail&id... 11-03-2009

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 34 Date created: 25/04/2006 Date Updated: 01/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure CTI Promotion of Enabling Technologies

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** CTI Promotion of Enabling Technologies

1.3 Keyword(s) ICT
IT competence building
Software development

1.4 Overview (nature, main goals) This programme is part of an initiative of the "Innovation Promotion Agency" (CTI) aiming at strengthening the link between science and industry in selected fields of strategic importance for the Swiss economy.

Switzerland is primarily a user of software, although - based on its technological capabilities - it should be possible to be an innovative player in (some niches of) international software markets. This was reason enough to launch a measure to strengthen and focus the software (ICT) capabilities in this country. It should help to build up a national software industry with original and successful products, and it should help to rise the qualification level of IT specialists. Funded projects are carried out jointly by the software (ICT) sector and science. Switzerland should become a relevant location for research and production of modern ICT based on networks of competence between universities, universities of applied sciences and enterprises. A predecessor programme "Soft[net]" was integrated in the new "Enabling Technologies" programme.

index.cfm?fuseaction=org.document&uuid=7D87CED7-EE82-EBB0-F0F68B9FAA141DD0

1.5 Background and rationale (Analytical reasoning why this measure is being created) 1. Lack of presence in a strategic field: from intensive user to producer of ICT (primarily software).
2. Making better use (in economic terms) of ICT knowledge generated at universities through collaboration between science and industry;
3. Providing more and higher quality IT services to companies,
4. Overcoming the scarcity of IT specialists

1.6 Policy Priorities 2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)
2.2.3 R&D cooperation (joint projects, PPP with research institutes)
4.3.1 Support to innovative start-ups incl. gazelles

1.8 Targeted research and technology fields ICT,

If other, please specify
Bottom-um definition of projects in the field of ICT, particularly in software development, by incumbent and start-up firms

2. Detailed information on duration and targets of measure

2.1 Start date 2004

2.2 Expected ending no end date planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Replacing existing measure(s)
SOFTNET

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how
Switzerland is lacking an ICT producing sector. Policy makers percieved some potential not in the hardware but the software sector, particularly since the Swiss economy is a very strong user of ICT.

2.4 Geographic coverage Switzerland

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Consultancies and other private service providers (non-profit)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	
Trade Unions	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: Pre-competitive research
Applied industrial research
Human research development
Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The responsibility for the programme is at CTI. It approves proposals of science-industry co-operation partners based on (partly external) expert knowledge. Funding goes to the university partner, with the industry partner (s) financing at least 50% of the project (with some exceptions, e.g. start-ups); hence, industry is subsidised only indirectly. The industry partner is responsible for the project management.

Subprogramme structure: none

Management structure: see the overall implementation structure

Review of progress: Monitoring only at the project level (intermediate and final assessments by CTI and experts). Too early for an evaluation of the whole programme.

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Compulsory: a) co-operation with a university (of applied science) , b) at least 50% self-funding. Moreover, CTI has some general (not compulsory) guidelines for project evaluation. E.g. competence profile of the applicants (knowledge, formal qualifications, resources, etc.), commercial-technical goals, business-plan, property rights, but also cost-benefit ratios, project length and neutrality of the measure in the target group.

Openness to EU countries The programm is not open to foreign countries.

Openness to third countries The programme is not open to foreign institutions.

Selection of projects / participants Application is possible at any time. Evaluation by (primarily) external experts.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Equipment
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR **open-ended programme**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable (non-Euro zone) **1.55**
Overall budget in national currency **open-ended programme**

Year :

0	22.3 Mio.
0	24.6 Mio.
0	?
0	?
0	

4. Results, evaluation and impacts CH 34

4.1 Were any indicators specified ex ante for the measurement of the results No
Goals and deliverables as formulated by the applicants and agreed upon by CTI

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **Yes**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? Systematic reporting for each finished project based on measures such as prototypes, patents, etc.

5 How to find out more about the measure ? CH 34

5.1 Information Souce/Reference Website: http://www.bbt.admin.ch/kti/projektfoerderung/00245/index.html/?lang=de

English
website: http://www.bbt.admin.ch/kti/projektfoerderung/00245/index.html/?lang=en
Uploaded document(s):

Relevant further information The programme is open-ended

5.2 Legal basis Government budget decision on the CTI activities in the period 2004-2007 (based on parliamentary approval)

5.3.2 Agency administering Innovation Promotion Agency (CTI); in German: Kommission für Technologie und Innovation (KTI)

5.3.3 Funding Agency Innovation Promotion Agency (CTI); in German: Kommission für Technologie und Innovation (KTI)

back to top

Important legal notice

PRO INNO EUROPE

Password reminder

Trendchart Support measures detail

CH 35 Date created: 25/04/2006 Date Updated: 24/06/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure CTI Promotion of Nanotechnology and Microsystems

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** CTI Promotion of Nanotechnology and Microsystems

1.3 Keyword(s) Microsystems
Nanotech start-up
Nanotechnology

1.4 Overview (nature, main goals)

This programme is part of an initiative of the "Innovation Promotion Agency" (CTI) aiming at strengthening the link between science and industry in selected fields of strategic importance for the Swiss economy.

In order to promote commercial use of research competence in the nanometre-based technologies and to come up with innovative products, the ETH-Board launched the TOP NANO 21 programme in 2000. This programme was handed over to KTI (Innovation Promotion Agency) in 2004, which is now entrusted with the programme execution. The goals of the programme are: a) to promote in Swiss industry the application of nanometre-based technologies, a very promising field where the Swiss position in terms of research is very strong; b) to increase the application-orientation of research at the universities and other academic institutions; c) to strengthen teaching in nanometre technology in order to increase the number and quality of young scientists, researchers, engineers and other specialists in this field; d) to foster technology transfer through co-operations, e) to support start-ups using such technologies.

1.5 Background and rationale (Analytical reasoning why this measure is being created) Switzerland has a competitive advantage in research in nanotechnology. At this stage of the development of this technology, the scope for application is quite unknown but believed to be high. Industrial specialisation of Swiss industry (niche products in the machinery sector, scientific and medical instruments, etc.) presumably offers great opportunities for application of this technology leading to product and process innovations.

1.6 Policy Priorities 1.2.2 Innovation strategies
2.1.2 Public Research Organisations
2.2.3 R&D cooperation (joint projects, PPP with research institutes)

1.8 Targeted research and technology fields Nanosciences and nanotechnologies,

If other, please specify
Within the field of nanotechnoloy, applicants (universities co-operating with firms) define the topic of the project (bottom-up principle). Project quality as assessed by experts is the prime criterion rather than the topic in itself.

2. Detailed information on duration and targets of measure

2.1 Start date 2004

2.2 Expected ending no end date planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Replacing existing measure(s)
TOP NANO 21

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Consultancies and other private service providers (non-profit)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	
Trade Unions	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: Pre-competitive research
Applied industrial research
Knowledge transfer (between researchers)
Human research development
Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The responsibility for the programme is at CTI. It approves proposals of science-industry co-operation partners based on (partly external) expert knowledge. Funding goes to the university partner, with the industry partner (s) financing at least 50% of the project (with some exceptions, e.g. start-ups); hence, industry is subsidised only indirectly. The industry partner is responsible for the project management.

Subprogramme structure: none

Management structure: see overall management structure

Review of progress: Monitoring only at the project level (intermediate and final assessments by CTI and experts). Too early for an evaluation of the whole programme.

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Compulsory: a) co-operation with a university (of applied science) , b) at least 50% self-funding. Moreover, CTI has some general (not compulsory) guidelines for project evaluation. E.g. competence profile of the applicants (knowledge, formal qualifications, resources, etc.), commercial-technical goals, business-plan, property rights, but also cost-benefit ratios, project length and neutrality of the measure in the target group.

Openness to EU countries No direct funding for foreign institutions

Openness to third countries Same as EU

Selection of projects / participants Application is possible at any time. Evaluation by (primarily) external experts.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR **open-ended programme**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable (non-Euro zone) **1.55**
Overall budget in national currency **open-ended programme**

Year :	
0	23 Mio.
0	30 Mio.
0	?
0	
0	

4. Results, evaluation and impacts CH 35

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? There is a systematic reporting of the outcomes of each finished project.

5 How to find out more about the measure ? CH 35

5.1 Information Souce/Reference Website: http://www.bbt.admin.ch/kti/projektfoerderung/00243/index.html?lang=de
English
website: http://www.bbt.admin.ch/kti/projektfoerderung/00243/index.html?lang=en
Uploaded document(s):

Relevant further information The programme is open-ended

5.2 Legal basis Government budget decision on the CTI activities in the period 2004-2007 (based on parliamentary approval)

5.3.2 Agency administering Innovation Promotion Agency (CTI); in German: Kommission für Technologie und Innovation (KTI)

5.3.3 Funding Agency Innovation Promotion Agency (CTI); in German: Kommission für Technologie und Innovation (KTI)

back to top

Important legal notice

PRO INNO EUROPE

Password reminder

Trendchart Support measures detail

CH 38 Date created: 26/04/2006 Date Updated: 23/06/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure NRP No. 50: "Endocrine Disruptors: Relevance to Humans, Animals and Ecosystems"

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** NRP No. 50: "Endocrine Disruptors: Relevance to Humans, An and Ecosystems"

1.3 Keyword(s) Hormonally active chemicals
Impact of endocrine disruptors on health. etc.
risk analysis

1.4 Overview (nature, main goals)

Since the last seventies, the Swiss National Science Foundation (SNSF) funds problem-driven research in many different policy-relevant fields under the "heading" of "National Research Programme" (NRP).

The NRP aims to develop scientific strategies to assess the risks and hazards that arise when endocrine disruptors are processed through ecosystems to cause human and animal exposure. Methods and models suitable to assess the endocrine activity of these chemicals or chemical mixtures will be established and the mechanisms of action, and their effects on developmental and reproductive processes will be investigated. The magnitude of exposure of humans, domestic animals, wildlife and environment in Switzerland and the resulting hazards and risks will be assessed. The NRP aims to create a consensus platform for industry and regulators on how to avoid the negative impact of today¹s chemicals of this category. In the pursuit of this goal, the NRP aims to define a set of rules for future development of pertinent substances.

The presence of hormonally active chemicals ("endocrine disruptors") in the biosphere has become a worldwide environmental concern. In 1999, a report released by the Swiss Agency for the Environment, Forests and Landscape (BUWAL) concluded that such chemicals have already left their mark on the Swiss landscape and implicated them as a general cause of population

1.5 Background and rationale (Analytical reasoning why this measure is being

created)	changes in wildlife. The potential contribution of endocrine disruptors to the increased incidence of a number of diseases and developmental disorders in humans and animals is alarming, but the establishment of solid cause-effect relationships requires further scientific investigation.
1.6 Policy Priorities	2.1.1 Policy measures concering excellence, relevance and management of research in Universities 2.1.2 Public Research Organisations 2.1.4 Research Infrastructures 2.2.3 R&D cooperation (joint projects, PPP with research institutes)

If other, please specify

The programme should develop scientific strategies to assess the risks and hazards that arise when endocrine disruptors are processed through ecosystems and cause human and animal exposure. Major topics to be addressed are:

a) What is the magnitude of exposure of humans, domestic animals, wildlife and the environment in Switzerland?

b) Which methods and models are suitable to assess the endocrine activity of these chemicals?

c) What are the hazards and risks to human and animal health? What is the impact on biodiversity?

d) What measures should be taken for the protection of humans and the environment?

In the wider perspective, the programme aims to create a consensus platform for industry and regulators on how to avoid the negative impact of today's chemicals of this category.

2. Detailed information on duration and targets of measure

2.1 Start date	2002
2.2 Expected ending	2007
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

see "Background and Rationale""

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6.2 Type of Research Activity targeted:	Problem driven (basic) research Knowledge transfer (between researchers) International research collaboration Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	Having launched the programme, ths SNSF made three competitive calls for projects that were assessed by international experst. Based on their recommendations the SNSF and the Steering Commitee of the programme accepted about 30 projects to be realised during the life-span of the programme. The running projects are evaluated every year by external experts. Based on these assessments the Steering Commitee may stop a project if the research is not up to the standards agreed upon before the project was launched.
Subprogramme structure:	None
Management structure:	The programme, which addresses seven research topics, is strategically managed by a Steering Commitee representing leading national and foreign scientists, complemented by an official of the Federal Office of Environment. The operational management is at the Swiss National Science Foundation (SNSF).
Review of progress:	Submission of an annual report to the SNSF, which then is assessed by international experts
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	1. Competence: outstanding, internationally recognised quality; 2. Contribution to the solving of the basic problems to be addressed; 3. Concept to implement practical conclusions drawn from the research.
Openness to EU countries	no direct funding to EU researchers
Openness to third countries	same as EU
Selection of projects / participants	The Federal Government defines the overall theme of the programme (based on recommendations of the SNSF and political priorities). Afterwards, there is a fixed call by the SNSF for projects contributing to the pre-determined theme. Submissions for the indivudual projects are evaluated by international experts in terms of scientific quality and the expected contribution to the problems to be investigated by the programme.
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment External expertise (consultants, studies, etc.)
3.7 Overall budget	Overall budget in EUR **5.8 Mio.** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1 EUR = 1.55 CHF** Overall budget in national currency **9 Mio. SFR** further information **No yearly budget. The yearly budgets depend on the number of projects approved after the 3 calls.**

4. Results, evaluation and impacts CH 38

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	see Swiss National Science Foundation.

5 How to find out more about the measure ? CH 38

5.1 Information Souce/Reference	Website: http://www.nfp50.ch/ English website: http://www.nfp50.ch/ Uploaded document(s):
Relevant further information	Programme not yet finished
5.2 Legal basis	Government decision based on a recommendation of the SNSF
5.3.2 Agency administering	Swiss National Science Foundation (SNSF)
5.3.3 Funding Agency	Swiss National Science Foundation (SNSF)

back to top

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 30 Date created: 24/04/2006 Date Updated: 11/03/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	NCCR Quantum Photonics
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	NCCR Quantum Photonics
1.3 Keyword(s)	Advanced light sources Nanoscale optics Photonic systems Quantum communication
1.4 Overview (nature, main goals)	This programme is part of a large-scale research initiative of the Swiss National Science Foundation (SNSF) aiming at establishing and funding of "National Competence Centres of Research" (NCCR). To date, there are about twenty of such NCCR, about half of them relevant in terms of S&T policy (i.e. strong orientation towards science relevant for the development of technologies). The objectives of this specific NCCR are: (a) to deepen our understanding concerning the quantum properties of light, (b) to study the interactions of light with matter with extreme spatial and temporal resolution, (c) to develop new laser sources beyond the present state-of-the-art in terms of wavelength range, spectral properties, power output, and pulse duration, (d) to develop the applications of photonics in the fields of information and communications technologies as well as in other fields of science and engineering, (e) to strengthen the education/training of engineers/scientists in the field of photonics, (f) to co-ordinate the research in this field in Switzerland by maintaining a network of excellence, (g) to assure the basic research effort necessary to guarantee the continued strong presence of Swiss research groups and industry in international research programs,

1.5 Background and rationale (Analytical reasoning why this measure is being created)	(h) to contribute to the industrial development of this field through a high quality basic research effort in fields of great application potential. 1. Promotion of long term cutting-edge research projects in an area thought to be of increasing and strategic relevance for Swiss science and economy. 2. Tightening and expanding national and international research networks. 3. Further developing the present top-level competence of research in this field. 4. Intensifying research-based training for promising young researchers (with special emphasis on women). 5. Contributing to the knowledge base of Swiss industry. 6. Promoting start-ups.
1.6 Policy Priorities	2.1.1 Policy measures concering excellence, relevance and management of research in Universities 2.1.4 Research Infrastructures 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 3.1.3 Stimulation of PhDs

If other, please specify

The research program develops along the following main lines embracing both fundamental aspects and application related developments:
1. Quantum communication,
2. Advanced light sources,
3. Nanoscale optics,
4.Photonic systems.

Objectives: (a) to deepen our understanding concerning the quantum properties of light;
(b) to study the interactions of light with matter with extreme spatial and temporal resolution;
(c) to develop new laser sources beyond the present state-of-the-art in terms of wavelength range, spectral properties, power output, and pulse duration,
d) to develop the applications of photonics in the fields of information and communications technologies as well as in other fields of science and engineering.

2. Detailed information on duration and targets of measure

2.1 Start date	2001
2.2 Expected ending	2008
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how
Research-internal logic matching the strategic goals of national research policy (cutting-edge research in strategic research fields)

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research	✓	
units/centres		
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	
Other	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6.2 Type of Research Activity targeted:	Basic research Knowledge transfer (between researchers) Human research development International research collaboration Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The responsibility for the programme is at a so-called "home institution" (Federal Institute of Technology Lausanne) that co-ordinates a series of research groups (own institution, research groups of other Swiss universities, foreign research groups).
Subprogramme structure:	none
Management structure:	See overall implementation structure
Review of progress:	Submission of an annual report to the SNSF, which then is assessed by an international review panel

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?	1. Competence: outstanding, internationally recognised quality; 2. Active knowledge and technology transfer activities; 3. Contribution to the education of young scientists and the attraction of promising foreign researchers in the field; 4. Contribution to the strenghtening of the national research system (embedded in the international research community).
Openness to EU countries	No direct funding for foreign research institutions, but these may profit from linking to the programme (collaboration in an EU framework programme")
Openness to third countries	Same as EU countries
Selection of projects / participants	Fixed calls (about every second year) without pre-determined topic. Detailed submissions are evaluated by international experts from a purely scientic point of view. Afterwards, the SNSF takes into account some additional criteria and presents its recommendation to the Government that takes the final decision.
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment Training (including study trips) External expertise (consultants, studies, etc.)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector Other co-financing
3.7 Overall budget	Overall budget in EUR **54m** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.46** Overall budget in national currency **CHF79m** further information **Overall budget (€54m, CHF79m) contains €29m of Phase II (2005-2008). More than half of these funds stem from project partners.**

Year :

2005	€8.9m
2006	€8.7m
2007	€5.9m
2008	€5.7m
0	

4. Results, evaluation and impacts CH 30

4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?
The international review panel was highly positive about the quality of work in terms of all criteria mentioned above, such as research quantity and quality (publications, conference contributions, etc.), embededness in international joint projects and networks, number of spin-offs, implementation of new graduate and doctoral programms as well as summer courses .
The SNSF followed the suggestion of the panel to finance the continuation of the programme for phase II (2005-2008)

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	See http://nccr-qp.epfl.ch

5 How to find out more about the measure ? CH 30

Relevant further information	Extension for another four years (2005-2008)
5.2 Legal basis	Government decision based on a recommendation of the SNSF
5.3.2 Agency administering	Swiss National Science Foundation (SNSF)
5.3.3 Funding Agency	Swiss National Science Foundation (SNSF)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 32 Date created: 25/04/2006 Date Updated: 11/03/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Switzerland
1.2 Title of measure	NCCR Nanoscale Science
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	NCCR Nanoscale Science
1.3 Keyword(s)	Molecular electronics Nanoethics Nanoscale building blocks for Life Sciences and IC Nanoscale research
1.4 Overview (nature, main goals)	This programme is part of a large-scale research initiative of the Swiss National Science Foundation (SNSF) aiming at establishing and funding of "National Competence Centres of Research" (NCCR). To date, there are about twenty of such NCCR, about half of them relevant in terms of S&T policy (i.e. strong orientation towards science relevant for the development of technologies). Nanoscale science is an emerging interdisciplinary topic of fundamental importance to the future of science and technologies. The underlying science involves the basic building blocks and length scales of matter in traditional disciplines like biology, chemistry, physics and engineering. The fact that life sciences and new approaches to information technology will share the same basic building blocks of matter at the nanoscale clearly implies that approaches, scientific tools, fabrication methods and understanding must be jointly developed. The NCCR will provide an interface between research institutions and industry. The already strong collaboration with industry will continue as will the transfer of knowledge and technology, and finally new spin-off companies will be created. With an involvement of doctoral and post-graduate students, a PhD program, the promotion of world-class scientists and the organisation of an international summer school, etc. the programme will significantly contribute to education and training in thies field.

