

Comments from Ireland on Commission Consultation Document on State Aid for Innovation

Introduction

The Consultation document on State Aid for Innovation represents an important step in the implementation of the Commission's State Aid Action Plan and we strongly support the strategy set out in the Consultation paper. It brings together the policy directions set out in the Lisbon Agenda and the forthcoming Communication 'More Research and Innovation: Investing for Growth and Employment'. In this way, state aid can contribute to a more innovative economy by developing appropriate state aid rules which will address the existing market failures. However, there are some weaknesses in the current communication.

The paper does not appear to allow for the inclusion of non-technological innovation. Such a narrow focus would exclude the ranges of non-technological innovative actions that enterprises of all sizes will need to implement if they are to be competitive in the global market. There is also a need to ensure that the service sectors are included in any state aid proposals. The proposed exclusion of non-technological innovation activities could lead to an interpretation that the service sectors and their non-technological innovation, on which they are highly dependent, are excluded. This needs to be avoided. The service sectors are increasingly important for Member States and Europe, in general, because of their economic importance (share of GDP, share of jobs, etc.). Furthermore, the evolution of manufacturing industries will see that sector increasingly transforming more and more elements of their activities into service businesses through innovation.

The paper recognises the importance of large firms to innovation but yet the provision of state aid for innovation by large enterprises appears to be excluded. Large firms are an essential part of the innovative world. The Lisbon Agenda clearly sets out the need for innovative individuals and organisations to play a greater role in building Europe's competitiveness and narrowing the productivity gap between Europe and the US and other global competitors. To achieve this,

the international dimension is imperative because the wider the pool to search for innovative ideas the more likelihood that originality will be found. It is unlikely that such an international dimension will be found solely amongst SMEs working on their own. Large firms can provide this critical input and this contribution may not happen without the intervention of the State.

In addition, large multinational companies have an increasing choice of low cost locations at their disposal. In this context the European operations of these companies are increasingly under cost pressure from locations with cheaper operating environments. The only realistic way the European location is going to remain viable in the long run is to embrace innovation, in its broadest sense, and on a continual basis. They need to find ways to cut costs, create value, and improve efficiency and quality wherever possible, and without damaging working conditions. Given the simple option open to globalised companies to achieve instant value/cost reduction by relocating manufacturing/service operations to low cost locations, there is a clear need in many circumstances to tip the balance towards risky and time consuming innovation initiatives in existing European operations as an alternative.

Definition of Innovation

A clear and simple definition of what is meant by innovation is required which will enable it to be incorporated into the current Research and Development guidelines. For the purposes of the State aid guidelines on innovation, we would suggest that the following definition of innovation could be used as a basis for its incorporation in the Research and Development Guidelines;

“the renewal and enlargement of the range of products and services and associated markets; the establishment of new methods of production, supply and distribution; the introduction in changes in management, work organization, and the working conditions and skills of workforce.”¹

PRINCIPLES GOVERNING CONTROL OF STATE AID FOR INNOVATION

Is State aid the right policy instrument?

There are a number of clear market failures which exist which can only be addressed by some form of state aid:

- Significant challenges face European firms today. Rapid technological changes require rapid innovative responses in order to ensure that they can survive in a globalised market. However, innovative projects are regarded as high risk and as such find it difficult to attract investment from the normal private sector sources. The challenge is to develop and incentivise such firms in Europe today, as they are not fully equipped to react to such challenges.
- Under-investment in innovative start-up companies is an issue that is evident throughout Europe and Ireland is no different. The finance gap remains an issue. There are a growing number of innovative projects in incubation and campus facilities that are not gaining adequate access to seed capital to realise the potential of the new products and services under development. These market failures continue to exist despite the various initiatives implemented by the Community as well as the EIB/EIF. Furthermore, a lack of exit strategies also impacts on innovative start-ups and deters possible investors.
- The need to innovate is not the sole prerogative of new and young enterprises. The need for renewal and improved competitiveness also impacts on traditional sectors and large enterprises if they are to survive in the globalised market. It is no longer an option for these sectors solely to continue to focus on protecting market share and investing in reducing the operational costs of running the business on a day-to-day basis. Firms in these sectors have not yet fully embraced the innovation concept

¹European Commission COM (1995) 688

and need to be stimulated into action. There is an essential need for the State to stimulate such sectors to understand and tackle the risks of renewing their businesses as well developing more innovative products and services. The renewal of these sectors is an essential component for the future of the Irish economy.