1.5 Background and rationale (Analytical reasoning why this measure is being created)	1. Strong presence in a strategic field in scientific and economic terms through long term cutting-edge research projects, 2. Further improving the already excellent "research infrastructure" in this promising field (human capital, networks accross disciplines), 3. Bridging the gap between basic science and industrial application
1.6 Policy Priorities	2.1.1 Policy measures concering excellence, relevance and management of research in Universities 2.1.2 Public Research Organisations 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 3.1.3 Stimulation of PhDs
If other, please specify	6 research sub-topics: - Nanobiology, - Quantum Computing and Quantum Coherence, - Atomic and Molecular Nanosystems, - Molecular Electronics, - Functional Materials by Hierarchical Self-Assembly, - Nanoethics

2. Detailed information on duration and targets of measure

2.1 Start date	2001
2.2 Expected ending	2008
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Research-internal logic matching the strategic goals of national research policy (cutting-edge research in strategic research fields; developing knowledge base;

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6.2 Type of Research Activity targeted:	Basic research Knowledge transfer (between researchers) Human research development International research collaboration Networking

If you have any additional

comments on the targeted fields, please provide them here:	Networking primarily at the level of research groups (departments, universities)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The responsibility for the programme is at a so-called "home institution" (University of Basle) that co-ordinates a series of research groups of the own and other Swiss universities as well as foreign research groups).
Subprogramme structure:	none
Management structure:	See overall implementation structure
Review of progress:	Submission of an annual report to the SNSF, which then is assessed by an international review panel
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	1. Competence: outstanding, internationally recognised quality; 2. Active knowledge and technology transfer activities; 3. Contribution to the education of young scientists and the attraction of promising foreign researchers in the field; 4. Contribution to the strenghtening of the national research system (embedded in the international research community).
Openness to EU countries	No direct funding for foreign research institutions, but these may profit from linking to the programme (collaboration in an EU framework programme")
Openness to third countries	Same as EU countries
Selection of projects / participants	Fixed calls (about every second year) without pre-determined topic. Detailed submissions are evaluated by international experts from a purely scientic point of view. Afterwards, the SNSF takes into account some additional criteria and presents its recommendation to the Government that takes the final decision.
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment Training (including study trips) External expertise (consultants, studies, etc.)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector Other co-financing
3.7 Overall budget	Overall budget in EUR **€84.9m** Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.46** Overall budget in national currency **CHF124m** further information **The overall budget (€84.9m, CHF124m) contains €38m of Phase II (2005-2008). Of these, only about one third stems from the SNSF . The largest part of the remaining funds comes**

from project participants.

Year :

2005	€9.6m
2006	€7.8m
2007	€10.3m
2008	€10.3m
0	

4. Results, evaluation and impacts CH 32

4.1 Were any indicators specified ex ante for the measurement of the results	No Goals and deliverables as formulated by the applicants and agreed upon by the SNSF
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **Yes** On-going/Mid-term **Yes** Final/Ex-post **Yes**
4.3 If the programme was evaluated, what were the main findings?	The international review panel was highly positive about the quality of work in terms of all programm selection criteria (see Section "Elegibility"), such as research quantity and quality (publications, conference contributions, etc.), intensification of PhD programmes, patents, spin-offs . The SNSF followed the suggestion of the panel to finance the continuation of the programme for phase II (2005-2008)
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	see http://www.nccr-nano.org

5 How to find out more about the measure ? CH 32

5.1 Information Souce/Reference	Website: http://www.nccr-nano.org/nccr/ English website: http://www.nccr-nano.org/nccr/ Uploaded document(s):
Relevant further information	Continuation for another four years (2005-2008); see above.
5.2 Legal basis	Government decision based on a recommendation of the SNSF
5.3.2 Agency administering	Swiss National Science Foundation (SNSF)
5.3.3 Funding Agency	Swiss National Science Foundation (SNSF)

back to top

European Commission

Important legal notice

PRO INNO EUROPE

PRO INNO EUROPE

INNO POLICY TRENDCHART

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 29 Date created: 24/04/2006 Date Updated: 11/03/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure NCCR Structural Biology

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** NCCR Structural Biology

1.3 Keyword(s) computational biomolecular sciences
macromolecular structure determination
Membrane proteins: structures, functions
recombinant protein technologies
Structural biology

1.4 Overview (nature, main goals) This programme is part of a large-scale research initiative of the Swiss National Science Foundation (SNSF) aiming at establishing and funding of "National Competence Centres of Research" (NCCR). To date there are about twenty of such NCCR, of which eleven are relevant in terms of S&T policy.

The programme aims at providing a platform for joint interdisciplanry projects of world-class standing, focussing on two main challenges in structural biology: membrane proteins and supramolecular assemblies/molecular interaction. To achieve these goals, high efficiency in three core technology areas is a prerequisite: recombinant protein technologies, macromolecular structure determination, and computational biomolecular sciences. A new postgraduate programme in structural biology ensures a broad education across traditional disciplines (molecular biology, biochemistry, etc). Transfer of research findings and encouragement of start-up companies are an explicit goal of the programme.

1.5 Background and rationale (Analytical reasoning why this measure is being created) 1. Promotion of long term cutting-edge research projects in an area (Life Sciences) that is of vital strategic importance for Swiss science, economy and society.
2. Tightening and expanding research networks in Switzerland (as well as links with foreign partners).
3. Further developing the present top-level competence of research in this field.

4. Intensifying research-based training for promising young researchers (with special emphasis on women).
5. Fostering knowledge transfer to industry.

1.6 Policy Priorities 2.1.1 Policy measures concering excellence, relevance and management of research in Universities
2.1.4 Research Infrastructures
3.1.3 Stimulation of PhDs

If other, please specify

The programme aims at providing a platform for joint interdisciplanry projects of world-class standing, focussing on two main challenges in structural biology: membrane proteins and supramolecular assemblies/molecular interaction. To achieve these goals, high efficiency in three core technology areas is a prerequisite: recombinant protein technologies, macromolecular structure determination, and computational biomolecular sciences. A new postgraduate programme in structural biology ensures a broad education across traditional disciplines (molecular biology, biochemistry, etc). Transfer of research findings and encouragement of start-up companies are an explicit goal of the programme.

2. Detailed information on duration and targets of measure

2.1 Start date 2001

2.2 Expected ending 2008

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Research-internal logic matching the strategic goals of national research policy (cutting-edge research in strategic research fields).

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Higher education institutions (education function)	✓	
Other	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: Basic research
Knowledge transfer (between researchers)
Human research development
Networking

If you have any additional comments on the targeted fields, please provide them here: International research collaboration is not an immediate target but it is obvious that a NCCR has extensive international links (and aims at deepening the already existing network)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The responsibility for the programme is at a so-called "home institution" (University of Zurich) that co-ordinates a series of research groups of (own institution, other

Swiss as well as foreign research groups). There are four sub-programmes/main research areas (structural biology of membrane proteins; supramolecular assemblies/molecular interactions; recombinant protein technologies; structure determination technologies; computational biomolecular sciences) covering 12 larger research projects

Subprogramme structure: none

Management structure: See overall implementation structure

Review of progress: Submission of an annual report (self-evaluation) to the SNSF, which then is assessed by an international review panel (complemented by a site visit)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? 1. Competence: outstanding, internationally recognised quality;
2. Active knowledge and technology transfer activities;
3. Contribution to the education of young scientists and the attraction of promising foreign researchers in the field;
4. Contribution to the strenghtening of the national research system (embedded in the international research community).

Openness to EU countries No direct funding for foreign research institutions, but these may profit from linking to the programme.

Openness to third countries Same as EU countries

Selection of projects / participants Fixed calls (about every second year) without pre-determined topic. Detailed submissions are evaluated by international experts from a purely scientic point of view. Afterwards, the SNSF takes into account some additional criteria mentioned above and presents its recommendation to the Government that takes the final decision.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Equipment
Training (including study trips)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector
Other co-financing

3.7 Overall budget Overall budget in EUR **€51m**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.46**
Overall budget in national currency **CHF74m**
further information
The overall budget (€51m, CHF74m) contains €27m of Phase II (2005-2008). More than half of the funds stem from other sources than the SNSF (mostly partners of the programme).

Year :

An initiative of the Directorate-General for Enterprise and Industry

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

CH 31 Date created: 25/04/2006 Date Updated: 11/03/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Switzerland

1.2 Title of measure NCCR Neuro

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** NCCR Neuro

1.3 Keyword(s)

Mechanisms of regeneration/repair of the nervous system
Neural plasticity
Restoration of functions of damage/deseases of the nervous system

1.4 Overview (nature, main goals)

This programme is part of a large-scale research initiative of the Swiss National Science Foundation (SNSF) aiming at establishing and funding of "National Competence Centres of Research" (NCCR). To date, there are about twenty of such NCCR, about half of them relevant in terms of S&T policy (i.e. strong orientation towards science relevant for the development of technologies).

The fundamental goal of this NCCR is the restoration of function after damage or disease of the nervous system. The NCCR will elucidate the basic cellular and molecular mechanisms of regeneration, plasticity and functional repair of the damaged nervous system. Using animal models as an intermediate step, novel approaches for therapies of human diseases will be developed with emphasis on epilepsy, stroke, spinal cord injury, multiple sclerosis and Alzheimer's disease.Additional objectives are a) further development of a leading-edge research infrastructure, b) expansion of training (PhD students, young professors), c) exploiting even better the synergies between complementary disciplines (all branches of "neuroscience") as well as between universities, hospitals and the pharmaceutical industry.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

1. Promotion of long term cutting-edge research projects in an area of very large social importance,
2. Increasing the knowledge-base in an area where Swiss industry is highly competitive (pharmaceutical industry),
3. need for further improving the already excellent "research infrastructure" in this strategic field (networking, databases, etc.),
4) further build-up of education/training in the transdisciplicinary field of "neuroscience"

1.6 Policy Priorities

2.1.1 Policy measures concering excellence, relevance and management of research in Universities
2.1.2 Public Research Organisations
2.1.4 Research Infrastructures
2.2.3 R&D cooperation (joint projects, PPP with research institutes)

If other, please specify

Restoration of function after damage or disease of the nervous system. The NCCR will elucidate the basic cellular and molecular mechanisms of regeneration, plasticity and functional repair of the damaged nervous system. Using animal models as an intermediate step, novel approaches for therapies of human diseases will be developed with emphasis on epilepsy, stroke, spinal cord injury, multiple sclerosis and Alzheimer's disease.

2. Detailed information on duration and targets of measure

2.1 Start date 2001

2.2 Expected ending 2008

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Research-internal logic matching the strategic goals of national research policy (cutting-edge research in strategic research fields; high social relevance

2.4 Geographic coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Higher education institutions (education function)	✓	
Other	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted:

Basic research
Problem driven (basic) research
Knowledge transfer (between researchers)
Human research development
International research collaboration
Networking

If you have any additional comments on the targeted fields, please provide them

Networking primarily at the level of research groups (departments, universities, hospitals, R&D division of

here: pharmaceutical companies)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The responsibility for the programme is at a so-called "home institution" (University of Zurich) that co-ordinates a series of research groups of (own institution, research groups of other Swiss universities, foreign research groups).

Subprogramme structure: none

Management structure: See overall implementation structure

Review of progress: Submission of an annual report to the SNSF, which then is assessed by an international review panel

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?

1. Competence: outstanding, internationally recognised quality;
2. Active knowledge and technology transfer activities;
3. Contribution to the education of young scientists and the attraction of promising foreign researchers in the field;
4. Contribution to the strenghtening of the national research system (embedded in the international research community).

Openness to EU countries No direct funding for foreign research institutions, but these may profit from linking to the programme (collaboration in an EU framework programme")

Openness to third countries Same as EU countries

Selection of projects / participants Fixed calls (about every second year) without pre-determined topic. Detailed submissions are evaluated by international experts from a purely scientic point of view. Afterwards, the SNSF takes into account some additional criteria and presents its recommendation to the Government that takes the final decision.

3.4 In what form is funding provided ? Grants

Specify other:

3.5. What are the eligible costs, where direct funding is provided ?

Labour costs (including overheads)
Equipment
Training (including study trips)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding)

Co-financed by the private sector
Other co-financing

3.7 Overall budget

Overall budget in EUR **€98m**
Overall budget in EUR Exchange rate used (1 EUR =) - where applicable(non-Euro zone) **1.46**
Overall budget in national currency **CHF143m**
further information
Overall budget (€98m, CHF143m) contains €57.9m of Phase II (2005-2008); about 25% of the funding stems from the SNSF, the rest is mainly financed by the programme participants.

Year :

2005	€7.8m
2006	€7.7m
2007	€6.3m
2008	€4.7m
0	

4. Results, evaluation and impacts CH 29

4.1 Were any indicators specified ex ante for the measurement of the results No
Goals and deliverables as formulated by the applicants and agreed upon by the SNSF.

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **Yes**

4.3 If the programme was evaluated, what were the main findings?

The international review panel was highly positive about the quality of work in terms of all criteria mentioned in Section "Elegibility". The SNSF followed the suggestion of the panel to finance the continuation of the programme for the next phase (2005-2008)

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?

See NCCR Structural Biology
www.structuralbiology.unizh.ch

5 How to find out more about the measure ? CH 29

5.1 Information Souce/Reference

Website: http://www.structuralbiology.uzh.ch/
English website: http://www.structuralbiology.uzh.ch/
Uploaded document(s):

Relevant further information Continuation for another four years (2005-2008)

5.2 Legal basis Government decision based on a recommendation of the SNSF

5.3.2 Agency administering Swiss National Science Foundation (SNSF)

5.3.3 Funding Agency Swiss National Science Foundation (SNSF)

back to top

2005	€14.2m
2006	€14.2m
2007	€14.4m
2008	€15.0m
0	

4. Results, evaluation and impacts CH 31

4.2 Where an evaluation has taken place, what were the main findings?

Ex-ante **No**
On-going/Mid-term **Yes**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

The international review panel was highly positive about the quality of work in terms of all selection criteria mentioned in the Section "Eligibility", such as research quantity and quality (publications, conference contributions, patents, etc.), number of spin-offs, intensification of PhD programmes . The SNSF followed the suggestion of the panel to finance the continuation of the programme for phase II (2005-2008)

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?

See http://www.nccr-neuro.unizh.ch

5 How to find out more about the measure ? CH 31

5.1 Information Souce/Reference

Website: http://www.nccr-neuro.uzh.ch/
English website: http://www.nccr-neuro.uzh.ch/
Uploaded document(s):

Relevant further information

Continuation for another four years (2005-2008); see above.

5.2 Legal basis

Government decision based on a recommendation of the SNSF

5.3.2 Agency administering

Swiss National Science Foundation (SNSF)

5.3.3 Funding Agency

Swiss National Science Foundation (SNSF)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures result

29 Policy measures found

Portugal

Ref	Title	Last Update
PT 84	Innovation Scoring	27/03/2009
PT 79	SME Skills Support system - Collective projects	26/03/2009
PT 76	Innovation Support System - Innovation Projects	24/03/2009
PT 57	FINCRESCE(Financial Support to Company Growth)	15/10/2008
PT 31	Venture capital Syndication Funds (FSCR)	24/07/2008
PT 45	Training and Human Resources	24/07/2008
PT 51	NEOTEC Initiative	24/07/2008
PT 52	SIED - System of incentives for the digital econom	24/07/2008
PT 53	INOV_JOVEM	24/07/2008
PT 55	FINICIA	24/07/2008
PT 56	FINICIA-High Innovation Content Projectson	24/07/2008
PT 32	Credit Enhancement Securitization Fund (FGTC)	24/07/2008
PT 34	NEST New Technology Based Companies	24/07/2008
PT 35	QUADROS Programme	24/07/2008
PT 13	Centres for Company Formalities	24/07/2008
PT 18	Industrial Property Use Incentive System (SIUPI)	24/07/2008
PT 25	Financial Innovation - Action B (POE)	24/07/2008
PT 26	Industrial Property Support Offices (GAPI)	24/07/2008
PT 27	PME Digital (Digital SME)	24/07/2008
PT 30	Programa GERIR - Formacao e Consultadoria em Gest	24/07/2008
PT 71	FINICIA Programme	24/07/2008
PT 70	NEOTEC Iniciative	24/07/2008
PT 69	NEST - New Technology Based Companies	24/07/2008
PT 66	SIME-I&DT - Incentive System for Company Modernisa	12/10/2007
PT 65	European and International Cooperation Projects in	12/10/2007
PT 64	IDEIA - Support to Applied Research and Developmen	12/10/2007
PT 68	NITEC - Incentive System for Creating R&D Nuclei i	12/10/2007
PT 67	Tax Incentives for Company Investments in R&D (SIF	12/10/2007

PT 72	Doctoral Grants in Companies	12/10/2007

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 84 Date created: 27/03/2009 Date Updated: 27/03/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure Innovation Scoring

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Innovation Scoring
- **Full name in national language:** Innovation Scoring

1.3 Keyword(s) Scoring
Innovation
Self-diagnosis
Capabilities

1.4 Overview (nature, main goals)

The Innovation Scoring tool has been developed in the context of the 'Sustained Development of Company Innovation' project launched by COTEC-Associação Empresarial para a Inovação, a business association for supporting innovation, created in 2003 under the aegis of the President of the Portuguese Republic.
This tool in intended to be a self-diagnosis instrument enabling companies to assess their innovation capabilities. Originally designed for COTEC members (mostly large firms), the tool is also applicable to SMEs. It is now generally available on-line through IAPMEI, enabling every firm to carry out its self-analysis of innovative capabilities and behaviour.
The Innovation Scoring consists in a set of 43 questions organised under four groups: conditions, resources, processes, and outcomes. It is also intended to play a pedagogical role helping companies, and namely SMEs, to identify weaknesses and to design actions to correct such weaknesses.
After getting a sound statistical basis, it is intended to provide companies with benchmark indexes regarding the industry concerned and other characteristics. At a later stage it is envisaged to launch an audit procedure, namely with a view to help SMEs to design and launch improvement action plans.

The Innovation Scoring tool has been developed in the context of the 'Sustained Development of Company Innovation' project launched by COTEC-Associação Empresarial para a Inovação, a business association for supporting innovation, created in 2003 under the aegis of the

President of the Portuguese Republic.
The rationale for the launching of this tool is the recognition that Portuguese firms innovative capabilities are limited. Instruments to help companies to identify their weaknesses and start competence enhancing paths are therefore needed. The Innovation Scoring tool responds a clear weakness in the policy mix, much more orientated towards the granting of financial incentives than to the upgrading of firms, namely SMEs, management capabilities. The tool has a Manual which provides support not just on what the scoring is concerned but also on highliting interesting approaches followed by companies in Portugal and elsewhere to improve theis innovation capabilities and performance.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

1.6 Policy Priorities 4.1.1 Support to sectoral innovation in manufacturing
4.1.2 Support to innovation in services
4.2.1 Support to innovation management and advisory services
4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc

1.8 Targeted research and technology fields No specific thematic focus,
If other, please specify
No thematic focus.

1.9 Addressing innovation-related Lisbon guideline elements 1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date 2007

2.2 Expected ending No End Date Planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?
Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly Inspired by an existing measure of another (EU) country
Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how
The Innovation Scoring tool has benefited from earlier attempts to design innovation diagnosis tools in Portugal, as well as from instruments designed by consultancy firms and national authorities in other countries. Particularly relevant has been the experience of Singapore.

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	

2.5.3 If more than one target group is eligible, is Only proposals from single organisations are accepted

Other (please specify)
The tool is available for all firms. COTEC has been also using the tool to assess applications by SMEs to join the COTEC Innovative SMEs Network.

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation
Promotion of entrepreneurship/start up (including incubators)	Innovation management tools (incl quality)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	Implemented by COTEC and IAPMEI, the institute for Smalland medium Sized Firms and Innovation as an on-line tool.
Subprogramme structure:	Not applicable.
Management structure:	COTEC and IAPMEI
Review of progress:	A significant number of firms have already used the on-line tool, and participated in training courses in which, among other issues, the way how to use the tool as an innovation and capability building instrument is explained to companies.
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Not applicable.
Openness to EU countries	The Innovation Scoring tool has also an on-line English version, which may be used by companies outside Portugal.
Openness to third countries	The Innovation Scoring tool has also an on-line English version, which may be used by companies outside Portugal.
Selection of projects / participants	Not applicable.
3.3. What State Aid framework is applied to the measure	Not applicable.
3.4 In what form is funding provided ?	No direct funding provided
	Specify other:
3.7 Overall budget	further information **Not applicable.**

4. Results, evaluation and impacts PT 84

5 How to find out more about the measure ? PT 84

5.1 Information Souce/Reference	Website: http://www.cotecportugal.pt/index.php?option=com_content&task=view&id=259&Itemid=103; http://www.innovationscoring.pt/
	English website: http://www.cotecportugal.pt/index.php?option=com_content&task=blogcategory&id=69&Itemid=109
	Uploaded document(s):
5.2 Legal basis	Not applicable
5.3.1 Launching Agency	CoTEC and IAPMEI
5.3.2 Agency administering	IAPMEI

back to top

2.2 Expected ending	2013
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	
Novel (no relation to previous) measure	
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)
	Inspired by need to meet EU level policy objectives

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

The measure is intended to respond two policy concerns, namely leveraging public intervention and promoting SME cooperation.It may also contribute to strengthen the involvement by business associations in policy implementation.

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	
Consultancies and other private service providers (non-profit)		✓
Other non-profit research organisations (not HEI)		✓
Technology and innovation centres (non-profit)		✓
Business organisations (Chambers of Commerce...)		✓
Other		✓

2.5.2 If necessary, give more details on the target groups e.g. restricted to spin-offs, start-ups only, which other groups,etc...	It is expected that the organisations in charge of promoting the collective project will entice cooperation among the participating SMEs
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation Applied industrial research Development/prototype creation
Promotion of entrepreneurship/start up (including incubators)	Commercialisation of innovation (including IPR) Industrial design Co-operation promotion and clustering Diffusion of technologies in enterprises Innovation management tools (incl quality)
2.6.2 Type of Research Activity targeted:	Applied industrial research Knowledge transfer (between researchers) International research collaboration Networking
If you have any additional comments on the targeted fields, please provide them here:	The measure is intended to respond two policy concerns, namely leveraging public intervention and promoting SME cooperation.It may also contribute to strengthen the involvement by business associations in policy implementation.

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	This measure comes in the context of the CFOP ('Compete'), under the NSRF 2007-2013. The programme is coordinated by a specific body, the POFC Office, which oversees its implementation
Subprogramme structure:	This measure is part of the SME Skills Support System. It has no specific sub-programmes. However, collective projects may address a broad range of different fields, from product development and engineering and process innovation to promotion, and companies' internationalisation.
Management structure:	The measure is managed by the following organisations: AICEP (Portuguese Agency for Investment and Foreign Trade) ITP (Portuguese Tourism Institute) IAPMEI (Institute for Support of SMEs

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 79 Date created: 26/03/2009 Date Updated: 26/03/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	SME Skills Support system - Collective projects
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	SME Skills Support system - Collective projects
• **Full name in national language:**	Sistema de Incentivos Qualificação e Internacionalização das PME - Projectos conjuntos
1.3 Keyword(s)	SMEs Skills Competencies Collective projects
1.4 Overview (nature, main goals)	This measure comes in the context of the SME Skills Support System, which is part of the Competitiveness Factors Operational Programme -CFOP ('Compete'), under the National Strategic Reference Programme - NSRF 2007-2013. It is aimed at encouraging public bodies concerned with SMEs, business associations and R&D organisations to identify competitive issues relevant for SMEs and to address them through the carrying out of projects that may be relevant for groups of companies. The purpose is to identify common problems, felt by groups of SMEs, and to design collective actions aimed at addressing them.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	The background for this measure may be traced back to the Demonstration Actions in the first PEDIP programme, launched in 1989, and continued in later Community Support Frameworks. Another 'heritage' is related to the PIPs (Public Initiatives and partnerships) under the 2000-2006 PRIME Programme. A further consideration has been the need to foster SME cooperation. The rationale for the measure, besides the promotion of cooperative behaviours is the perception that there are types of problems common to sets of SMEs that may be better addressed through common approaches, thereby gaining scale and enhancincing the efficiency and effectiveness of public policy. Another relevant consideration is the involvement of business associations in the implementation of public policy.
1.6 Policy Priorities	4.1.1 Support to sectoral innovation in manufacturing 4.1.2 Support to innovation in services
If other, please specify	No thematic technology fields.
1.9 Addressing innovation-related Lisbon guideline elements	1. Improvements in innovation support services, in particular for dissemination and technology transfer. 6. Efficient and affordable means to enforce intellectual property rights.

2. Detailed information on duration and targets of measure

2.1 Start date	2007

	and Investment)
Review of progress:	Too early to access. Until the end of 2008, 23 collective projects had been approved.
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	The following selection criteria do apply: - Level of involvement of SMEs, and innovativeness of the envisaged actions; - Competencies and experience of the coordinating team as well as of the contracted external experts ; - demonstation and dissemination effects towards other SMEs; - homogeneity of the participating SMEs; - relevance of the investments concerned to increase the competitiveness of the firms concerned; and - expected impact of tte prject on the internationalisation of the SMEs concerned.
Openness to EU countries	This measure is open to all public organisations dealing with SMEs as well as to R&D organisations and business associations established in Portugal.
Openness to third countries	This measure is open to all public organisations dealing with SMEs as well as to R&D organisations and business associations established in Portugal.
Selection of projects / participants	Projects are selected on their merits, as mentioned above. To be eligible projects should satisfy a number of conditions, namely regarding information diffusion before selecting participating SMEs and the ex-ante involvement of at least 5 SMEs. projects should extend for a maximum of 2 years.
3.3. What State Aid framework is applied to the measure	This measure is consistent with Regulation (CE) 70/2001 concerning the support to be granted to SMEs, with the exception of the laid down in Regulations (CE) 68/2001 and 1998/2006.
3.4 In what form is funding provided ?	Grants
	Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment Training (including study trips) External expertise (consultants, studies, etc.) Other Promotion, follow-up, evaluation and dissemination costs incurred by the organisation (s) in charge of the projects. labour cost directly associated to the carrrying out and management of the project are also supported.
3.7 Overall budget	further information **This measure is part of Axis 2 of the POFC /'Compete' programme. Axis 2 encompasses two main Support Systems: Innovation ans SME Skills (which includes the current measure). The overall budget for Axis 2 is Euro 1220 million).**

4. Results, evaluation and impacts PT 79

4.1 Were any indicators specified ex ante for the measurement of the results	Yes Number of collective projects carried out Number of SMEs involved in collective projects Size of the collective projects.
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **Yes** On-going/Mid-term **No** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? Ex-ante evaluation has been positive, although underlining the advantages of focussing the support on company initiatives and public-private partnerships. Time elapsed is still too short to enable a sound ex-post evaluation.
4.4 If no official evaluation has been	

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 76 Date created: 24/03/2009 Date Updated: 24/03/2009

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	Innovation Support System - Innovation Projects
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Innovation Support System - Innovation Projects
• **Full name in national language:**	Sistema de Incentivos à Inovação - Inovação produtiva
1.3 Keyword(s)	Product and processinnovation Development and launch of new producte, processes and services knowledge transfer and application organisational innovation marketing innovation
1.4 Overview (nature, main goals)	This measure is aimed at promoting innovation in business enterprises, including namely (1) the production of new or significantly improved goods, and the delivery of new or significantly improved services, (2) the adoption of new or significantly improved manufacturing, distribution and logistics processes, and (3) the adoption of new or significantly improved marketing and organisational processes. The purpose is to stimulate different forms of innovation in companies, through the provision of financial support. In principle, the concern is to be selective in supporting projects, granting support only to those which ehibit a relevant innovation content (process, product, marketing, organisational). The innovation projects measure is intended to go a step forward with regard to earlier measures launched in the previous Community Support Frameworks (CSFs), being more demanding as to the innovative content of the projects. The rationale is to go further than the financing of hardware, by linking the support provided to innovative activities, at product, process, marketing and organisational levels. The measure is intended to encourage the carrying out of innovative activities by firms, based on the assumption that increased innovative perfprmance, at different levels, will entail increased form competitiveness.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	
1.6 Policy Priorities	4.1.1 Support to sectoral innovation in manufacturing 4.1.2 Support to innovation in services 4.2.1 Support to innovation management and advisory services 4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc
1.7 Targeting specific sector	TOTAL MANUFACTURING (15 -- 37)
1.8 Targeted research and technology fields	Food, agriculture and fisheries,
If other, please specify	
This measure is not addressed to specific technology fields.	
1.9 Addressing	3. The encouragement of cross-border knowledge transfer, including

innovation-related Lisbon guideline elements	from foreign direct investment.

2. Detailed information on duration and targets of measure

2.1 Start date	2007
2.2 Expected ending	2013
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	Novel (no relation to previous) measure
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Inspired by need to meet EU level policy objectives
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding
All companies	✓	✓

2.5.3 If more than one target group is eligible, is	Co-operation/networking optional (e.g. associating SMEs as users)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Development/prototype creation Commercialisation of innovation (including IPR)
Promotion of entrepreneurship/start up (including incubators)	Diffusion of technologies in enterprises Innovation management tools (incl quality)
If you have additional comments on the targeted fields, please provide them here:	The measure is aimed at promoting product, process, organisational and marketing innovation
2.6.2 Type of Research Activity targeted:	Applied industrial research

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	The measure is managed by the CFOP (Competitiveness FactorsOperational programme)Management Office. The Technical bodies in charge of management arethe following: AICEP- the Agency for Investment and Foreign trade; the Portugues Institute for Tourism and IAPMEI- the Institute for Small and Medium Sized Firms and Investment
Subprogramme structure:	Not applicable. This measure is part of a wider programme (Innovation Support System
Management structure:	The measure is managed by the CFOP (Competitiveness FactorsOperational programme)Management Office. The Technical bodies in charge of management arethe following: AICEP- the Agency for Investment and Foreign trade; the Portugues Institute for Tourism and IAPMEI- the Institute for Small and Medium Sized Firms and Investment
Review of progress:	It is still too early to assess progress so far, since the measure has started to be implemented in late 2007.
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Projets are selected on the basis of a Project Merit index, based on selection criteria defined by the Ministries for the Economy and for Environment and regional development.
Openness to EU countries	All companies should be located in Portugal, irrespectively of their ownership structure.
Openness to third countries	Not applicable.

Selection of projects / participants	The selection of the projects is carried out by a Selection Commission, on the basis of the criteria mentioned on 3.2 above
3.3. What State Aid framework is applied to the measure	Follows de minimis rsupport ules.
3.4 In what form is funding provided ?	Grants Subsidized loans (including interest allowances) Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Equipment External expertise (consultants, studies, etc.) Other IPRs, Sofware, Quality systems...
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.) Co-financed by the private sector

4. Results, evaluation and impacts PT 76

4.1 Were any indicators specified ex ante for the measurement of the results	Yes New products and processes. Organisational and marketing innovation initiatives.
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **Yes** On-going/Mid-term **No** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? Not applicable.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	Too early to assess.

5 How to find out more about the measure ? PT 76

5.1 Information Souce/Reference	Website: http://www.pofc.qren.pt/PresentationLayer/conteudo.aspx?menuid=532&exmenuid=453 Uploaded document(s):
Relevant further information	Not envisaged so far.
5.2 Legal basis	Ministerial decree 1464/2007, of 15 November 2007.
5.3.1 Launching Agency	POFC Office
5.3.2 Agency administering	AICEP IPT IAPMEI
5.3.3 Funding Agency	IAPMEI ITP

back to top

undertaken is there any evidence which allows an appraisal of the success of the measure?	As pointed out above, time elapsed is still too short. It is not possible to use the number of projects approved as a performance indicator.

5 How to find out more about the measure ? PT 79

5.1 Information Souce/Reference	Website: http://www.pofc.qren.pt/PresentationLayer/conteudo.aspx?menuid=530&exmenuid=438 Uploaded document(s): Portaria_250_08.pdf Portaria1463_07.pdf
Relevant further information	The original Ministerial decree regulating this measures has bben subject to several clarifications by the Ministerial decree 250/2008. No further developments envisaged.
5.2 Legal basis	Ministerial Decree 1463/2007, of 15 November. Ministerial Decree 250/2008, of 04 April.
5.3.1 Launching Agency	The measure has been launched in the context of the POFC/'Compete' programme by the POFC Office.
5.3.2 Agency administering	AICEP (Portuguese Agency for Investment and Foreign Trade) ITP (Portuguese Tourism Institute) IAPMEI (Institute for Support of SMEs and Investment)
5.3.3 Funding Agency	AICEP (Portuguese Agency for Investment and Foreign Trade) ITP (Portuguese Tourism Institute) IAPMEI (Institute for Support of SMEs and Investment)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 57 Date created: 07/02/2008 Date Updated: 15/10/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	FINCRESCE(Financial Support to Company Growth)
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	FINCRESCE(Financial Support to Company Growth)
• **Full name in national language:**	FINCRESCE
1.3 Keyword(s)	Company financing Company growth SMEs
1.4 Overview (nature, main goals)	FINCRESCE is aimed at improving the financing conditions for firms following consistent growth strategies and enhancing their competitive capabilities. Included in INOFIN, the Framework Programme on financial Innovation for SMEs, FINCRESCE is addressed to companies at the middle stage of their life cycles, exhibiting good performances and risk profiles. More specifically, the measure intends to encourage company strategies that fit economic policy priorities, following growth strategies in international markets, as well as the consolidation of sectoral leaderships.FINCRESCE is also aimed at improving financial intermediation effectiveness and at encouraging medium-sized companies to enter capital markets.It is also concerned with promoting the adaptation of those companies to the financial management requirements stemming from Basel II. FINCRESCE is based on public-private partnerships with a set of financial and non-financial players, active in providing support to SMEs.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	As mentioned above, FINCRESCE is part of the INOFIN Framework Programme. The problems associated to the characteristics of the Portuguese financial system, dominated by credit approaches and significantly risk-averse, are behind the decision to launch INOFIN, and therefore FINCRESCE. Historically, the roots of these initiatives go back to the financial engineering programmes included in PEDIP I and II. The rationale for FINCRESCE is basically the following: companies' financing needs change along their lifecycle. Therefore, specific measures should be designed to respond such differentiated needs. While FINICIA (reported in PT_55 and PT_56) is addressed to new businesses and to companies in the early phases of their lifecycles, FINCRESCE is focussed on companies in later stages, following growth strategies and commited to enhance their competitive basis.
1.6 Policy Priorities	4.3.1 Support to innovative start-ups incl. gazelles
1.9 Addressing innovation-related Lisbon guideline elements	5. Better access to domestic and international finance.