- By and large, services account for around 70% of GDP and employment in OECD countries. Service functions are activities that cut across the economy and are integrated into, and thus add value to, every stage of the value chain. They underpin the existence of all enterprises, whether in manufacturing or services, micro or large enterprise. Services represent a large range of highly heterogeneous non-manufacturing activities including the intangible in nature and more performance than object based, production and consumption occur simultaneously in interaction between the client and service provider and unlike goods, services cannot be inventoried and stored. Manufacturing and services are also increasingly intertwined and an expanding share of manufacturing companies has also become service providers. The firm's dynamic of innovation in services will therefore require an understanding of firms' internal learning capabilities – absorptive capacity – and also their patterns of interactivity which need to be acknowledged and facilitated in State Aid measures.
- The levels of risk of innovative projects can be a deterrent to SMEs to engage in these activities, as quite often they believe that such projects tend to be beyond the scope of smaller firms.
- Current EU innovation strategies and policies do not distinguish between the funding requirements and characteristics of micro enterprises (with fewer than ten employees) and small and medium enterprises. The micro enterprise, which is also a principal characteristic of the Services Sector, contributes significantly to innovation in Europe, however, despite the significantly greater challenges that they face compared to small and medium firms, they are not provided with any additional incentive. These

firms' ability to carry out R&D and drive innovation needs to be facilitated by recognising within the State Aid guidelines the unique nature and importance of such micro enterprises in developing a successful and innovative economy.

- There is a need for intervention in the markets to inform and educate buyers, particularly government and state buyers, of the benefits resulting from innovative buying. Intervention aimed at creating awareness in this manner will assist innovative firms in finding a suitable market for their products and services and also help buyers to become more competitive as a result of the absorption and dissemination of knowledge. The current proposals in the Consultation paper do not make any mention of support for this market failure.
- Innovation aid as such is clearly a horizontal aid and should be available to all sizes of firms. Bonuses should be provided on a) the level of innovation in the project b) firms size c) joint project with other firms d) joint project with the education sector e) willing to share results of aided projects with others and f) the level of risktaking.
- The rules should not be intrusive and should not be designed with the intention of capturing small amounts of aid which has no appreciable distortive effect on competition and/or trade between member states.

We agree with the Commission that any new rules must ensure that any State aid must produce incentive effects, be proportionate and limit the distortions to competition and trade. However, excluding non-technological innovation at this stage in the process needs to be reconsidered. The Commission needs to ensure that the new guidelines recognise that innovation is encompassed in all level of activities of a firm. Furthermore, the exclusion of aid to large firms does not recognise their importance in developing/encouraging cooperation between SMEs, the educational sector and public research organisations.

Question 1) Do you think that it is appropriate not to create a separate Framework for Innovation and that the new possibilities for State aid target selected innovation-related activities?

The modern understanding of innovation processes recognises that innovations originate from complex processes in which fundamental research, applied research, industrial research, pre-competitive development, early market studies, development of business models, organisational development, efforts to understand end-user needs and various potential contexts of use, training needs and other activities related to the production, acquisition, transfer and adaptation of the necessary knowledge and skills needed to create and bring the eventual new and significantly improved products, processes, services, methods and other results of innovative activities and any combinations of these to the markets do take place parallel, not consecutively. It is therefore not practical to define innovation separately from R&D, but rather see R&D in a wider context including various forms of innovative activities including those currently defined as R&D. These “new” innovative activities should, however, be clearly defined.

We do not agree with the proposal in this paper to add a fourth category to the Research and Development State aid Framework. It would add further complexity for Member States in determine where projects would sit between the innovation category stage and the pre competitive stage. We would propose a revised and more inclusive definition for the pre competitive development stage which would include both technological and non-technological innovative activities. This would provide simplicity, clarity and greater transparency. Furthermore, this would resolve the issue of the non-inclusion of large firms as proposed in the Commission’s proposals. There may need to be a clear definition for the incentive effect for large firms to address the Commission’s concern about large firms at the pre competitive development stage.

The inclusion of the innovative activities solely under the R and D guidelines would create difficulties, as it would link innovation solely with technology. This would be a major hindrance to development of non-technological innovative

activities which are as critical as the technological activities. It would also be important to include the definition of innovative activities across a range of other guidelines. Such guidelines could be the Training Aid Guidelines and State Aid and Risk Capital Guidelines.

Question 2) Do you think that the problems presented in Annex and the market failures identified by the Commission as hampering the innovation process are accurate? If so, why? If not, why not?

We have set out above the market failures which we consider are significant impediments in developing an innovative culture with Europe.