2. Detailed information on duration and targets of measure

2.1 Start date	2007
2.2 Expected ending	No End Date Planned
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	
Novel (no relation to previous) measure	
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)
2.4 Geographic coverage	(National)
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding
SMEs only	✓	
Other	✓	

2.5.2 If necessary, give more details on the target groups e.g. restricted to spin-offs, start-ups only, which other groups,etc...	Not applicable
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Pre-competitive research
Promotion of entrepreneurship/start up (including incubators)	Promotion of entrepreneurship/start up (including incubators)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	This Measure is part of the general INOFIN programme, aimed at improving the philosophy and the structure of financial support instruments addressed to firms.
Management structure:	The programme is managed by IAPMEI.
Review of progress:	Available data suggests a good take-up by companies
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Companies exhibiting good performances and risk profiles that might become growth references in different economic sectors (such companies ara labelled as Leader SMEs, the best being considered as Excellence SMEs). Only companies classified as Leader SMEs, at least, are eligible.
3.4 In what form is funding provided ?	No direct funding provided Other Specify other:
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **not available** further information **Budget not available**

4. Results, evaluation and impacts PT 57

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	The measure is very recent. It seems to go on a good track, having in mind the involvement of the major banks and the significant number of applications by companies.

5 How to find out more about the measure ? PT 57

5.1 Information Souce/Reference	Website: http://www.iapmei.pt Uploaded document(s):
5.2 Legal basis	INOFIN Framework Programme
5.3.1 Launching Agency	IAPMEI
5.3.2 Agency administering	IAPMEI

back to top

European Commission
An initiative of the Directorate-General for Enterprise and Industry

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 31 Date created: 11/11/2002 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	Venture capital Syndication Funds (FSCR)
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Venture capital Syndication Funds (FSCR)
1.3 Keyword(s)	Venture capital Syndication funds Innovation promotion
1.4 Overview (nature, main goals)	This measures, which comes in the context of the so-called Financial Innovation Actions of POE (PT 24 and PT25), defines the rules for the creation and current activities of the FSCRs. There are funds aimed at undertaken combined venture capital operations by investing in company equity and financing venture capital organisations, with a view to strengthen SMEs capital structures.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure comes in the context of the 'Financial Innovation' strand of POE/PRIME. It is aimed at providing further leverage and support to the development of venture capital activities in Portugal.
1.6 Policy Priorities	1.3.2 Horizonal measures in support of financing 4.3.2 Support to risk capital
1.9 Addressing innovation-related Lisbon guideline elements	5. Better access to domestic and international finance.

2. Detailed information on duration and targets of measure

2.1 Start date	2002
2.2 Expected ending	No End Date Planned
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	
Novel (no relation to previous) measure	
2.3.2 If the measure is novel was it mainly	Inspired by an existing measure of another (EU) country Inspired by national policy debate (e.g study, consultation) Inspired by need to meet EU level policy objectives Novel (no relation to previous) measure

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 45 Date created: 14/10/2004 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure Training and Human Resources

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Training and Human Resources

1.3 Keyword(s) Training
Human Resouces
Competitiveness

1.4 Overview (nature, main goals) This programme is aimed at supporting training of human resouces in firms. It comes under the PRIME programme and replaces some measures included in old POE.

1.5 Background and rationale (Analytical reasoning why this measure is being created) Recognizing the low level of qualification of active human resoures in Portugal and strong intensity of knowledge included in the new paradigm of competitivess, anchored in very well qualified human resources, this programme seeks to overcome some weaknesses of Portuguese economy.

1.6 Policy Priorities 3.3.1 Job training (LLL) of researchers and other personnel involved in innovation
3.3.2 Recruitment of skilled personel in enterprises

If other, please specify

1.9 Addressing innovation-related Lisbon guideline elements 1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date 2003

2.2 Expected ending 2006

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure

2.4 Geographic coverage (National)

2.5. Target groups

2.4 Geographic coverage (National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Other	✓	✓

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Promotion of entrepreneurship/start up (including incubators)

Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Variable, depending on each specific intervention.

3.4 In what form is funding provided ? Other
Specify other: Contribution to venture capital syndication funds equity

3.5. What are the eligible costs, where direct funding is provided ? Other
Not applicable

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget Overall budget in EUR **50 million euros**

4. Results, evaluation and impacts PT 31

4.1 Were any indicators specified ex ante for the measurement of the results Yes
Number of interventions. Amount of equity participation held. Contribution to the dynamisation of the venture capital market

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **No**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?
The first venture capital syndication fund PME-IAPMEI was created in 2003.

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? Not available

5 How to find out more about the measure ? PT 31

5.1 Information Souce/Reference Website: http://www.iapmei.pt
Uploaded document(s):

5.2 Legal basis Ministerial Decree no. 509/2004 Ministerial Decree no. 196/2003 Decree-Law no. 187/2002, of 21 August

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	✓
Other public education institutions (secondary,etc...)	✓	✓
Business organisations (Chambers of Commerce...)	✓	✓
Trade Unions	✓	✓

2.5.3 If more than one target group is eligible, is Co-operation/networking optional (e.g. associating SMEs as users)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Improving the legal and regulatory environment

Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Integrated projects that combine investment and training with an assessment methodology included; autonomous projects exclusively focusen on trainning with an assessment methodology included; technological courses

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Training (including study trips)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget Overall budget in EUR **536 million euros**
further information **Year 2000-2006. However, the budget for this programme alone is not available. The amount mentioned above (536 million euros) corresponds to the total budget for the Measure IV of PRIME, which includes a number of different programmes (training linked with investment strategies, training for SME executives, training in the context of partnerships, technological schools and INOV_JOVEM).**

4. Results, evaluation and impacts PT 45

4.1 Were any indicators specified ex ante for the measurement of the results Yes
Number of graduates employed Number of persons trained Number of technological schools involved

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

Ministerial Decree no. 37/2002, of 10 January

5.3.4 Manager(s) responsible for the measure
Gaspar Antonio - (IAPMEI)
Furtado Jose - (IAPMEI)
IAPMEI

back to top

	The evaluation of this programme has been mostly focused on human resources issues, and not on its impact on innovation performance.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	See above

5 How to find out more about the measure ? PT 45

5.1 Information Souce/Reference	Website: http://www.prime.min-economia.pt Uploaded document(s):
5.2 Legal basis	Ministerial Decree (Portaria) no. 1285/2003 of 17 November Ministerial Decree 1318/2005 of 26 December
5.3.4 Manager(s) responsible for the measure	Cilineo Pedro - (IAPMEI) IAPMEI

back to top

1.9 Addressing innovation-related Lisbon guideline elements	1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date	2004
2.2 Expected ending	2006
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	
Novel (no relation to previous) measure	
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Inspired by need to meet EU level policy objectives Novel (no relation to previous) measure
2.4 Geographic coverage	(National)
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding
Scientists / researchers (as individuals)	✓	✓
Technology and innovation centres (non-profit)	✓	
Business organisations (Chambers of Commerce...)	✓	
Other	✓	✓

2.5.2 If necessary, give more details on the target groups e.g. restricted to spin-offs, start-ups only, which other groups,etc...	Mainly individuals
2.5.3 If more than one target group is eligible, is	Only proposals from single organisations are accepted
	Other (please specify) Besides scientits/researchers working in R&D organisations, the NEOTEC Initiative is also addressed to students enrolled in tertiary education and post-graduates. It also supports projects carried out by R&D organisations to exploit their knowledge
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation
Promotion of entrepreneurship/start up (including incubators)	Industrial design
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Projects should be presented by individuals (or groups of individuals) in the conditions above (or by R&D organisations as mentioned above); The Initiative unfolds in three phases: (1) idea/concept generation; (2) development of a business model and a business plan;

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 51 Date created: 14/04/2005 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	NEOTEC Initiative
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	NEOTEC Initiative
1.3 Keyword(s)	NTBF Creation ICTs Technology Transfer
1.4 Overview (nature, main goals)	The NEOTEC Initiative is concerned with the provision of seed capital for the creation of new technology based firms in the ICT field, based in idea contests. More specifically, the Initiative has the following objectives: - promoting the creation of new technology based firms in ICTs, by supporting them in the different stages from the identification of market potential to the commercialisation - encouraging an attitudional change of NIS players, encouraging the carrying out of research activities and the exploitation of its results - stimmulating entrepreneurship and an innovation culture - promoting the development and market launch of new ICT products, processes and services
1.5 Background and rationale (Analytical reasoning why this measure is being created)	NEOTEC Initiative comes in the wake of the Action Plan on Information Society and is integrated in the measure 7.2. (R&D entrepreneurial initiatives in the ICT field) of POS_C, the Operational Programme on Knowledge Society. Its main rationale is the low level of creation of new technology based firms in that field. NEOTEC Initiative is envisaged as an instrument to respond this problem.
1.6 Policy Priorities	4.1.1 Support to sectoral innovation in manufacturing 4.1.2 Support to innovation in services 4.3.1 Support to innovative start-ups incl. gazelles 5.2.1 Fiscal incentives in support of the diffusion of innovative technologies, products and services

	and (3) operationalisation of the project
3.4 In what form is funding provided ?	Grants Specify other: Maximum support per project: 100 000 euros
3.5. What are the eligible costs, where direct funding is provided ?	Training (including study trips) External expertise (consultants, studies, etc.) Other IPR registration; technology acquisition agreements
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)
3.7 Overall budget	Overall budget in EUR **8.8 million euros** further information **2004-2006**

4. Results, evaluation and impacts PT 51

4.1 Were any indicators specified ex ante for the measurement of the results	Yes Number of new technology based firms created
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? The initiative is too recent (it was launched in early 2005)
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	The initiative is too recent (it was launched in early 2005)

5 How to find out more about the measure ? PT 51

5.1 Information Souce/Reference	Website: http://www.adi.pt Uploaded document(s): neotec_edital.pdf
5.2 Legal basis	Decree-Law 54A/2000, of 7 April Decree-Law 215A/2004, of 3 September Rules of NEOTEC Initiative
5.3.4 Manager(s) responsible for the measure	Santos Jorge Manuel Marques dos - (IPQ - Portuguese Institute for Quality) Agencia de Inovacao (AdI)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 52 Date created: 19/05/2005 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	SIED - System of incentives for the digital economy
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	SIED - System of incentives for the digital economy
1.3 Keyword(s)	Digital Economy Process Improvement Electronic Business
1.4 Overview (nature, main goals)	SIED is aimed at promoting the involvement of Portuguese SMEs in the digital economy. More specifically its objectives include: the strengthening of SMEs technological capabilities; use of digital instruments to improve SME organisation; stimulus to the upgrading of the involvement in the digital economy, by using electronic means for communication and transactions; to enlarge market scope, namely by encouraging foreign market entry; and promoting the adoption of innovative and cooperative behaviours.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure is justfied by the need to develop new instruments to encourage SMEs to exploit the opportunities opened by the adoption of information and communication technologies (ICTs). It comes in the wake of a former initiative taken in 2001: PME Digital.
1.6 Policy Priorities	4.2.1 Support to innovation management and advisory services 4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc 5.1.1 Support to the creation of favourable innovation climate (ex. roadshows, awareness campaigns)
1.8 Targeted research and technology fields	No specific thematic focus,
1.9 Addressing innovation-related Lisbon guideline elements	1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date	2005
2.2 Expected ending	2006

2.3.2 If the measure is novel was it mainly	Inspired by need to meet EU level policy objectives
2.4 Geographic coverage	(National)
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓

2.5.3 If more than one target group is eligible, is	Only proposals from single organisations are accepted
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	
Promotion of entrepreneurship/start up (including incubators)	Innovation management tools (incl quality)
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Projects should be undertaken in a maximum delay of two years and involve a maximum investment euro 350 000. Projects are selected on the basis of their merit, taking into account two criteria (in-house capabilities fit and depth of involvement in the digital economy).
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Equipment External expertise (consultants, studies, etc.)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)
3.7 Overall budget	Overall budget in EUR **not available**

4. Results, evaluation and impacts PT 52

4.1 Were any indicators specified ex ante for the measurement of the results	Yes Number of SMEs involved Depth of involvement
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.3 If the programme was evaluated, what were the main findings?	No evaluation so far. Still too early for evaluation (the measure was launched in February 2005).
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	No evaluation so far. Still too early for evaluation (the measure was launched in February 2005).

5 How to find out more about the measure ? PT 52

5.1 Information	Website: http://www.iapmei.pt

Souce/Reference	Uploaded document(s):
5.2 Legal basis	Ministerial Decree 382/2005, of 5 April 2005 Ministerial Decree 88A/2006, of 24 January 2006 Ministerialm Decision 2792-C/2006. of 3 February 2006
5.3.4 Manager(s) responsible for the measure	Cilineo Pedro - (IAPMEI) IAPMEI

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 53 Date created: 05/05/2006 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	INOV_JOVEM
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	INOV_JOVEM
1.3 Keyword(s)	Young graduates SMEs Improving capabilities
1.4 Overview (nature, main goals)	INOV_JOVEM is a new measure included in measures 3.3 and 4 of PRIME, aimed at stimulating SMEs to employ young graduates in science and engineering, economics and management, and design. This measure was used as an important electoral flag of the Socialist party and was envisaged as a relevant instrument towards the implementation of the Technological Plan. INOV_JOVEM includes four main sub-measures: (1) Professional scholarships; (2) Training in SMEs; (3) Support to integration, mainly addressed to SMEs with less than 50 workers; and (4) Support to contracting projects, aswsociated with implementation of growth strategies by SMEs with less than 250 workers. INOV_JOVEM is expected to play a significant role in enhancing in-house capabilities of SMEs through the employment of young graduates, which might contribute towards the development of new competencies in those firms.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure was used as an important electoral flag of the Socialist party and was envisaged as a relevant instrument towards the implementation of the Technological Plan. It was one of the first measures launched by the new Socialist Government, less than one month after taking office. The rationale for this measure is the need to inject 'grey matter' and 'new blood' in SMEs, to help them to strengthen their capabilities as well as their openess to change in order to respond new competitive pressures.
1.6 Policy Priorities	3.3.1 Job training (LLL) of researchers and other

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 55 Date created: 12/05/2006 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure FINICIA

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** FINICIA

1.3 Keyword(s) Company financing
Venture capital
Company creation
Company growth

1.4 Overview (nature, main goals) This measure is aimed at improving companies access to equity and credit, through the setting-up of public-private partnerships, with a view to provide small companies with the financial resources required for company development in the initial stages of their life cycles. FINICIA includes three intervention axes: (1) High Innovation Content Projects; (2) Emergent Small Businesses; and (3) Regionally Relevant Company Initiatives.

1.5 Background and rationale (Analytical reasoning why this measure is being created) This measure is a consequence of the perception of the need for improving the conditions for SMEs to access finance in the first stages of their lifes. It is also associated with the revision of public venture capital organisations and is intended to encourage the development of the venture capital market.

1.6 Policy Priorities 4.3.1 Support to innovative start-ups incl. gazelles
4.3.2 Support to risk capital

2. Detailed information on duration and targets of measure

2.1 Start date 2006

2.2 Expected ending No End Date Planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)
Novel (no relation to previous) measure

2.4 Geographic coverage (National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Pre-competitive research
Co-operation promotion and clustering
Innovation management tools (incl quality)
Promotion of entrepreneurship/start up (including incubators) Improving the legal and regulatory environment
Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Eligibility criteria are not very strict. Companies should have an aceptable financial situation, not to have depth to social security, tax authorities and workers, and shoulg not have been condemned for work and employment discrimination.

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Training (including study trips)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget Overall budget in EUR **not available**
further information **The bujdget for INOV_JOVEM is not available, since this measure is on of the five measures included under Mesures 3.3. and 4 (Entinsing Investment in Human Resources). The**

total budget allocated to Measure 4 for 2000-2006 is 535.8 million euros.

4. Results, evaluation and impacts PT 53

4.1 Were any indicators specified ex ante for the measurement of the results Yes
Number of young graduates employed by firms.

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?
This measure is too recent. The Ministerial Decree regulating its implementation was published in July 2005.

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? This measure is too recent. The Ministerial Decree regulating its implementation was published in July 2005.

5 How to find out more about the measure ? PT 53

5.1 Information Souce/Reference Website: http://www.iapmei.pt
Uploaded document(s):

5.2 Legal basis Council of Ministers Resolution no. 87/2005, of 24 March 2005 Ministerial Decree no. 586-A/2005, of 8 July 2005

5.3.4 Manager(s) responsible for the measure Cilineo Pedro - (IAPMEI)
IAPMEI

back to top

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓
Scientists / researchers (as individuals)	✓	✓
Other	✓	✓

2.5.3 If more than one target group is eligible, is Co-operation/networking optional (e.g. associating SMEs as users)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Awareness raising amongst firms on innovation
Promotion of entrepreneurship/start up (including incubators) Industrial design
Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Eligibility for High Innovation Content projects are the following: a) establishment of relationship with a venture capital firm; b) own financing up to 15 per cent of equity; c) certification of the innovative nature of the project.

3.4 In what form is funding provided ? Venture capital (including subordinated loans)
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Other
Not applicable

3.6. Sources of financing (other than national public sources of funding) Co-financed by the private sector

3.7 Overall budget Overall budget in EUR **not available**
further information **From 2006 onwards.**

4. Results, evaluation and impacts PT 55

4.1 Were any indicators specified ex ante for the measurement of the results Yes
Number of companies supported Amount of venture capital investment

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?
Too early for an evaluation.

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? Too early for an evaluation.