We agree with the market failures identified in this paper. We recognise that these market failures need to be addressed. However, some of these are very long-term issues which need to be tackled (e.g. Lack of common rules and standards, weaknesses in the labour markets.). There is a need to set out a clear agenda and recognise those market failures which can be tackled through State Aid and those which need to be addressed through different mechanisms.

(1) Lack of common rules and standards:

Among the problems identified are differences in tax and social security systems preventing the mobility of researchers and innovators; different certification procedures slowing down the transfer of innovative business models and ideas across EU countries; differences in patent protection procedures in the different Member States - the cost of patent defence, the duration to realise patents, i.e. the product, process service may have reached the market and start to lose market advantage by the time patents are realised. This is particularly relevant to the services sector industries.

(2) Weaknesses in financial and labour markets:

The main problems identified here are well documented by various Community reports and are market failures which all Member States are attempting to address. Revisions to the State Aid and Risk Capital Guidelines

and the Research and Development Framework are essential. The lack of private funding for R&D and innovation is a serious issue for SMEs and large firms in traditional sectors. These large firms are facing increasing competition and, if they are to become competitive in the global market, will require support their innovative activities.

A recent report (In draft form) on the Venture Capital market in Ireland shows the increasing difficulty for micro and small enterprises in accessing seed and early stage finance. Lack of investee readiness and managerial skills are among the issues identified. The inability of SMEs to retain and/or attract highly qualified staff is also a significant impediment for them to develop sustainable enterprises and to develop scale in order to compete on global markets.

(3) Non-functioning product markets:

We would agree fully with the market failures set out in the Commission's paper. However, we are not convinced that the proposals to grant state aid are sufficient to address these markets failures as many of them in this section are non technological. The Commission will need to reconsider how it might be possible to change the eligibility criteria to ensure that all these markets failure are addressed.

(4) Insufficient policy coordination:

We welcome that the Commission recognises the need to examine the issue of State Aid in the global context particularly in the area of innovation and Research and Development. Europe must be seen as a region which is willing to attract enterprises, irrespective of their size, which are at the leading edge of their technologies. It must be seen as willing to compete for such projects. This point was reinforced in the European Innovation Report launch. Mr Peter Haswell, the Managing Director of Piezotag Ltd noted that the international dimension is imperative because the wider the pool to search, the more likely originality will be found. The Commission is right to be concerned that

the EU is becoming less attractive for the location of R&D and innovation business units.

(5) General systemic inefficiencies:

We agree with this category. Again, we are not convinced that the proposals to grant state aid are sufficient to address these markets failures as many of them in this section are non technological.

(6) Insufficient flexibility and scope of support measures for new market requirements:

The evolution and needs of research and innovation require agility in the support measures available. Currently an increased focus is placed on multidisciplinary, convergence of sciences and technologies and introduction of disruptive technologies. The impact of these lead to new products, processes and services. Their development and lead-times during the pre-competitive stages are often greater than the traditional route of development. Support measures have been developed for the latter set of predictable evolutionary processes but are less equipped for the less predictable cycles of development. Examples are found in supporting research in the areas of biotechnology, pharmaceuticals, biopharma, medical devices and nanotechnology, where radical and converging innovation activities are essential. Support of spin-outs and high potential start-ups, whilst operating on licensened technology require a greater lead time to market than in the less high-tech industries.

Question 3) The measures described in this Communication provide ex-ante criteria on the basis of which State aid for innovation would be approved. Do you think that such an approach is adequate?

We welcome the general thrust of the Commission's proposals in developing ex ante criteria for the approval of State aid for innovation. Clear ex ante rules which provide clarity will add significantly to openness and clarity for both Member States and enterprises.

Question 4a) Stakeholders are invited to provide empirical evidence about the appropriateness of authorising State aid to large companies, in particular in connection with the objective of developing clusters around poles of excellence in the EU.

A recent study by Baptista and Swann² found evidence that firms located in strong clusters are more likely to innovate. Part of the reason for this may be the effects of location externalities on innovative performance. These location externalities are associated with the phenomenon of industrial clustering. One of the main reasons behind the existence and success of clusters is the pervasiveness of knowledge externalities or spillovers. It seems likely that spillovers, particularly those associated with new technological knowledge, tend to be geographically localised. The spillover effect also applies to innovation in the services sector³. Certain regions accumulate sources of spillovers, which in turn attract and support innovators. This adds a regional dimension to the cumulative nature of the innovation process, and this has implications for the balance between regional and national industrial R&D policy.

State aid support for Innovation (whether to small or large firms) should be considered in the context of the fact that the EU is currently behind the US and Japan in research and innovation performance. Gross expenditure on R&D as a percentage of GDP is 1.9% in the EU compared with 2.7% in the US and 3.1% in Japan. R&D functions within firms have also become more mobile with evidence of a significant increase in the level of internationalisation of RTDI⁴. Companies are looking at how they can segment the R&D value chain and in certain parts of the value chain create smaller, more autonomous, flexible and innovative units.

² Baptista, Rui and P Swann. 1998. Do firms in clusters innovate more? Research Policy 27:525–540.

³ Current Forfás policy study on innovation in the Services Sector.

⁴ Von Zedwitz & Gassmann (2002) conclude that the degree of internationalisation of R&D is rising in the EU (on average 30% in the 1990s), the US (from 8% in the 1980s to 12% in the late 1990s), and in Japan (from 2% in 1986 to an estimated 4-8% in 1992/1993)

This presents both opportunity and threat. Evidence shows that European firms are increasingly investing abroad. As recently as 1990 European pharma companies carried out 73 percent of their research and development within their own borders – by 1999 that percentage had dropped to 59 (Pharmaceutical Executive July 2003). On the other hand, the EU needs to develop the skills and infrastructures that will enable it to attract investment from outside the EU for Research, Development and Innovation functions. Competition for mobile investment has also increased considerably, and there is a real possibility that the EU will ultimately lose out to China, India, and Japan in terms of attracting significant Research, Development and Innovation functions.

We would be concerned if state aid to large companies was limited to the objective of developing clusters – this may often be the result (as we are aware of evidence that clusters develop around a strong anchor institution, including for example, a large company as with Ericsson in Kista in Sweden, Nokia in Finland and Qualcomm in San Diego, US): but there are many other benefits in terms of knowledge spillovers.

Further evidence is also available from the US. The Advanced Technology Programme (ATP) in the USA has been for years funding both large and small enterprises. Recent impact evaluation of the programme has provided the following justification for funding large enterprises⁵:

- The participation of large firms increases technology development opportunities across a broad spectrum of technology areas and industries.
- In single-company projects their participation enables ATP to support industry needs across the full spectrum of technology areas. Projects in Materials and Chemistry, in particular, often require extensive manufacturing and materials processing facilities that small firms do not have. Biotechnologies aimed at human therapeutics often require considerable technology development beyond ATP, extensive regulatory testing and trials, and production and distribution licenses with larger companies before they can make a major impact.

⁵ ANALYSIS OF ATP IMPACTS, Factsheets Provided by the ATP Economic Assessment Office, NIST, National Institute of Standards and Technology - Technology Administration, U.S. Department of Commerce, April 2005.

- Large firms are active in joint ventures.
- Large firms in joint ventures partner with all types of organizations
- Large firms offer critical advantages in certain industries and technology areas
- Large firms bring technical advantages related to size and scope and commercialization advantages through marketing and manufacturing capability.
- Large firms gain access to new technologies while small firms find opportunities to integrate their technologies into larger systems and build a customer base.

ATP is one of the most extensively evaluated public funding schemes in the world.

Question 4b) Do you think that the Commission should develop ex-ante rules allowing State aid for Innovation to the benefit of large companies, or that such type of aid should always be subject to a case-by-case stricter analysis on the basis of a notification to the Commission?

We support clear ex ante rules allowing State aid for innovation by large companies. The adoption of a case by case approach would inevitably lead to lengthy examination processes which would militate against innovation projects, which, by their very nature, require to be implemented speedily to stay ahead in the market. A case-by-case stricter analysis would, based on the approach taken in the Multisectoral Framework for Large Investment Projects, render innovation aid for large companies virtually impossible.

Question 4c) As far as support to innovation (or other state aid) is concerned, would it be appropriate to distinguish between different categories of large companies? If so, on the basis of which criteria? And for which purpose?

Introducing more complexity in the guidelines would be counterproductive. Clear ex ante rules would be favourable. In particular the introduction of market share criteria for example, would, based on the approach taken in the Multisectoral Framework for Large Investment Projects, render innovation aid for large companies virtually impossible.

Question 5) Stakeholders are invited to provide empirical evidence about the appropriateness of authorising State aid to non-technological innovation, notably in services sectors

Services are a major contributor to economic growth in Europe and an increasingly important source of innovation. Business activities and subsequently also research and development of industrial companies are increasingly focused on providing services. Therefore it is difficult to understand the Commission's economic, social, political or environmental rationale for limiting State aid for innovation to technological innovation only. On the contrary, such a limitation could seriously endanger Europe's competitiveness in the long run.