5 How to find out more about the measure ? PT 55

5.1 Information Souce/Reference Website: http://www.iapmei.pt
Uploaded document(s):

5.2 Legal basis Not available

5.3.4 Manager(s) responsible for the measure	IAPMEI

back to top

programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓

2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Awareness raising amongst firms on innovation
Promotion of entrepreneurship/start up (including incubators)	
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Innovative characteristics, enabling the granting of the IAPMEI Innovation status. Promoters shall contribute with 15% own capital
3.4 In what form is funding provided ?	Subsidized loans (including interest allowances) Venture capital (including subordinated loans) Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Other Company initial equity
3.6. Sources of financing (other than national public sources of funding)	Other co-financing
3.7 Overall budget	Overall budget in EUR **not available** further information **2006 onwards**

4. Results, evaluation and impacts PT 56

4.1 Were any indicators specified ex ante for the measurement of the results	Yes Number of applications supported Investment amount
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	Still too recent for an assessment

5 How to find out more about the measure ? PT 56

5.1 Information Souce/Reference	Website: http://www.iapmei.pt Uploaded document(s):
5.2 Legal basis	INOFIN Initiative
5.3.4 Manager(s) responsible for the measure	Furtado Jose - (IAPMEI)

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 56 Date created: 28/05/2007 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	FINICIA-High Innovation Content Projectson
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	FINICIA-High Innovation Content Projectson
1.3 Keyword(s)	Highly innovative start-ups Company creati Financial support Venture capital
1.4 Overview (nature, main goals)	This axis of FINICIA IS addressed to support high innovation content projects which were granted the IAPMEI Innovation status. This instrument combines equity and debt to support investments above 100, 000 €. It provides the access to venture capital, requiring investment promoters to finance at least 15% with own capital.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure was designed to promote the development of innovative start-ups. It comes in the context of the more general FINICIA measure. The measure was intended to replace NEST , also with similar objectives, but too cumbersome to attract promoters" interest.
1.6 Policy Priorities	4.3.1 Support to innovative start-ups incl. gazelles 4.3.2 Support to risk capital
If other, please specify	

2. Detailed information on duration and targets of measure

2.1 Start date	2006
2.2 Expected ending	No End Date Planned
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	

Novel (no relation to previous) measure
Replaces measure(s) being phased-out
→ PT 34 - NEST New Technology Based Companies

2.3.2 If the measure is novel was it mainly	Novel (no relation to previous) measure
2.4 Geographic coverage	(National)
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 32 Date created: 11/11/2002 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	Credit Enhancement Securitization Fund (FGTC)
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Credit Enhancement Securitization Fund (FGTC)
1.3 Keyword(s)	SMEs Credit Securitization Financial innovation
1.4 Overview (nature, main goals)	This measure, which comes in the context of the so-called Financial Innovation Actions of POE (PT 24 and PT25), is aimed at creating a fund (FGTC) for providing guarantees in connection with operations concerning the transaction of securitized credits on SMEs debt
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure comes in context of the 'Financial Innovation' strand of POE/PRIME. It is mainly aimed at improving SMEs, financial structure and access to finance.
1.6 Policy Priorities	1.3.2 Horizonal measures in support of financing
If other, please specify	
1.9 Addressing innovation-related Lisbon guideline elements	5. Better access to domestic and international finance.

2. Detailed information on duration and targets of measure

2.1 Start date	2002
2.2 Expected ending	No End Date Planned
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly	Inspired by an existing measure of another (EU) country Inspired by national policy debate (e.g study, consultation) Inspired by need to meet EU level policy objectives Novel (no relation to previous) measure
2.4 Geographic coverage	(National)
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the

PRO INNO EUROPE

Trendchart Support measures detail

PT 34 Date created: 01/01/1900 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	NEST New Technology Based Companies
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	NEST New Technology Based Companies
1.3 Keyword(s)	NTBFs Science-based entrepreneurship Creation of new firms
1.4 Overview (nature, main goals)	The objective is to provide financial support to the creation, launching and development of technology-based firms which have a close relationship with domestic Science and Technology organisations and/or are expected to reach a high level of technological capacity
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure was aimed at promoting science-based entrepreneurship while using venture capital as an instrument for providing funds to the creation of new firms. Integrated in PRIME, this measure was an attempt to encourage the creation of new technology-based firms.
1.6 Policy Priorities	4.3.1 Support to innovative start-ups incl. gazelles 4.3.2 Support to risk capital
1.8 Targeted research and technology fields	No specific thematic focus,
1.9 Addressing innovation-related Lisbon guideline elements	1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date	2002
2.2 Expected ending	2006
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	
Novel (no relation to previous) measure	
2.3.2 If the measure is novel was it mainly	Novel (no relation to previous) measure Other (Please explain) Inspired by the Programme for Productivity and

Economic Growth (PPCE)	
2.4 Geographic coverage	(National)
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding
All companies	✓	✓
Scientists / researchers (as individuals)	✓	✓
Other	✓	✓

2.5.3 If more than one target group is eligible, is	Co-operation/networking optional (e.g. associating SMEs as users)
	Other (please specify) NEST is addressed to the creation of new technology-based firms. Promoters may be single or colective entities, as well as recently created technology-based firms without significant activities.
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure **Promotion of entrepreneurship/start up (including incubators)**	Awareness raising amongst firms on innovation
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Projects based on research and development activities, aimed at creating and developing new technology-based companies, which will develop relationships with S&T organisations or with strong technological competences.
3.4 In what form is funding provided ?	Venture capital (including subordinated loans) Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Other Support is provided through venture capital, and not on the basis of eligible costs
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.) Co-financed by the private sector
3.7 Overall budget	Overall budget in EUR **Not applicable.** further information **This measure does not entail any direct public expenditures.**

4. Results, evaluation and impacts PT 34

4.1 Were any indicators specified ex ante for the measurement of the results	Yes Number of NTBFs created Equity raised from venture capital firms Total investment undertaken
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? Mid-term evaluation has shown that the measure has not been very successful. In fact, access is too difficult for

programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding
Other	✓	✓

2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure **Promotion of entrepreneurship/start up (including incubators)**	Promotion of entrepreneurship/start up (including incubators)
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Variable, depending on each case.
3.4 In what form is funding provided ?	Other Specify other: Financial contributions towards the creation or development of the fund
3.5. What are the eligible costs, where direct funding is provided ?	Other Not applicable, having in mind the characteristics of the measure
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)
3.7 Overall budget	Overall budget in EUR **25 million euros**

4. Results, evaluation and impacts PT 32

4.1 Were any indicators specified ex ante for the measurement of the results	Yes Number of operations supported, and respective amount. Increase of recourse of SME to emission of debt certificates.
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **Yes** On-going/Mid-term **No** Final/Ex-post **No**
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	No evidence available so far

5 How to find out more about the measure ? PT 32

5.1 Information Souce/Reference	Website: http://www.iapmei.pt Uploaded document(s):
5.2 Legal basis	Decree-Law no. 188/2002, of 21 August Ministerial Decree no. 37/2002, of 10 January
5.3.4 Manager(s) responsible for the measure	Gaspar Antonio - (IAPMEI) Furtado Jose - (IAPMEI) IAPMEI

back to top

	new, small firms since the programme requires the incorporation of the company in order to have access to venture capital. This has seriously hindered the take-up of the measure by envisaged targets.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	See above

5 How to find out more about the measure ? PT 34

5.1 Information Souce/Reference	Website: http://www.adi.pt Uploaded document(s):
5.2 Legal basis	Ministerial Decree no. 1518/2002, of December 19 (NEST is integrated in Axis 1 of PRIME)
5.3.4 Manager(s) responsible for the measure	Santos Jorge Manuel Marques dos - (IPQ - Portuguese Institute for Quality) IPQ - Portuguese Institute for Quality

back to top

novel was it mainly	consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	(National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓

2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Pre-competitive research
Promotion of entrepreneurship/start up (including incubators)	Innovation management tools (incl quality)
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Applicant SMEs should undertake, under the project, a strategic dyagnosis regarding its overall strategy and the need for the admittance of skilled people; these should have at least degree in economics, management, engineering, physics, chemistry or information systems.
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Training (including study trips) External expertise (consultants, studies, etc.)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)
3.7 Overall budget	Overall budget in EUR **Not available.**

4. Results, evaluation and impacts PT 35

4.1 Were any indicators specified ex ante for the measurement of the results	No
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? Evaluation has indicated that QUADROS has contributed to increase the employment of young graduates by SMEs, but at a pace much lower than required for significant company change.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	See above

5 How to find out more about the measure ? PT 35

5.1 Information	Website: http://www.iapmei.pt

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 35 Date created: 01/01/1900 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	QUADROS Programme
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	QUADROS Programme
1.3 Keyword(s)	Young graduates Human resources SMEs capabilities
1.4 Overview (nature, main goals)	The Programme is aimed at supporting SME development, through the strengthening of human resources namely in the management and technological areas.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure, launched in the context of PRIME, is aimed at improving SMEs' capabilities , through the support to the employment of young graduates in sciences, engineering, economics, management, marketing and design. It comes in the wake of earlier measures aimed at increasing human resources skills in companies.
1.6 Policy Priorities	3.3.1 Job training (LLL) of researchers and other personnel involved in innovation 3.3.2 Recruitment of skilled personel in enterprises 4.2.1 Support to innovation management and advisory services 4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc
1.9 Addressing innovation-related Lisbon guideline elements	1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date	2002
2.2 Expected ending	2006
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	
Novel (no relation to previous) measure	
2.3.2 If the measure is	Inspired by national policy debate (e.g study,

Souce/Reference	Uploaded document(s):
5.2 Legal basis	Ministerial Decree no. 1502/2002, of December 14 The Programme is under Axis 1 (Company Dynamisation) and 2 (Human Resources Skills) of PRIME
5.3.4 Manager(s) responsible for the measure	Cilineo Pedro - (IAPMEI) IAPMEI

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 13 Date created: 01/01/1900 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	Centres for Company Formalities
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Centres for Company Formalities
1.3 Keyword(s)	Company formalities Creation of new companies Catting red tape
1.4 Overview (nature, main goals)	The Centres for Company Formalities (CCF) are one stop shops aimed at reducing the red tape and making easier the process of creating new firms as well as of changing or extinguishing existing firms. CCF provide, under the same roof, the access to the bodies most relevant in the process of creating firms: National Registry of Collective Bodies, Tax Directorate, Commercial Registry, Social Security Services and notary public.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measures is aimed at easining the creation of new firms.
1.6 Policy Priorities	1.3.3 Other horizontal policies (ex. society-driven innovation) 5.1.1 Support to the creation of favourable innovation climate (ex. roadshows, awareness campaigns)

2. Detailed information on duration and targets of measure

2.1 Start date	1998
2.2 Expected ending	No End Date Planned
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	
Novel (no relation to previous) measure	
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation) Novel (no relation to previous) measure
2.4 Geographic coverage	(National)
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the

programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	✓

2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	
Promotion of entrepreneurship/start up (including incubators)	Awareness raising amongst firms on innovation
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	CCF services apply to all firms, although most of its clients are SMEs
3.4 In what form is funding provided ?	No direct funding provided Specify other:
3.7 Overall budget	Overall budget in EUR **not available**

4. Results, evaluation and impacts PT 13

4.1 Were any indicators specified ex ante for the measurement of the results	Yes Number of firms created as a percentage of the overall creation of firms. Time need for creating a firm.
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **No** Final/Ex-post **No** **4.3 If the programme was evaluated, what were the main findings?** Np official evaluation so far However, the change in the legislation extending the creation of CCF beyond its pilot phase and the opening of new CCFs (there are 6 now) indicated a very positive assessment.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	Available evidence indicates that the experience was very successful, making the creation of new firms easier, less slow and less expensive. The time needed to create a new firm was reduced from 4/5 months to 3/4 weeks. The recourse to the CCFs was high: in the year of 1998 the share of firms created in CCFs was 27% of the total number of new firms recorded in 1997. For 1999 it is expected that such share will reach around 50%.

5 How to find out more about the measure ? PT 13

5.1 Information Souce/Reference	Website: http://www.iapmei.pt Uploaded document(s):
5.2 Legal basis	Law-Decree n?.78-A/98 of 31 March 1998
5.3.4 Manager(s) responsible for the measure	Costa Fabrizio - (Marche Region) IAPMEI

back to top

European Commission

An initiative of the Directorate-General for Enterprise and Industry

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 18 Date created: 01/01/1900 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	Industrial Property Use Incentive System (SIUPI)
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Industrial Property Use Incentive System (SIUPI)
1.3 Keyword(s)	Industrial property Patenting Market introduction authorisations
1.4 Overview (nature, main goals)	Promoting invention, creativity and innovative activities by companies as well as by entrepreneurs, independent inventors and designers, and research institutions. SIUPI is aimed at supporting domestic and international industrial property rights utilisation by Portuguese companies, namely patenting. In 2005 support was also extended to the expenditures incurred in connection with the introduction of pharmaceutical products in foreign markets.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	SIUPI follows similar measures in earlier PEDIP programmes. SIUPI falls in the context of the PRIME programme, on the modernisation of the Portuguese economy.
1.6 Policy Priorities	4.2.1 Support to innovation management and advisory services 5.3.1 Measures to raise awareness and provide general information on IPR 5.3.2 Consultancy and financial incentives to the use of IPR
1.9 Addressing innovation-related Lisbon guideline elements	6. Efficient and affordable means to enforce intellectual property rights.

2. Detailed information on duration and targets of measure

2.1 Start date	2000
2.2 Expected ending	2006
2.4 Geographic coverage	(National)
2.5. Target groups	

2.5.1 Please indicate which group(s) are the targets or benificiaries of the

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 25 Date created: 01/01/1900 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure Financial Innovation - Action B (POE)

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Financial Innovation - Action B (POE)

1.3 Keyword(s) SMEs
Financial structure
Access to credit for innovation

1.4 Overview (nature, main goals) The measure is aimed at strengthening SMEs" capacity to have access to credit and to negotiate contractual conditions.

1.5 Background and rationale (Analytical reasoning why this measure is being created) This measure is included in the 'financial innovation' strand of POE/PRIME. It is a continuation/upgrading of earlier efforts launched in the PEDIPs. It includes three main areas: the fund of mutual counter guarantee; mutual guarantee societies; and the credit enhancement titularization fund

1.6 Policy Priorities 1.3.2 Horizonal measures in support of financing
4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc

1.9 Addressing innovation-related Lisbon guideline elements 5. Better access to domestic and international finance.

2. Detailed information on duration and targets of measure

2.1 Start date 2002

2.2 Expected ending 2006

2.4 Geographic coverage (National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Other	✓	✓

2.5.2 If necessary, give more details on the target groups e.g. restricted to spin-offs, start-ups only, No cooperation required

which other groups,etc...

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Promotion of entrepreneurship/start up (including incubators)

Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Organisations eligible for support under this measure should: (1) be promoted by companies focussed and experienced on the management and development of financial instruments addressed to SMEs; (2) demonstrate, on the basis of prior experience, the capabilities - as well as the organisation, financial resources and skilled human resources - to meet the objectives and reach the quality standards required for the project; and (3) be aimed at supporting companies with economic viability. The proje

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Other
Contributions towards the creation or increase of the funds concerned

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget Overall budget in EUR **310 million euros**
further information **The budget refers also to Financial Innovation - Action A (PT 24).**

4. Results, evaluation and impacts PT 25

4.1 Were any indicators specified ex ante for the measurement of the results Yes
- Number of operations supported - Size of operations supported - Support provided by the Funds concerned to SMEs - Number and characteristics of the Mutual Guarantee Comapnies supported

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?
The mid-term evaluation of PRIME has indicated that this is an important issue where further efforts should be undertaken, following the initiatives which where already carried out

5 How to find out more about the measure ? PT 25

5.1 Information Souce/Reference Website: http://www.iapmei.pt
Uploaded document(s):

5.2 Legal basis Ministerial Decree no. 37/2002, of 10 January

5.3.4 Manager(s) responsible for the measure Gaspar Antonio - (IAPMEI)
Furtado Jose - (IAPMEI)

programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	✓
Scientists / researchers (as individuals)	✓	✓
Higher educations institutions research units/centres	✓	✓
Other non-profit research organisations (not HEI)	✓	✓
Technology and innovation centres (non-profit)	✓	✓

2.5.2 If necessary, give more details on the target groups e.g. restricted to spin-offs, start-ups only, which other groups,etc... Not addressed to support cooperation

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure Industrial design

Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Projects concerning the demand of national and international patents, utility models and industrial models and designs, as well as those on the maintaining of existing property rights. Minimum eligible expenditure is ? 2,500

3.4 In what form is funding provided ? Grants
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Equipment
External expertise (consultants, studies, etc.)
Other
Industrial property registration and maintenance fees

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget Overall budget in EUR **not available**
further information **Not provided. SIUPI runs from 2000 to 2006**

4. Results, evaluation and impacts PT 18

4.1 Were any indicators specified ex ante for the measurement of the results Yes
Increase in the number of patent applications by nationals

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **Yes**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?
The system was found to be important for promoting patenting, taking into account that this is one of the

innovation related aspects where Portugal has a weaker performance. However, the mid-term evaluation also found that SIUPI additionality was relatively low.

5 How to find out more about the measure ? PT 18

5.1 Information Souce/Reference Website: http://www.inpi.pt
Uploaded document(s):

5.2 Legal basis Ministerial Decree no. 262/2005, of 16 February

5.3.4 Manager(s) responsible for the measure Campinos Ant?nio - (INPI - National Institute for Industrial Property)
INPI - National Institute for Industrial Property

back to top

IAPMEI

back to top

1.9 Addressing innovation-related Lisbon guideline elements 6. Efficient and affordable means to enforce intellectual property rights.

2. Detailed information on duration and targets of measure

2.1 Start date 2001

2.2 Expected ending No End Date Planned

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly
Novel (no relation to previous) measure
Other (Please explain)
Initiative taken by the management of INPI, the National Institute for Industrial Property

2.4 Geographic coverage (National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Higher educations institutions research units/centres	✓	✓
Other non-profit research organisations (not HEI)	✓	✓
Technology and innovation centres (non-profit)	✓	✓
Business organisations (Chambers of Commerce...)	✓	✓

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure
Pre-competitive research
Promotion of entrepreneurship/start up (including incubators)
Promotion of entrepreneurship/start up (including incubators)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Not apllicable

3.4 In what form is funding provided ?
Other
Specify other: Support to the services rendered

3.5. What are the eligible costs, where direct funding is provided ? Training (including study trips)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget
Overall budget in EUR **2.26 million euros**
further information **2.26 million euros**

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 26 Date created: 01/01/1900 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure Industrial Property Support Offices (GAPI)

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Industrial Property Support Offices (GAPI)

1.3 Keyword(s)
Industrial property rights
Networking
Support services

1.4 Overview (nature, main goals)
The Gapi initiative is aimed at launching small units specialised on the provision of information and on the development of actions concerning the promotion of industrial property (IP), with the purpose of strengthening the competitiveness of Portuguese firms through differentiation. GAPI is part of a wider initiative, in the context of Public Initiatives and Partnerships strand of POE, regarding the Valorisation of the Industrial Property System. This was undertaken by INPI together with a host of other organisations, including Technological Centres, Employers Associations, S&T Parks, and University - Enterprise Interface Organisations.