There are undoubtedly difficulties in differentiating between non-technological innovation and normal business operations. This is true especially in the case of small (service) companies, which do not have systematic structures and processes for innovation.⁶ Defining innovative activities and even R&D e.g. in services is not straight forward. However, it can be done.

The OECD Frascati manual⁷ identifies the problems of defining R&D and innovation in services. The recently updated OECD Oslo manual⁸ defines four types of innovation:

- Product innovation (including services)

⁶ On the other hand, as it has been identified in the context of technological innovation, small companies are the least likely to cause any market disturbances. Larger service producers on the other hand are forced to organise their innovative activities for efficiency and quality. This means that their innovative activities are likely to be more distinguishable.

⁷ Frascati Manual. Proposed standard practice for surveys on research and experimental development, OECD, 2002

⁸ The 3rd and latest edition of the OECD Oslo manual has been published 27 Oct 2005 <http://www.oecdbookshop.org/oecd/display.asp?lang=EN&sf1=identifiers&st1=922005111p1>.

- Process innovation (including service production processes)
- Marketing innovation (introduced in the latest update)
- Organisational innovation (introduced in the latest update)

The manual provides definitions for each of these types and for innovation and innovation activities. It also provides a list of changes which are not considered innovations and examples highlighting different types of innovation and how to distinguish between different types of innovations. Furthermore, the OECD Oslo manual contains definitions for various types of innovative activities. The most important of these in this context are definitions for other preparations for product and process innovations, preparations for marketing and organisational innovations, training and design.

The rules for State aid for innovation should make use of the extensive work that has been done to prepare these definitions in defining the eligibility of the related innovative activities for State aid.

Forfás, the national policy advisory board, for enterprise, trade, science, technology and innovation in Ireland, is completing a study on innovation in the services sector, the first amongst EU countries. The study is expected to be published during the first quarter of 2006. Some preliminary information shows that innovation in the services sector contains elements that are somewhat different to those found in the manufacturing sector:

- Business concepts and models;
- Service delivery – customer interface
- Innovation process and bringing services products to market;
- Peoples' and managements' skills
- Innovation environmental attributes including critical mass, knowledge resources and operational environment.

Question 6) Should the rules on State aid for innovation include regional bonuses for cohesion purposes? Should they differ according to the geographical situation of the region, irrespective of cohesion issues?

The need for innovation aid is critical across all sectors, all regions and all sizes of enterprises within the Community. This has been clearly identified in various reports already published by the Commission. The need for more innovation is clearly set out in the Lisbon Agenda.

Innovation aid as such is clearly a horizontal aid and should be available to all sizes of firms throughout the EU, it is more important to focus supports on substantive and genuine innovation than on distinguishing between EU regions, all face the same global competitive pressures. Bonuses should be provided on a) the level of innovation in the project, b) firms size, c) joint project with other firms, d) joint project with the education sector, e) willingness to share results of aided projects with others. Also, there is justification for increased aid intensities or a bonus intensity level for organisations which recruit a highly qualified researcher and/or engineer from another EU member State. Such an incentive would further promote EU cohesion.

Question 7) Are some types of aid more suited to specific situations and specific innovation activities (ex: tax rebates, secured loans, repayable advances)?

It is difficult to be precise as the type of incentives will depend on the type, age, and sector location of the firm to be aided. It would also depend on the financial resources of a member state to provide such support as different incentives place different demands on the Member State's Exchequer. We believe that a range of different types of aid should be allowable leaving it to the prerogative of the Member State to decide which is the most appropriate to meet their respective needs.

Question 8) Do you agree with the proposed criteria to define innovative start-ups, with the approach of not defining eligible costs, with the amounts of aid and cumulation rules?

We welcome this proposal as it clearly addresses the issue of access to finance for innovative start-ups which have a particularly difficult time in accessing seed and very early stage capital from the private investors/business angels.

However, we have some concerns with the Commission's proposals;

Start-ups Criteria.

The definition of a start-up date needs to be clearer to give legal certainty. Start-up period can be different for different technology areas

For example, in the biotechnology and life sciences sectors there is a longer lead-time for start-ups. Also as nanotechnology is a new emerging enabling technology, a lot of innovation cannot be ready for the market, however it is important in a longer term process. While this variation in start-up periods may be difficult to define, some recognition must be given.

Innovativeness Criteria

i) Proof of innovativeness

This definition would include an R and D start-up enterprise intending to develop a new process and would focus on those which are technologically based. Recognition needs to be provided within this definition that innovation can incur in the service sector and in low technology enterprises. In our opinion, the proposed definition is too restrictive.

ii) R and D expenses as a percentage of overall expenditure

By setting a high percentage of 15% would not be seen as an incentive and might exclude those enterprises which need to be incentivised. We would suggest 10%.

The proposal to have an exemption of social security and other local/regional taxes needs further consideration. The requirement to have these reinvested in

the firm would be virtually impossible to monitor. The document is unclear as to whether this exemption relates to all workers or just those who are involved in R and D/innovation. The repayable advances proposal is unclear.

The provision that start-ups that meet the proposed eligibility criteria would receive €1m not linked to any specific eligible costs over a three-year period is a positive proposal. We would see this as a form of horizontal aid and not linked to any regional aid map considerations. We are concerned about the limitation of this aid to only €1m. Highly innovative enterprises in the biotech or pharma would require amounts in excess of €1m. An amount of €2m would appear to be more appropriate. We are also concerned at the 3 year limit which we believe is too short. Development capital as set in this document is needed over a longer period. In our opinion, the time period should be extended to 5 years.

Question 8a) Do you think that different eligibility criteria should be established for high-tech sectors like biotech and pharmaceuticals which have long time-to-market and product development cycles?

It would be important to recognise that there is a need for a longer start up lead-time in excess of 5 years for particular priority sectors. In the case of biotech and pharma it should be in the region of 10 years.

Question 9) Beyond the proposed rules, empirical arguments are welcomed that demonstrate the need for State aid:

i) **for start-ups independently of the innovativeness criterion,**

The Commission has clearly recognised the market failure at the seed and very early stage. This was proposed in the draft Regional Aid Guidelines which was welcomed by Ireland. This type of development capital is a precursor to the support which may become available through SARC type interventions at a later stage. In proposing such aid for start-ups the Commission recognises that SARC type interventions have not provided the solution to all the needs of start-up enterprises. It has addressed the need of those projects where the private

investor recognizes the possibility of investing in start-ups, which have significant growth opportunities and where there is the possibility of high returns. The SARC has also facilitated the leveraging of private sector finance for these types of start-ups. However, this leaves a market failure for those seed/very early stage start-ups which are still at the proof of concept/seed corn stage and which may or may not be high tech start-ups but where neither the banks nor private investors are willing to invest. Such projects have to fall back on family and friends for their investment requirements. In many instances, these resources are very limited. This market failure is not limited to regions designated for regional aid; it is a market failure which may be applicable to new enterprise start-ups in the SME sector generally. We agree with the Commission's proposal in this consultation document which recognises that this seed and early stage finance stretches across regions and not just assisted regions. We strongly support this proposal but have a concern about the amount of €1m and the time period of 3 years as already stated above.

ii) **for innovative SMEs established for more than [5 years].**

It would be important to recognise that there is a need for a longer start-up lead-time in excess of 5 years for particular priority sectors. In the case of biotech and pharma it should be in the region of 10 years.

3. TACKLING THE EQUITY GAP TO INCREASE THE PROVISION OF RISK CAPITAL IN THE EU

The Commission already recognises that the current State Aid and Risk Capital Guidelines are too restrictive. There is a need to revise the tranche size which are currently too small and do not reflect the needs of innovative and technologically advanced firms. There is also a need to consider the fact that the number of tranches an enterprise might require could extend for many years even beyond 5 years particularly in the Biotech and Pharma sectors.

The Commission should reconsider whether it is appropriate to continue to regard an aid element in any Risk Capital initiative. This, in our opinion, undermines the objectives of any commercially based Risk Capital initiative. The open tender system combined with the independence of the Private Sector Fund Manager's decision is the fundamental basis of ensuring that the aid element, if any, is at such a minimal level as to be totally insignificant. By insisting that an aid element is to be included, then this, in our opinion, will undermine the independence of the Private Sector Fund manager. Of greater concern is that it may dampen the enthusiasm of the private sector to set up such schemes and make them unattractive. The decision of DG Competition on the Enterprise Capital Funds is an ideal template for future guidelines.

We are very concerned about the negative impact of the SME definition on business angels. The current rules causes enterprises to lose their SME status if they are more than 25% owned by a business angel holding more than €1.25m stake (This is not so for a venture capitalist). This will have an impact on the ability of business angels to protect their investment in enterprises seeking further capital investments. As a result, business angels could be deterred from investing at the lower end.