1.5 Background and rationale (Analytical reasoning why this measure is being created)
This initiative was launched by the management of INPI, the National Institute for Indutrial Property. The rationale is to increase the awareness about the advantages provided by industrial property rights and to encourage patenting by both research organisations and companies.

1.6 Policy Priorities
1.3.3 Other horizontal policies (ex. society-driven innovation)
2.2.2 Knowledge Transfer (contract research, licences, research and IPR issues in public/academic/non-profit institutes)
5.3.1 Measures to raise awareness and provide general information on IPR
5.3.2 Consultancy and financial incentives to the use of IPR

1.8 Targeted research and technology fields No specific thematic focus,

4. Results, evaluation and impacts PT 26

4.1 Were any indicators specified ex ante for the measurement of the results
Yes
- Ratio of real versus approved investment - Number of GAPI launched and active at the end of the programme

4.2 Where an evaluation has taken place, what were the main findings?
Ex-ante **No**
On-going/Mid-term **No**
Final/Ex-post **No**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? Available indicators suggest that the launching of the GAPI network had a very positive effect on the awarness of the national system of innovation actors about industrial property rights (namely patents) as well as on systemic interactions among different players. Data on patent applications by research centers have more than doubled between 2001 and 2005. This very positive result may be to a large extent a consequence of the action of GAPIs.

5 How to find out more about the measure ? PT 26

5.1 Information Souce/Reference
Website: http://www.inpi.pt
Uploaded document(s):

5.2 Legal basis Ministerial Decree no. 680-A/2000, of 29 August (on Public Initiatives and Partnerships)

5.3.4 Manager(s) responsible for the measure
Campinos Ant?nio - (INPI - National Institute for Industrial Property)
INPI - National Institute for Industrial Property

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 27 Date created: 01/01/1900 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	PME Digital (Digital SME)
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	PME Digital (Digital SME)
1.3 Keyword(s)	Digital economy Integration of firms in digital economy E-commerce
1.4 Overview (nature, main goals)	PME Digital is a pilot programme included under POE Public Initiatives and Partnerships and more specifically under the Measure 2.1B of POE. The main objectives of PME Digital are the following: (1) strengthening the technological upgrading and the modernisation of SME structures, through the participation in the digital economy; (2) stimulating entrepreneurial initiatives leading to an increased integration of digital economy in SMEs internal organisation; (3) encouraging SMEs to enlarge their markets, profiting from the digital economy; and (4) strengthening the adoption by SMEs of more innovative and cooperation-oriented attitudes and behaviours.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This measure is included in PRIME Public Initiatives and Partnerships. It is aimed at encouraging companies uptaking of ICT.
1.6 Policy Priorities	3.3.1 Job training (LLL) of researchers and other personnel involved in innovation 3.3.2 Recruitment of skilled personel in enterprises 4.2.1 Support to innovation management and advisory services 4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc
1.9 Addressing innovation-related Lisbon guideline elements	1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date	2002

2.2 Expected ending	2006
2.3 Relationship to other programmes	
2.3.1 How does the measure relate to other measures?	Novel (no relation to previous) measure
2.3.2 If the measure is novel was it mainly	Inspired by need to meet EU level policy objectives Novel (no relation to previous) measure
2.4 Geographic coverage	(National)
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding
SMEs only	✓	✓
Consultancies and other private service providers (non-profit)	✓	✓
Business organisations (Chambers of Commerce...)	✓	✓

2.5.3 If more than one target group is eligible, is	Co-operation/networking optional (e.g. associating SMEs as users)
2.6 Target activities	
2.6.1 Aspect of innovation process addressed by the measure	Pre-competitive research Diffusion of technologies in enterprises Innovation management tools (incl quality)
Promotion of entrepreneurship/start up (including incubators)	
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	The selection of RIATs is based on a set of criteria including the field of activity, management structures, diffusion capabilities and technical assistance methods and capabilities. With regard to the System of Incentives (sub-measure B) there are three main selection criteria: the level of internal integration of SME involvement in the digital economy, namely on what concerns human resources, processes and information systems and technologies; the envisaged depth of involvement in the digital
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment Training (including study trips) External expertise (consultants, studies, etc.)
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)
3.7 Overall budget	Overall budget in EUR **not available** further information **Not available**

4. Results, evaluation and impacts PT 27

4.1 Were any indicators specified ex ante for the measurement of the results	Yes - Number of RIAT created and still operating one year after the provision of financial support - Number of SMES involved - Typology of SMEs involved - Percentage of SMEs launching investment prjects to participate in the digital economy - Percentage of SMEs which started on line transactions
4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? It was found that PME Digital had an important contribution towards the development of systemic links between different actors.

5 How to find out more about the measure ? PT 27

5.1 Information Souce/Reference	Website: http://www.iapmei.pt Uploaded document(s):
5.2 Legal basis	Ministerial Decree no. 680A/2000 of 29 August (on Public Initiatives and Partnerships)
5.3.4 Manager(s) responsible for the measure	Branquinho Cristina - (IAPMEI) IAPMEI

back to top

European Commission
An initiative of the Directorate-General for Enterprise and Industry

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 30 Date created: 11/11/2002 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	Programa GERIR - Formacao e Consultadoria em Gestao para Pequenas Empresas
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Programa GERIR - Formacao e Consultadoria em Gestao para Pequenas Empresas
1.3 Keyword(s)	SMEs Management training SME consultancy Demonstration effect
1.4 Overview (nature, main goals)	'Gerir' is aimed at improving managerial capacity, organisation structures and competitiveness of micro and small enterprises through the provision of a mix of training and consultancy services, adapted to enterprises needs, identified on the basis of company diagnosis exercises.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	This programme was launched by IAPMEI with support of the Operational Programme Employment, training and social development. It is aimed at contributing towards the development of SMEs management capabilities with a view to enhance their competitiveness
1.6 Policy Priorities	3.3.1 Job training (LLL) of researchers and other personnel involved in innovation 4.2.1 Support to innovation management and advisory services 4.2.2 Support to organisational innovation incl. e-business, new forms of work organisations, etc
1.8 Targeted research and technology fields	No specific thematic focus,
1.9 Addressing innovation-related Lisbon guideline elements	1. Improvements in innovation support services, in particular for dissemination and technology transfer.

2. Detailed information on duration and targets of measure

2.1 Start date	2002
2.2 Expected ending	2004
2.3 Relationship to other programmes	

PRO INNO EUROPE

Trendchart Support measures detail

PT 71 Date created: 16/06/2006 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure FINICIA Programme

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** FINICIA Programme

1.3 Keyword(s)

Company creation
Company growth
Compnay financing
Venture capital

1.4 Overview (nature, main goals)

FINICIA is aimed at improving companies access to equity and credit, through the setting up of public-private partnerships, with a view to provide small firms the resources needed to carry out their activities in the first stages of their life cycles. FINICIA includes three main axes: (1) high innovation content projects, where support will consist in venture capital financing; (2) emergent small business; and (3) regionally relevant company initiatives.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

FINICIA was designed to respond the perceived need for improving SMEs access to finance in the first stages of their life cycles. The purpose was to design a programme encompassing enough to respond the requirements of different types of small initiatives/firms. FINICIA is clearly related to the on-going revision of public venture capital organisations. It is also envisaged as an instrument to promote the development of the venture capital market.

1.6 Policy Priorities

4.3.1 Support to innovative start-ups incl. gazelles
4.3.2 Support to risk capital

If other, please specify

No research themes or disciplines targeted.

2. Detailed information on duration and targets of measure

2.1 Start date 2005

2.2 Expected ending no end date planned

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

2.3.1 How does the measure relate to other measures?

Novel (no relation to previous) measure

2.3.2 If the measure is novel was it mainly

Novel (no relation to previous) measure
Other (Please explain)
This measure is based on the experience raised with earlier training/consultancy programmes provided to SMEs, namely the "Rede Programme"

2.4 Geographic coverage (National)

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓

2.5.3 If more than one target group is eligible, is

Co-operation/networking optional (e.g. associating SMEs as users)

Other (please specify)
The ultimate target are micro and small enterprises (below 50 employees). However, applicants should be entrepreneurs associations as well as other public and private organisations with training capabilities, which may behave as dynamisers of SMEs

2.6 Target activities

2.6.1 Aspect of innovation process addressed by the measure

Pre-competitive research
Innovation management tools (incl quality)

Promotion of entrepreneurship/start up (including incubators)

Improving the legal and regulatory environment

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?

Applicants should have training capabilities, consultancy experience and be accredited by INOFOR. Projects will be selected taking into account the capacity and experience of the promoter, the skills of the team, the characteristics of the action to be carried out and the budget.

3.4 In what form is funding provided ?

Other
Specify other: Provision of specific management services

3.5. What are the eligible costs, where direct funding is provided ?

Training (including study trips)

3.6. Sources of financing (other than national public sources of funding)

Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget

Overall budget in EUR **To be collected**

4. Results, evaluation and impacts PT 30

4.1 Were any indicators specified ex ante for the measurement of the results

Yes
Level of involvement of SMEs in the training-consultancy process. Assessment by SMEs of the improvements achieved. SME competitiveness

4.2 Where an evaluation

Ex-ante **No**

FINICIA is aimed at responding the perceived weakness of financing mechanisms for supporting firms in their early stages.

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
SMEs only	✓	✓
Scientists / researchers (as individuals)	✓	✓

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:

The programme was launched by IAPMEI, but involves the PME-IAPMEI Venture Capital Syndication Fund, the Mutual Guarantee Societies and the Credit Enhancement Securitisation Fund. In the context of Axis 3 (regionally relevant company initiatives), cooperation with Municipalities, local development agencies and the regional development coordination commissions is also envisaged (and in some cases is already being carried out).

Subprogramme structure:

FINICIA has three sub-programmes (or axes): (1) High Innovation Content Projects - the most relevant for our purposes; (2) Emergent Small Businesses; and (3) Regionally Relevant Company Initiatives.

Management structure:

FINICIA is managed by IAPMEI.

Review of progress:

The programme has been launched less than 6 months ago. Therefore it is too early to assess the progress.

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?

The selection of high innovation content projects is based on an evaluation of the innovative nature of the project. We were not able to find any details concerning specific evaluation criteria. To be eligible projects should involve the establishment of relationship with a venture capital firm and to have own financing of 15 per cent of equity.

Openness to EU countries

No nationality based restrictions were established.

Openness to third countries

No nationality based restrictions were defined.

Selection of projects / participants

There are no fixed calls for applications. Proposals are evaluated on the basis of their own merits, and the innovative nature of the project should be certified (in the case of High Innovation Content Projects).

3.4 In what form is funding provided ?

Specify other:

3.5. What are the eligible costs, where direct funding is provided ?

Other
Support is provided through venture capital to strengthen companies" equity. Therefore it makes no sense to mention eligible costs.

3.6. Sources of financing (other than national public sources of funding)

Co-financed by the Structural funds (ERDF, ESF,etc.)
Co-financed by the private sector

4. Results, evaluation and impacts PT 71

4.4 If no official evaluation

has taken place, what were the main findings?

On-going/Mid-term **No**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

No evaluation yet

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?

Too early to carry out an assessment of the measure

5 How to find out more about the measure ? PT 30

5.1 Information Souce/Reference

Website: http://www.iapmei.pt
Uploaded document(s):

5.2 Legal basis

Programa Gerir ? Regulation Joint Ministerial Decision no. 175/2001, of 23 February 2001 Joint Ministerial Decision no. 102-A/2001, of 1 February 2001 (articles 20, 21 and 22) Normative Decision no. 42-B/2000, of 20 September 2000 Ministerial Decree no. 799-B/2000, of 20 September 2000 Regulatory Decree no. 12-A/2000, of 15 September 2000 Decree.Law no. 54-A/2000, of 7 April 2000

5.3.4 Manager(s) responsible for the measure

Duarte Helena - (IAPMEI)
Costa Fabrizio - (Marche Region)
IAPMEI

back to top

has been undertaken is there any evidence which allows an appraisal of the success of the measure?	The programme has been launched less than 6 months ago. Therefore it is too early to evaluate the results.

5 How to find out more about the measure ? PT 71

5.1 Information Souce/Reference	Website: http://www.iapmei.pt Uploaded document(s):
Relevant further information	Further developments will depend on the performance of the programme.
5.2 Legal basis	Regulation on the FINICIA programme
5.3.1 Launching Agency	IAPMEI
5.3.2 Agency administering	IAPMEI
5.3.3 Funding Agency	IAPMEI

back to top

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 70 Date created: 16/06/2006 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	NEOTEC Iniciative
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	NEOTEC Iniciative
1.3 Keyword(s)	Exploitation of R&D results Information and communication technologies New entrepreneurial ideas New technology based firms Technology transfer
1.4 Overview (nature, main goals)	NEOTEC provides seed capital for the creation of new technology based firms, on the basis of idea contests. The main objectives are the following: (1) encouraging the creation of new technology based firms with high growth potential by supporting iniciatives in differente stages, from the identification of market potential to the commercialisation of results; and (2) to induce a change of attitudes by scientific players, in order to further the exploitation and valorisation of research results. It is expected that NEOTEC might contribute to a knowledge transfer from R&D organisations towards the market. NEOTEC includes two main types of projects: (1) technology based company creation; and (2) valorisation of entrepreneurship potential.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	NEOTEC is aimed at responding to one of the main weaknesses in the process of creation of high growth NTBFs, by providing appropriate finance and by identifying the various stages of NTBF creation. The NEOTEC Iniciative is integrated in the Measure 7.2. (R&D and Company Iniciatives in the ICT area) of POS_C the Operational Programme on the Knowledge Society. The main rationale of NEOTEC is the overcoming of the barriers that inhibit the transformation of R&D results into sound entrepreneurial initiatives.
1.6 Policy Priorities	4.3.1 Support to innovative start-ups incl. gazelles 4.3.2 Support to risk capital

If other, please specify

Although NEOTEC was launched in the context of Measure 7.2. of POS_C, entitled "R&D and Company Iniciatives in the ICT area", applications are not exclusively focused on the

ICT field. In fact, projects supported under NEOTEC also concern, for instance, agro-business, life sciences and energy activities.

2. Detailed information on duration and targets of measure

2.1 Start date	2005
2.2 Expected ending	2006
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

It is often argued that there is a shortage of specific incentives to encourage the creation of NTBFs and the commercial exploitation of R&D results by setting up new firms. NEOTEC is aimed at responding this problem, by providing a new instrument to encourage NTBF creation.

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
Scientists / researchers (as individuals)	✓	✓
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	
Business organisations (Chambers of Commerce...)	✓	

2.6.2 Type of Research Activity targeted:	Applied industrial research
If you have any additional comments on the targeted fields, please provide them here:	Although applied industrial reserach was mentioned above, this is not the key target of NEOTEC. In fact, NEOTEC is addressed to the creation of firms, and not so much to the support of research as such.

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	NEOTEC was launched in the context of the Measure 7.2. (R&D and Company Iniciatives in the ICT area), included in priority axis 7 (TICs Integrated Innovation) of POS_C, the Operational Programme on Knowledge Society. NEOTEC works on the basis of competitive applications. This means that specific periods for applications concerning the various projects stages are defined.
Management structure:	NEOTEC is managed by the Innovation Agency (AdI) index.cfm?fuseaction=org.document&uuid=7D87D213-CE97-11D0-455907C4200BE15E. Applications are evaluated by technical teams involving representatives from companies, Universities and S&T organisations, led by the Innovation Agency. Specific requirements were defined for each of the three stages: Stage 1: generation of product, service or process concepts; Stage 2: development of a business model and a business plan; and Stage 3: operationalisation of the project.
Review of progress:	As far as we know, no specific review of progress has been undertaken, except the identification of the projects supported (according to the information provided in

NEOTEC website 24 projects were already supported).

Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	According to the regulation, applications concerning the creation and development of high growth NTBFs which may leverage regional or sectoral growth and development should be privileged. Concurrent financing by private organisations is also envisaged as a plus in project evaluation.
Openness to EU countries	No discrimination on a nationality basis.
Openness to third countries	No discrimination on a nationality basis.
Selection of projects / participants	There are fixed calls for participation (for each stage), in order to enable competitive selection. In the case of company creation and development those projects which are considered as more relevant for regional or sectoral development will be selected. In the case of valorisation of S&T organisations knowldege, the quality of cooperation among different S&T organisations is considered to be a selection criterion.
3.4 In what form is funding provided ?	Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Training (including study trips) External expertise (consultants, studies, etc.) Other Expenditures concerning prototype development, market research, technology transfer and intellectual property registration are eligible for support
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)

4. Results, evaluation and impacts PT 70

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	The only information available is that 24 projects were already approved.

5 How to find out more about the measure ? PT 70

5.1 Information Souce/Reference	Website: http://www.neotec.gov.pt Uploaded document(s):
Relevant further information	No further developments envisaged.
5.2 Legal basis	Regulation on NEOTEC Iniciative
5.3.1 Launching Agency	UMIC - Agency for Innovation and Knowledge
5.3.2 Agency administering	Innovation Agency (AdI)
5.3.3 Funding Agency	POS_C - Operational Programme on the Knowledge Society

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 69 Date created: 16/06/2006 Date Updated: 24/07/2008

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	NEST - New Technology Based Companies
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	NEST - New Technology Based Companies
1.3 Keyword(s)	Creation of firms New technology based firms Science-based entrepreneurship
1.4 Overview (nature, main goals)	NEST is aimed at promoting the creation of new firms with strong technology bases, namely those concerned with the exploitation of R&D results. NEST support corresponds to the provision of venture capital in favourable conditions.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	NEST is an attempt to address the low level of NTBF creation in Portugal. Simultaneously, it was envisaged as an instrument to dynamise venture capital markets. NEST was also meant to spur the exploitation of public R&D results.
1.6 Policy Priorities	4.3.1 Support to innovative start-ups incl. gazelles 4.3.2 Support to risk capital

If other, please specify

No specific technology fields targeted. The only condition is the firm to have a significant technological basis.

2. Detailed information on duration and targets of measure

2.1 Start date	2002
2.2 Expected ending	2006
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

This programme was designed to respond a key weakness of the Portuguese National System of Innovation - the low level of creation of NTBFs.