Question 10) Do you think that other types of State aid apart from those currently granted in respect of risk capital are required in order to help European SMEs grow beyond the start-up phase? If so, which ones?

The Commission's proposal to consider specific provisions for post seed stages is a very positive move as studies in Ireland have shown that severe difficulties exist at post seed and very early stage. The proposal in point 45 is critical and will address the lack of capital at the post seed stage. This gap has appeared in Ireland, at the post seed stage. The proposal of not cumulating the proposed aid with aid given under SARC will be a significant driver in addressing the funding gap at this stage.

Question 11) Do you think that these provisions would produce the expected effects in terms of encouraging SMEs to launch innovative

products in the market? If not, what changes should be made to these rules?

Section 3.3 outlines the proposed characteristics of supports to encourage technological experimentation and the risks of launching innovative products. We believe such support should not be restricted to 'technological' experimentation and 'products', it should be extended to include business model experimentation and innovative services.

In addition, there is no provision in the proposed rules for supporting the adaptation of existing knowledge and Intellectual Property in order to bring new products, processes or services to market. Adaptation of existing knowledge and IP is a key form of innovation, and should not be excluded under the guidelines.

We agree with the expanded eligible costs.

We do not agree with the proposal in this paper to add a fourth category to the Research and Development State aid Framework. It would add further complexity for Member States in determining where projects would sit between the innovation category stage and the pre competitive stage. We would propose a revised and more inclusive definition for the pre competitive development stage which would include both technological and non-technological innovative activities. This would provide simplicity, clarity and greater transparency. Furthermore, this would resolve the issue of the non-inclusion of large firms as proposed in the Commission's proposals. There may need to be a clear definition for the incentive effect for large firms to address the Commission's concern about large firms.

We do not agree with the proposed level of aid intensity grant of 15% which is too low and will not be a significant incentive for addressing the market failures outlined in the document. We are proposing that innovation eligible costs should be incorporated under the pre competitive development category of the Research and Development Framework with its corresponding aid intensities.

Question 12) Is there evidence that these provisions should be extended to large companies? Do you think that notification should be required for measures granting substantial amounts of aid to individual firms or individual sectors? If yes, above what amount? What empirical evidence should then be requested by the Commission?

Restricting innovation aid to SMEs will increase the risk of increasing mobility of large firms outside of Europe. This would be a serious matter for the Community. Large firms are an essential component in the diffusion of new and innovative technologies particularly when they collaborate with Universities and other educational bodies as well as SMEs.

The provision of clear definitions of innovation and eligible innovative activities (as proposed in the response to Q6) will allow for member states to develop national strategies and closely monitor and evaluate those strategies to ensure that state aid would be targeted to the designated projects and activities.

As outlined above large firms are an important and integral part of the innovation process in virtually all sectors, so they cannot sensibly be excluded. With regard to notification requirements, these should have realistically high thresholds, simple and quick procedures (a system similar to the current Multisectoral framework or even the notification process required for R&D projects would in effect create an impossible situation in terms of aiding worthy innovation projects involving large firms). Above all clear, simple and unambiguous rules/ limits would help speed up any required notification process.

Question 13) How would you regard specific support for innovation intermediaries which merge or develop a joint venture to reach critical mass in a technological field of specialisation? Should investment aid be permitted in this context? If so, on what conditions? What other measures could be envisaged?

We believe some clarification and elaboration is required with regard to the definition of 'innovation intermediaries'. In particular, we would suggest that enterprise networks and mentors qualify as such intermediaries.

Intermediary function should be address widely encompassing activities from the research bench, through bring to market, dissemination and facilitation and the coordination of such actions at national and trans-national levels.

4. A SUPPORTIVE BUSINESS ENVIRONMENT FOR INNOVATION

We agree with the proposals set out in this section as it clearly addresses the issue which has perplexed the minds of both the Commission and Members when trying to develop initiatives to establish Business Incubators/Innovation Intermediaries. The recent decision on the German Technology Centres showed that the Commission sees such initiatives as essential supports for supporting SMEs particularly in the field of innovation.

We agree with the proposal that the innovation intermediaries should not be regarded as beneficiaries of aid as long as their activities are not market oriented and do not create selective advantages for the benefit of selective undertakings.

We would be concerned about being over prescriptive on the business advisory services and the provision of facilities. This would be difficult to monitor. It may be more suitable just to exclude specific activities.

The proposal of the voucher system is a positive recommendation.

The proposals encouraging training and mobility will address some of the needs of the SMEs regarding training and mobility and it will also encourage better linkages between SMEs and PROs and educational institutes.

Question 14) Is there evidence that the recruitment by SMEs of other types of highly skilled personnel should be also aided?

There is a clear market failure issue here for SMEs. It is imperative that the exchange of research staff by large firms and public research organisations/universities/institutes of technologies is facilitated. This will not be accomplished by the market on its own. The critical objective to achieve here is the interchange of employees of large firms, SMEs and universities and institutes of technologies.

The Forfás study⁹ on technology absorptive capacity of Irish SMEs demonstrated that the recruitment of technical and legal skills is important. In the current Forfás policy study of innovation in the Services Sector, the hiring of the just-in-time specialist or employees (short contract) is critical. Furthermore the nature of off-shoring and outsourcing provides a different recruitment dynamic, which is key to the development of services companies. This forms a key part of the globalisation of a company's workforce. State Aid needs to facilitate this new approach to recruitment in line with the development of new business models and increasing competitiveness at a global scale. This is not possible under the existing state aid rules.

Question 15) Should the Commission adopt specific rules for cases where a researcher chooses not to return to his/her home university or where the university no longer intends to hire him/her back?

We are unable to recognise any advantage with this proposal.

Question 16) What definition of cluster/clustering activities should be followed and what criteria should be used to distinguish clusters from the broader category of innovation intermediaries?

While we welcome much of the proposals regarding the development of poles of excellence, we believe the scope of the proposals are too narrowly focused on close physical clusters and close proximity collaboration. We would advocate the recognition and inclusion of virtuality in clusters, recognising that much

innovation is the result of information flows. Clusters are regional geographically mapped entities. If Ireland is to be considered as a single region, than virtual clustering is essential. Furthermore, virtual clustering promotes cross-border clustering of activities.

Subcontracting/Cooperation and Collaboration

The current guidelines for research and development recognise and encourage collaboration as a positive and beneficial method of encouraging cross fertilisation of research and development ideas. However, SME block exemption which now includes research and development specifically separates subcontracting from effective collaboration. This amendment in, our opinion, is not a positive one. It appears that it is now possible to interpret that, in the SME block exemption, subcontracting is not effective collaboration and thus not eligible cost of research and development. This is too simple a position as the distinction between effective co-operation and subcontracting is not always straightforward as an element of risk sharing can be involved for both contracting parties. It would be more logical to allow subcontracting as eligible cost whenever it can be justified as an integral part of a project whether it is for innovation and/or research and development. Secondly, sub contracting is a more of collaboration and in many cases, is the first step towards some form of formal collaboration. This must be recognised and supported in any changes in the guidelines in particular with regard to innovation.

Question 17) Do you think that State aid should be allowed to promote European centres of excellence? If so, what type of State aid, for what reasons, and subject to what conditions? What other, possibly better, measures could be envisaged?

There is a need to clarify whether this includes:

- purely a single physical Centre entity in a singular geographical location,
AND / OR

⁹ Forfás. 2005. Making technological knowledge work. A study of the absorptive capacity of Irish SMEs.

- a central entity with a consortium of sub-poles at various national levels
AND / OR
- a central coordinating entity with a virtual network of groups

State aid should be considered on the level of national participation and likely benefits, strengthening national capability and capacity in international good practice.

Question 18) Are additional criteria needed to avoid State aid being fragmented and to encourage the concentration of resources in a limited number of poles of excellence?

No comment

Question 19) What are your views more generally about the need for additional provisions for infrastructure that supports innovation (e.g. in the field of energy, transport etc.)?

Question 20) Do you think that large firms should be entitled to State aid, e.g. to establish research facilities in a European pole of excellence? Should the Commission try and develop specific criteria to control such State aid? What type of economic evidence should be requested to analyse the necessity of such State aid?

Large firms are critical to Europe's competitiveness and its ability to compete in the global economy. Developing clusters of innovation requires, as already stated, an international dimension. Such internationalisation should be encouraged. One of the methods to accomplish this would be to encourage large firms to participate in such ventures. It is unlikely that they would do this without an incentive. We would disagree with point 66 where it is proposing no ex ante rules for large firms.

We would suggest that the Commission consider the benefits of supporting Multinational firms in establishing research facilities in European poles of excellence. These include:

- The recruitment of European researchers,
- Collaboration with indigenous firms and higher education institutions,
- Spill-over externalities from participating in Multinational Corporation research.