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	✓

Scientists / researchers (as individuals)	✓	✓
Other	✓	✓

2.5.3 If more than one target group is eligible, is	Co-operation/networking optional (e.g. associating SMEs as users)

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	NEST is part of the PRIME programme. There is no direct competition among applications. Support corresponds to the provision of venture capital, and promoters should contribute with at least 5 per cent of the new company's equity. Companies should be already incorporated before the involvement of venture capital institutions.
Management structure:	NEST is managed by the Innovation Agency (AdI).index.cfm?fuseaction=org.document&uuid=7D87D213-CE97-11D0-455907C4200BE15E Although AdI might have created a project team specifically for the NEST programme, this did not happen due to the very low demand.
Review of progress:	NEST may be rated as unsuccessful. In fact, the conditions for support were excessively cumbersome, and the demand was extremely low. The updating of the mid-term evaluation of PRIME points out NEST as an example of a programme which was very far from reaching its objectives.
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	The Ministerial Decree creating NEST is not very specific about selection criteria. It just states the following: "Project eligibility will be recognised whenever the project is compatible with the scope and objectives of the programme" (that is, of NEST).
Openness to EU countries	No restrictions were defined with regard to the nationality of promoters.
Openness to third countries	No restrictions were defined with regard to the nationality of promoters.
Selection of projects / participants	There are no fixed calls for participation. Proposals are evaluated on the basis of their merits. Applications should be made in a standardised form, where the reference to the venture capital organisations contacted by promoters should be mentioned; a business plan should also be presented. The Innovation Agency may get the advise of experts in the fields or businesses concerned. Promoters should subscribe at least 5 per cent of equity.
3.4 In what form is funding provided ?	Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Other NEST provides venture capital support for creation NTBFs. It does not support specific R&D expenditures.
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.) Co-financed by the private sector

4. Results, evaluation and impacts PT 69

4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**
	4.3 If the programme was evaluated, what were the main findings? A mid-term evaluation of this programme has been undertaken. This has clearly assessed NEST as unsuccessful, namely due to the fact that demand has been extremely low. The reasons for this might have been antecipated: the requirement of previous incorporation of the company to have access to venture capital is irrealistic, when the purpose is to promote the creation of new firms.
4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	See above

5 How to find out more about the measure ? PT 69

5.1 Information Souce/Reference	Website: http://www.adi.pt Uploaded document(s):
Relevant further information	NEST will not survive in the new National Strategic Reference Framework 2007-2013. The creation of FINICIA indicates that no further effort will be undertaken to revive NEST.
5.2 Legal basis	Ministerial Decree no. 1518/2002, of 19 December
5.3.1 Launching Agency	Innovation Agency (AdI)
5.3.2 Agency administering	Innovation Agency (AdI)
5.3.3 Funding Agency	PME - IAPMEI Venture Capital Syndication Fund

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 66 Date created: 19/04/2006 Date Updated: 12/10/2007

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure SIME-I&DT - Incentive System for Company Modernisation (Research and Technological Development)

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** SIME-I&DT - Incentive System for Company Modernisation (Research and Technological Development)

1.3 Keyword(s)

Process development
Product Development
R&DT
Technological Improvements

1.4 Overview (nature, main goals)

SIME I&DT provides financial support to research and technological development activities carried out by companies, leading to the generation of new products, processes or systems or to the introduction of significant improvements in existing poroducts, processes or systems. It is addressed to companies in most industrial sectors, excluding agriculture and mining. It is expected that by providing support to product, process or system innovation companies would became more competitive in global markets. Eligible expenditures concern namely R&D activities (including the wages of personnal specifically assigned to R&D activities), technical assistance and technology transfer.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

SIME I&DT was launched in January 2006 to replace SIME Inovação, a former measure also under the System of Incentives for the Modernisation of the Economy (PRIME). SIME Inovação, launched in 2004, was not able to generate a significat take up by companies, namely due to the fact that it was based on reimbursable loans only and put too much emphasis on the profitability of projects as selection criteria. The new measure is in line with the priorities of the Technological Plan and the Lisbon Strategy, and is expected to strongly contribute to incraese the number of companies undertaking R&D activities as well as their commitment towards product, process and system innovation. SIME I&DT also responds

the criticisms raised to SIME Inovação in the recent evaluation of PRIME.

1.6 Policy Priorities

1.2.2 Innovation strategies
2.2.3 R&D cooperation (joint projects, PPP with research institutes)
2.3.1 Direct support of business R&D (grants and loans)

If other, please specify

There are speciifc themes for the calls. These tend to be mostly defined according to industry than technology. However, in renewable energy sources the following areas where specifically targetted: wind energy, thermic solar energy, photovoltaic energy, wave energy and biomass energy.

2. Detailed information on duration and targets of measure

2.1 Start date 2006

2.2 Expected ending 2007

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Replacing existing measure(s)
R&D Activities by Consortia

2.3.2 If the measure is novel was it mainly

Inspired by national policy debate (e.g study, consultation)
Inspired by need to meet EU level policy objectives

2.4 Geographic coverage

National coverge. However, companies located outside 'Lisboa e Vale do Tejo' region with benefit from a 5 per cent increase in incentives rates

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Consultancies and other private service providers (non-profit)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	
Trade Unions	✓	

2.5.3 If more than one target group is eligible, is

Co-operation/networking mandatory (e.g. cluster programme)

Other (please specify)

So far this measures has been completed through thematic applications, restricted to some industries. Two applications fields were defined: (1) renewable energy sources; and (2) traditional industries (textile, clothing and footwear)

2.6.2 Type of Research Activity targeted:

Applied industrial research
Knowledge transfer (between researchers)

Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: There are specific applications calls, focussed on specific themes/industries. So far two calls have been issued, for renewable energy and for traditional industries (textile, clothing and footwear). As mentioned above, several areas of renewable energy sources were specifically targetted.

Management structure: There are three managing agencies: IAPMEI, the Institute for Small and Medium Sized Firms, for most projects; API, the Portuguese Investment Agency, for large projects or investors; and ITP, the Institute of Tourism of Portugal, for tourism projects. The Innovation Agency (AdI) will be involved as specialised body, providing advice on the technological relevance or sophistication of projects. Specific calls are issued. After closing the call, application are analysed and ranked according to their merits. Decision should be taken 60 days after closing the call.

Review of progress: This is a rather new measure. It is the result from the assessment of an earlier measure in the field. Since PRIME, where this measure is integrated, will come to an end by December 2006, the measures is not likely to be subject to changes. However, it is expected to be monitored, to provide indications on how to proceed in the design of similar measures in the next National Strategic Reference Framework 2007-2013 (NSRF)

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Criteria for eligibility are the following: (1) Eligibility of projects: minimum investment of € 50000 (for SMEs) or € 100000 (for non SMEs); maximum duration of two years; supported by an appropriate strategic analysis; involvement of skilled human resources; and innovative nature, encompassing significant expected technological developments; (2) Eligibility of promoters: appropriate technological and managerial capabilities to carry out the project (or accessing missing capacilities through linkages with other S&T organisms; and allocation of the investment project to the activity concerned for a period of at least 5 years after the term of the investment. Projects will be selected on the basis of 5 criteria: (1) coherence and market, scientific, technological and organisational fit of the project; (2) project impact on the company concerned (competitiveness, S&T cooperation and linkages and in-house capabilities); (3) impact on the economic system, including the international characteristics of the project; (4) innovative nature of the projects; and (5) appropriateness of the research team.

Openness to EU countries The involvement of participants from other EU countries as well as the integration of the project in the context of a wider research project under the EU Research and Technological Development Framework Programme are

encouraged. In the first instance, a majoration of 10% in the incentive is provided, while in the second such a majoration reaches 15%

Openness to third countries The opening of the programe to third country participants is not considered

Selection of projects / participants Although the Ministerial Decree regulatory of this measure states that applications may be presented at any time, the practice so far (the measure was launched in January 2006) has been the launching of thematic calls. These enable a better evaluation, since applications will be ranked according ro their merits. Selection is based on a weighted average of the five selection criteria mentioned above. Very relevant projects may be subject to a negotiated procedure, where appropriate incentives may be assigned

3.4 In what form is funding provided ?

Grants
Subsidized loans (including interest allowances)
Specify other:

3.5. What are the eligible costs, where direct funding is provided ?

Labour costs (including overheads)
Equipment
External expertise (consultants, studies, etc.)
Other
Technology transfer and acquisition. Patent acquisition and licenses. Expenditures in connection with the dissemination and promotion of the research results achieved.

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget Overall budget in EUR **Not available**

4. Results, evaluation and impacts PT 66

4.2 Where an evaluation has taken place, what were the main findings?

Ex-ante **Yes**
On-going/Mid-term **No**
Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

Not applicable to the present measure. This was launched in January 2006 only

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? Not applicable, for the reasons mentioned above

5 How to find out more about the measure ? PT 66

5.1 Information Souce/Reference

Website: http://www.prime.min-economia.pt/PresentationLayer/prime_apoios_00.aspx?activeitem=2&activesubitem=-1&idioma=2&accaoid=35
English website: http://www.prime.min-economia.pt/presentationlayer/prime_Home_00.aspx?activeitemtop=6&idioma=2
Uploaded document(s):

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 65 Date created: 19/04/2006 Date Updated: 12/10/2007

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure European and International Cooperation Projects in Research, Technological Development and Innovation

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** European and International Cooperation Projects in Research, Technological Development and Innovation

1.3 Keyword(s)
International research cooperation
Internationalisation of R&D
Reserach projects

1.4 Overview (nature, main goals)
This measure is aimed at supporting cooperative research projects with European and International partners, which may contribute to foster new research fields in Portuguese research centres as well as to encourage the internationsalisation of the research activities of those centres. It is mainly addressed to Higher Education and other public research units, including public laboratories, and private non profit research organisations, but also to companies and business associations. The key feature of the measure is the promotion of European and international research cooperation

1.5 Background and rationale (Analytical reasoning why this measure is being created)
The measure is integrated in the context of the priority axis V ('Science and Innovation for Technological Development') of POCI-2010, the OP on Science and Innovation. A similar measure, although with a lower budget, was already included in the former POCTI, the OP on Science, Technology and Innovation that preceded POCI 2010. The measure responds to important challenges of research policy: (1) to stimulate internationally competitive research by Portuguese research centers; and (2) to encourage the internationalisation of such centers, especially through cooperation with foreign partner organisations

1.6 Policy Priorities
1.2.1 Strategic Research policies (long-term research agendas)
2.2.3 R&D cooperation (joint projects, PPP with research institutes)

3.2.3 Mobility of researchers (e.g. brain-gain, transferability of rights)

If other, please specify

No specific research themes are defined in the regulations which lays the basis for financial support

2. Detailed information on duration and targets of measure

2.1 Start date 2005

2.2 Expected ending 2006

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Replacing existing measure(s)

Mobilising the capacity of interbacional cooperation in R&D

2.4 Geographic coverage National coverage

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	
Business organisations (Chambers of Commerce...)	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: International research collaboration

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: Projects to be supported under this measure should be carried out under the supervision of a responsible researcher who is the counter part of the public agencies in charge of the management, funding and follow-up of the measure. Eligible projects should in principle be disked with research programmes implemented in the context of the FP6 as well as of bi-lateral or multi-lateral international R&D cooperation.

Subprogramme structure: Not applicable.

Management structure:
The measure is managed by FCT, the Portuguese Foundation for Science and Technology (see the corresponding template). Applications are evaluated by experts panels with a minimum of 3 elements. These should include national and international experts. Decisions are justified ina final evaluation report. Applicants may have a recourse to another commission whose members are indicated by the Minister for

Science, Technology and Higher Education

Review of progress: No, but the results of the programme are included in the Annual Report of POCI, as well as in the Annual Report of FCT. The measures is evaluated in the context of mid-term or final evaluations of POCI

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? In each scientific domain, the following factors are taken into account in evaluating applications: (1) degree of fit between the project and the objectives of the measure (see above); (2) appropriateness of the expected costs to the objectives of the project and its work programme; (3) merit of the application organisations (excellence, degree of internationalisation, capability to contribute to scientific and technological development), (4) quality of the project concerned (scientific merit, originality, method, expected results, and diffusion activities); (5) relevance of the project, from a technology transfer perspective; and (6) relevance of the research activities forseen to meet the objectives of international cooperation. Additional criteria, concerning project mechanisms and impact on the internationalisation of the research centres concerned, should be taken into account: the integration of the project research activities in a research programme financed under the FP6 or other relevant European programme and/or in a bi-lateral or multi-lateral research cooperation programme signed by the Portuguese Government

Openness to EU countries Participants from other EU countriesare not eligible for support. They should get funding from this country's authorities or from the Commission. However, the key objective of the programme is the promotion of the cooperation between Portuguese research centres and European and international partners

Openness to third countries Participants from other EU countriesare not eligible for support. They should get funding from this country's authorities or from the Commission. However, the key objective of the programme is the promotion of the cooperation between Portuguese research centres and European and international partners

Selection of projects / participants There are fixed call, open for some time. Proposals, as mentioned above, evaluated and renked by specific panels, with the participation of international experts.

3.4 In what form is funding provided ? Grants

3.5. What are the eligible costs, where direct funding is provided ? Specify other:
Labour costs (including overheads)
Equipment
Training (including study trips)
External expertise (consultants, studies, etc.)

3.6. Sources of financing (other than national public sources of funding) Co-financed by the Structural funds (ERDF, ESF,etc.)

3.7 Overall budget Overall budget in EUR **Not available**

Relevant further information This measure will be for sure evaluated with a view to prepare the new Competitiveness programme in the context of the NSRF 2007-2013.

5.2 Legal basis Ministerial Decree no. 88-C/2006, 24 January, see http://www.prime.min-economia.pt

5.3.1 Launching Agency SIME I&DT was launched by PRIME Management (Gabinete de Gestão do PRIME)

5.3.2 Agency administering SIME I&DT is administered Institute for Small and Medium Sized Firms (IAPMEI); Institute of Tourism of Portugal (IFT); Portugal's Investment Agency (API)

5.3.3 Funding Agency This programme is funded by the PRIME Operational Programme

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 64 Date created: 19/04/2006 Date Updated: 12/10/2007

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure IDEIA - Support to Applied Research and Development Projects

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** IDEIA - Support to Applied Research and Development Projec

1.3 Keyword(s)

Industrial research
Pre-Competitive Research
R&D consortia
University/Industry cooperation

1.4 Overview (nature, main goals)

IDEIA is a programme focussed on the support to R&D consortia involving companies and S&T organisations. Its main goals concern the promotion of the cooperation between Industry and S&T organisations and the encouragement to the economic exploitation of research results as well as the transfer of technology to industrial applications in new ot improved products, processes and services. The most distinctive feature of the programe is the requirement for the establishment of a consortium including at least one company and one S&T organization

1.5 Background and rationale (Analytical reasoning why this measure is being created)

The programme is aimed at addressing three inter-related shortcomings of the Portuguese reasearch and innovation systems. First: the weak University/Industry cooperation, or, more generally, the low level of cooperation and inter-action among the actors in those systems. Second: the insufficiemt economic exploitation of research results. Third: the low involvement of companies in research activities (business enterprise R&D expenditures are much below the Barcelona targets)

1.6 Policy Priorities

2.2.3 R&D cooperation (joint projects, PPP with research institutes)
2.3.1 Direct support of business R&D (grants and loans)

If other, please specify

General disciplinary coverage. There are no specific thematic orientation. However, "thematic cells" for projects may be launched (as far as we know, this has not happened).

2. Detailed information on duration and targets of measure

2.1 Start date 2003

2.2 Expected ending 2006

2.3 Relationship to other programmes

2.3.1 How does the measure relate to other measures?

Replacing existing measure(s)
R&D Activities by Consortia

2.3.2 If the measure is novel was it mainly Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

Not applicable

2.4 Geographic coverage National

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	
Consultancies and other private service providers (non-profit)	✓	
Higher educations institutions research units/centres	✓	
Other non-profit research organisations (not HEI)	✓	
Technology and innovation centres (non-profit)	✓	

2.5.3 If more than one target group is eligible, is Co-operation/networking mandatory (e.g. cluster programme)

2.6.2 Type of Research Activity targeted: Pre-competitive research
Applied industrial research
International research collaboration

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: Projects may involve two types of actions: (1) industrial research; and (2) pre-competitive research. The first concerns projects aimed at developing new technologies and new competencies. The second concerns namely the development of prototypes, pre-series and pilot actions, aimed at validating, in company environment, technologies already demonstrated in laboratory as well as the carrying out of promotional actions to encourage the economic exploitation of research results.

Management structure: The programme is managed by the Innovation Agency (AdI)index.cfm?fuseaction=org.document&uuid=7D87D213-CE97-11D0-455907C4200BE15E. Applications should be made to AdI, using a normalised form, where elements regarding project organisation and management should be included. A project director, responsible for the contacts with AdI as well as for the carrying out of the project, should be nominated. AdI undertakes periodic evaluation processes.

Review of progress: No, although the annual results of the programme are

included in the Annual Reports of PRIME and POCI 2010 operational programmes, as well as in AdI Annual Report

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ? Criteria for eligibility are the following: (1) Eligibility of projects: projects should involve R&D activities carried out by a consortium including at least one firm and one S&T organisation, the former taking the leadership role; projects should be focussed on industrial research and/or pre-competitive reasearch, have a minimum duration of 3 years and have appropriate financing; (2) Eligibility of promoters: firms should have been created at least two years before application (except for start-up firms supported under the NEST programme - New Tehnology-Based Firms) and have a balanced economic and financial situation. The main selection criteria are the following: (1) Project coherence and rationale; (2) expected project impact on the companies involved, namely in terms of promoting competitiveness, linkages with the S&T system and strengthening in-house innovation capabilities; (3) socio-economic impact, in terms of the technology concerned, technology diffusion, the expected dynamics of result exploitation and the international characteristics of the projects; (4) project's innovative potential; and (5) profile of the research team.

Openness to EU countries The involvement of participants from other EU countries as well as the integration of the project in the context of a wider resaerch project under the EU Research and Technological Development Framework Programme are encouraged. In the first instance, a majoration of 10% in the incentive is provided, while in the second such a majoration reaches 15%

Openness to third countries The opening of the programe to third country participants is not considered

Selection of projects / participants AdI carries out the evaluation of the projects submitted. This should not exceed 90 days after the call for projects deadline. Evaluation is carried out by specialists. After the evaluation, AdI drafts decision proposals (acceptance or rejection) of the projects, which are submitted to a management committee including the managers of PRIME and POCI 2010 operational programmes (see the corresponding research document templates) as well as representatives from the Ministry for Economy and Innovation, and for Science and Higher Education.

3.4 In what form is funding provided ? Grants
Subsidized loans (including interest allowances)
Specify other:

3.5. What are the eligible costs, where direct funding is provided ? Labour costs (including overheads)
Equipment
Training (including study trips)
External expertise (consultants, studies, etc.)
Other

further information **No information is available concerning the budget for this specific action (Action V.5.1). However, the overall budget for Measure V.5 (where the Action is included) is around 34 million euros for the 2000-2006 period.**

4. Results, evaluation and impacts PT 65

4.2 Where an evaluation has taken place, what were the main findings? Ex-ante **Yes**
On-going/Mid-term **No**
Final/Ex-post **No**

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure? Not applicable.

5 How to find out more about the measure ? PT 65

5.1 Information Souce/Reference Website: http://www.fct.mces.pt and http://www.pocti.mces.pt
Uploaded document(s):

Relevant further information It is expected that this measure will come to an end in 2006. However, a similar measure is expected to be included in the next National Strategic Reference Framework for 2007-2013.

5.2 Legal basis Regulation of Action V 5.1. of Measure V 5 of POCI 2010 (VER PORTARIA/DL POCI)

5.3.1 Launching Agency POCI Management

5.3.2 Agency administering Foundation for Science and Technology (FCT)

5.3.3 Funding Agency POCI Management

back to top

	Buildings are eligible insofar they concern the building up of pilot plants. Expenditures related to the protection of project results by intellectual and industrial property rights are also eligible.
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)
3.7 Overall budget	Overall budget in EUR **40 million**

4. Results, evaluation and impacts PT 64

4.2 Where an evaluation has taken place, what were the main findings?	Ex-ante **No** On-going/Mid-term **Yes** Final/Ex-post **No**

4.3 If the programme was evaluated, what were the main findings?

Yes, in the context of the overall evaluation of the Operational Programme PRIME. Unfortunately, evaluation was relatively wide and not so much focused on this specific programme. Furthermore, when evaluation was carried out only slightly more than 2 years had elapsed since the launching of IDEIA. This explains to some extent the small number of project applications: only 13 (of which 2 also concern pre-competitive research). The main evaluation findings were the following: (1) the programme appears to have a significant cognitive additonality, insofar as it promotes the collaboration between companies and S&T organizations, enabling not just technological learning but also a significant amount of organisational and collaborative learning which may be transfered to other cooperative projects; and (2) there is more need for selectivity (although one may wonder whether the low selectivity would not be associated wih the relatively low number of applications).

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	Not available

5 How to find out more about the measure ? PT 64

5.1 Information Souce/Reference	Website: http://www.adi.pt Uploaded document(s):
Relevant further information	Not applicable. The programe was launched only about three years ago
5.2 Legal basis	Ministerial Decree 16/2003 of January 9, 2003; Ministerial Decree 437/2003 of May 27, 2003
5.3.1 Launching Agency	PRIME Management and POCTI (new POCI 2010) Management [Gabinete de Gestão do PRIME e Gabinete de Gestão do POCTI/POCI - 2010]
5.3.2 Agency administering	Innovation Agency [Agência de Inovação - AdI]
5.3.3 Funding Agency	PRIME Operational Programme

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 68 Date created: 16/06/2006 Date Updated: 12/10/2007

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	NITEC - Incentive System for Creating R&D Nuclei in the Company Sector

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** NITEC - Incentive System for Creating R&D Nuclei in the Com Sector

1.3 Keyword(s)	Companies R&D Departments R&D Employment R&D Projects R&D Teams
1.4 Overview (nature, main goals)	NITEC is aimed at supporting the creation of R&D teams in firms. More specifically, the purpose is to strengthen companies' in-house R&D capabilities and to stimulate company efforts regarding the development and implementation of new products or processes as well as the absorption and upgrading of external technologies. R&D teams include a maximum of three people (for purposes of financial suppport) specifically concerned with the internalisation and development of technological competencies. NITECs are envisaged as a sound basis for the future development of R&D departments in companies. The NITEC programme is envisaged as an instrument to respond to the low R&D performance of Portuguese companies. It is expected that, by supporting the creation of a small R&D team with people focused on R&D activities, companies will step-by-step understand the advantages of enhancing in-house R&D capabilities, while at same time having a stronger internal basis to engage into external R&D cooperation with other companies or with S&T organisations. NITECs may be considered as an important step to encourage a stronger commitment to R&D activities and therefore an important instrument towards the Barcelona 3% objective.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	
1.6 Policy Priorities	2.2.3 R&D cooperation (joint projects, PPP with research institutes) 2.3.1 Direct support of business R&D (grants and loans) 3.2.1 Recruitment of researchers (e.g. fiscal incentives) 3.2.3 Mobility of researchers (e.g. brain-gain, transferability of rights)
If other, please specify	

No target fields were defined.

2. Detailed information on duration and targets of measure

2.1 Start date	2003
2.2 Expected ending	2006
2.3.2 If the measure is novel was it mainly	Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

NITEC was designed as a result of the understanding that the level of companies' in-house R&D capabilities in Portugal is very limited. It is therefore envisaged as an instrument to counter this situation.

2.4 Geographic coverage	National. For some time the Lisboa e Vale do Tejo region was excluded, but in 2005 it was considered again for purposes of support.

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	

2.6.2 Type of Research Activity targeted:	Problem driven (basic) research Pre-competitive research Applied industrial research Knowledge transfer (between researchers) Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	NITEC is part of PRIME, the Programme for the Modernisation of the Portuguese Economy.
Management structure:	NITEC is managed by the Innovation Agency (AdI) index.cfm?fuseaction=org.document&uuid=7D87D213-CE97-11D0-455907C4200BE15E, which has played an important role in promoting the programme and in convincing firms about the benefits of setting up R&D teams.
Review of progress:	So far there was no specific evaluation of NITEC. Available information, namely in the context of the broader updating of the mid-term review of PRIME, provides a very positive assessment of NITEC. In fact, the take up by firms has been judged as very positive. Until July 2005 there were 74 NITEC projects (in different stages), corresponding to a total investment of €29 million and a planned support of €12 million. Another positive aspect is the geographic coverage, since NITEC projects are fund in most regions of mainland Portugal.

Important legal notice

PRO INNO EUROPE

Password reminder

Trendchart Support measures detail

PT 67 Date created: 14/06/2006 Date Updated: 12/10/2007

1 General presentation of the measure/scheme/action/regulation

1.1 Country Portugal

1.2 Title of measure Tax Incentives for Company Investments in R&D (SIFIDE)

1.2 Title of measure (please provide explicit title and acronym if exists)

- **In English:** Tax Incentives for Company Investments in R&D (SIFIDE)

1.3 Keyword(s)

Company R&D
Research expenditures
Tax incentives

1.4 Overview (nature, main goals)

SIFIDE is aimed at encouraging R&D activities by Portuguese companies. It consistsof a tax credit granted to companies that performe or contracte R&D activities. There is an element of stimulus for companies already undertaking R&D activities to increase their commitment. This measure has been put into force again in 2005, after being eliminated in the 2005 budget, presented by the former Government. SIFIDE has been underlined by the present Government as a very important instrument for encouraging business firms R&D expenditures and for contributing towards to the Barcelona 3% objective.

1.5 Background and rationale (Analytical reasoning why this measure is being created)

Specific tax incentives for R&D activities have been launched some ten years ago, already with the code name of SIFIDE. After the decision of the previous Government to descontinue SIFIDE, one of the first measures of the new government was to put the system into force again. The main purpose of SIFIDE is to promote R&D activities by business firms. Tax incentives are considered as an important instrument for promoting firms' R&D activities. SIFIDE enables firms to deduct 20 per cent of their R&D expenditures from their taxable revenues. There is also the possibility to deduct up to 50 per cent of the increase in R&D expenditures with regard to the two last tax years average.

Research expenditures are defined as those incurred for acquiring new scientific or technological knowledge. Development expenditures corespond to those concerned with the exploitation of reserach results with a view to

get new (or to significantly improve) raw materials, products, services or manufacturing processes.

1.6 Policy Priorities 2.3.2 Indirect support to business R&D (tax incentives and guaranteees)

If other, please specify

General tax incentives, not dependent on specific themes or disciplines.

2. Detailed information on duration and targets of measure

2.1 Start date 1997

2.2 Expected ending 2010

2.3.2 If the measure is novel was it mainly

Inspired by an existing measure of another (EU) country
Inspired by national policy debate (e.g study, consultation)
Inspired by need to meet EU level policy objectives

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

The revision of SIFIDE in 2005 was influenced by national policy debate, insofar it corresponds to reaction to a previous decision of eliminating tax incentives to R&D. SIFIDE has also benefited from the analysis of the experience of tax incentives in other countries, namely Spain. In fact, the idea of having an incremental rate to enourage the increase of R&D expenditures with regard to previous years seems to be inspired by the Spanish experience. Finally, SIFIDE is also very much in line with the need to strengthen business R&D expenditures in connection with the Barcelona 3% target.

2.4 Geographic coverage National

2.5. Target groups

2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding

Category	Target of measure	Eligible for funding
All companies	✓	

2.6.2 Type of Research Activity targeted:

Basic research
Problem driven (basic) research
Pre-competitive research
Applied industrial research
Knowledge transfer (between researchers)
International research collaboration
Networking

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme: The programme is managed by Adindex.cfm?fuseaction=org.document&uuid=7D87D213-CE97-11D0-455907C4200BE15EI. Companies should submit their R&D expenditures in the previous year to AdI, in order to get the tax deduction provided by SIFIDE. All companies that have confirmed their R&D expenditures will be granted the tax deduction. The only exceptions are firms whose tax benefit is defined by indirect methods and those which have debts towards the State or Social Security.

Management structure: The programme is managed by the Innovation Agency (AdI).

Selection criteria

3.2 What are the eligibility

Eligible expenditures include the following:

Selection criteria

3.2 What are the eligibility and selection criteria for participating in the measure ?	NITEC applications are selected on the basis of an assessment of their activity plans, taking namely into account the following: (1) impact of R&D team activities on company's productivity and competitiveness; and (2) promoters technical and managerial capabilities. Promoters should commit to maintain the R&D team for at least five years, to have minimum levels of technical and managerial capabilities and to have appropriate control systems to assess and follow up the projects carried out by the R&D team. This should have, for financial support purposes, a maximum of three people.
Openness to EU countries	All companies incorporated in Portugal, irrespectively of the origin of their equity, are eligible for the NITEC programme.
Openness to third countries	All companies incorporated in Portugal, irrespectively of the origin of their equity, are eligible for the NITEC programme.
Selection of projects / participants	See 'Selection Criteria' above.
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Other Computers and software, as well as the access to technical databases are eligible. Similarly,technology transfer or acquisition contracts are also eligible
3.6. Sources of financing (other than national public sources of funding)	Co-financed by the Structural funds (ERDF, ESF,etc.)
3.7 Overall budget	Overall budget in EUR **Not available**

4. Results, evaluation and impacts PT 68

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	See above.

5 How to find out more about the measure ? PT 68

5.1 Information Souce/Reference	Website: http://www.adi.pt Uploaded document(s):
Relevant further information	It is expected that NITEC (with this label or with a different one) will be continued in the next National Strategic Reference Framework 2007-2013.
5.2 Legal basis	Ministerial Decree no. 441/2003, of 28 May
5.3.1 Launching Agency	Innovation Agency (AdI)
5.3.2 Agency administering	Innovation Agency (AdI)
5.3.3 Funding Agency	PRIME - Programme for the Modernisation of the Portuguese Economy

back to top

and selection criteria for participating in the measure ?	- acquisition of new hardware, except buildings, provided that it is assigned to R&D activities; - expenditures incurred with human resources assigned to R&D activities; - expenditures related to involvement of executives in the management of R&D organisations; - expenditures concerning R&D contracts with external S&T organisations; - participation in S&T organisations equity as well as the contribution towards investment funds dedicated to support R&D companies; and - expenditures regarding patent registration and maintenance, as well as the acquisition of patents required for R&D activities.
Openness to EU countries	SIFIDE is open to all companies established in Portugal irrespectively of the origin of their equity.
Openness to third countries	See above
Selection of projects / participants	All companies are eligible, provided that they fully confirm their R&D expenditures, and don't have debts to the State or the Social Security
3.4 In what form is funding provided ?	Tax incentives (including reduction of social charges) Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Equipment Training (including study trips) External expertise (consultants, studies, etc.) Other Patents
3.7 Overall budget	Overall budget in EUR **Not available** further information **Since SIFIDE corresponds to a tax incentive, there are no budget assigned to it.**

4. Results, evaluation and impacts PT 67

5 How to find out more about the measure ? PT 67

5.1 Information Souce/Reference	Website: http://www.adi.pt Uploaded document(s):
Relevant further information	No further developments are envisaged. SIFIDE is expected to be in force until 2010. Nevertheless, COTEC is developing a project with the objective to show that innovation expenditures (which significantly exceed R&D expenditures) should also benefit from tax incentives.
5.2 Legal basis	Law-Decree no. 40/20005, of 3 August 2005 (on the revision of SIFIDE)
5.3.1 Launching Agency	Innovation Agency
5.3.2 Agency administering	Innovation Agency
5.3.3 Funding Agency	Ministry of Finance

back to top

Important legal notice

PRO INNO EUROPE

Policy Analysis > INNO-Policy Trendchart > Policy Measures

Password reminder

Trendchart Support measures detail

PT 72 Date created: 05/07/2006 Date Updated: 12/10/2007

1 General presentation of the measure/scheme/action/regulation

1.1 Country	Portugal
1.2 Title of measure	Doctoral Grants in Companies
1.2 Title of measure (please provide explicit title and acronym if exists)	
• **In English:**	Doctoral Grants in Companies
1.3 Keyword(s)	Cooperation Doctoral Grants Innovation Research
1.4 Overview (nature, main goals)	This programme is aimed at attracting doctoral students to focusing their dissertation on issues relevant for firms, and to undertake them in a firm context. In this sense a strategy of cooperation between companies and Universities is encouraged.
1.5 Background and rationale (Analytical reasoning why this measure is being created)	Recognising the lack of cooperation between Universities and companies as well as the weak investment in R&D by private companies, this programme is intended to promote the linkages between these two types of institutions through of the development of doctoral research in business environments and in topics relevant for companies competitiveness.
1.6 Policy Priorities	2.2.1 Support infrastructure (transfer offices, training of support staff) 2.2.3 R&D cooperation (joint projects, PPP with research institutes) 3.1.3 Stimulation of PhDs 3.2.1 Recruitment of researchers (e.g. fiscal incentives)

If other, please specify

No specific themes were defined.

2. Detailed information on duration and targets of measure

2.1 Start date	2004
2.2 Expected ending	2006
2.3.2 If the measure is novel was it mainly	Inspired by an existing measure of another (EU) country Inspired by national policy debate (e.g study, consultation)

If the measure has been inspired by national policy debate, by a programme or policy initiative in another country or at EU level, please explain why and how

It was found that the development of doctoral research in S&T was not geared towards the needs of the Portuguese industrial fabric. Doctoral Grants in Companies were aimed at responding this weakness and at building a new bridge for cooperation between University and Industry.

2.4 Geographic coverage	National
2.5. Target groups	
2.5.1 Please indicate which group(s) are the targets or benificiaries of the programme and also which group(s) are eligible to apply for funding	

Category	Target of measure	Eligible for funding
All companies	✓	
Scientists / researchers (as individuals)	✓	
Higher educations institutions research units/centres	✓	
Higher education institutions (education function)	✓	

2.5.3 If more than one target group is eligible, is	Co-operation/networking mandatory (e.g. cluster programme)
2.6.2 Type of Research Activity targeted:	Problem driven (basic) research

3 Implementation structure and operational rules of measure

Overall implementation structure of the programme:	This programme is managed through open calls for applicants to present their projects. Doctoral grants are followed-up by the university supervisor and the coordenator of the project in the company. The programme is managed by FCT, the Science and Technology Foundationindex.cfm?fuseaction=org.document&uuid=7D87CC76-A128-5D8C-77FFCC5B7F1A77A3 . Applications are evaluated taking into account the applicants' merits, the research programme and the conditions provided by the host company.
Management structure:	The programme is managed by FCT, the Science and Technology Foundationindex.cfm?fuseaction=org.document&uuid=7D87CC76-A128-5D8C-77FFCC5B7F1A77A3 . The Innovation Agencyindex.cfm?fuseaction=org.document&uuid=7D87D213-CE97-11D0-455907C4200BE15E is indirectly involved in what concerns the promotion of exploratory contacts with firms. Doctoral candidates interested may apply at any time. Decisions on applications are communicated up to 90 working days after the application.
Review of progress:	Since the programme was launched in 2004, there has been no review of progress so far.
Selection criteria	
3.2 What are the eligibility and selection criteria for participating in the measure ?	Applications are selected on the basis of three main criteria: (1) applicants' merits and capabilities; (2) doctoral research programme; and (3) the conditions provided by the host company to carry out the envisaged research programme.
Openness to EU countries	Applicants should be Portuguese citizens or residents in Portugal.
Openness to third countries	Applicants should be Portuguese citizens or residents in Portugal.
Selection of projects / participants	Applicants may be submitted at any time. The selection is based on the consistency of the intended research project, taking into account applicants' merits, the relevance of the research programme and the conditions provided by the company concerned.
3.4 In what form is funding provided ?	Grants Specify other:
3.5. What are the eligible costs, where direct funding is provided ?	Labour costs (including overheads) Training (including study trips) Other University fies and publication of doctoral thesis
3.6. Sources of financing (other than national public	Co-financed by the Structural funds (ERDF, ESF,etc.)

sources of funding)	
3.7 Overall budget	Overall budget in EUR **Not available**

4. Results, evaluation and impacts PT 72

4.4 If no official evaluation has been undertaken is there any evidence which allows an appraisal of the success of the measure?	Since the programme was launched in 2004, it is still too early to appraise its success.

5 How to find out more about the measure ? PT 72

5.1 Information Souce/Reference	Website: http://www.fct.mctes.pt/pt/concursosabertos/concurso2004%5FBDE/ Uploaded document(s):
Relevant further information	No relevant developments to report.
5.2 Legal basis	Decree-Law no. 123/99 of 20 of April on Scientific Research Grants.
5.3.1 Launching Agency	Fundação para a Ciência e a Tecnologia (FCT)
5.3.2 Agency administering	Fundação para a Ciência e a Tecnologia (FCT)
5.3.3 Funding Agency	POCI 2010 (The Operational Programme on Science and Innovation 2010)

back to top