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Community rules on state aid for innovation

vade mecum

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1. INTRODUCTION

In Lisbon in 2000 Heads of State and Government committed the European Union to a ***new strategic goal*** for the next decade: *to become the most competitive and dynamic knowledge-based economy in the world*. The Council has subsequently emphasised the importance of innovation as the main source of competitiveness and economic growth, and its key role in the European Research Area.

The level of innovation is affected by the competitive environment in which firms operate. In a recent Communication on "A Pro-active Competition Policy for a Competitive Europe"[1] the Commission points out that a "competitive and open internal market provides the best guarantee for European companies to increase their efficiency and innovation potential." The Communication on Industrial Policy in an enlarged Europe[2] noted that "European Industry needs to become more innovative. Every sector and activity needs to be constantly initiating, refining and improving its products, services and processes […] Competitiveness and economic growth are also increasingly based on innovating, that is, on the development and economic exploitation of new or improved products and services, and the optimisation of business processes. Innovation continuously redefines markets and opens up new sectors of economic and social activity. It concerns every industrial sector, both old and new.

While fostering competition and market opening is generally considered as the most efficient instrument to stimulate the innovation process, situations exist in which the market fails to deliver the incentives necessary to reach the desirable level of activity contributing to this process in view of the social returns it generates. In such cases government interventions may be appropriate to correct existing market failures, bearing in mind that the benefits of State intervention must always be assessed against its costs, particularly in terms of distortion of competition.

In this context, the present Vade mecum seeks to provide a practitioners' guide, which describes the possibilities Member States currently have outside the specific sectors to promote innovation through State aid without distorting competition to an extent contrary to the common interest. Moreover, the Commission intends to produce in 2005 a Communication in which the need and potential to expand the possibilities to aid innovation will be explored.

2. DEFINITIONS OF INNOVATION

Definitions of the term "innovation" abound and there is for the moment no consistent definition of the term, which can be applied horizontally throughout all sectors. Thus, in the economic literature some definitions focus primarily on technological innovations, whereas others include organisational and presentational innovation of a product or service. Some definitions distinguish between firm level, local or world-wide innovation others between innovations in different types of sectors.

[1] COM(2004) 293 final.
[2] COM(2002) 719 final.

In the Commission Communication on Innovation Policy[3], innovation is defined broadly as "the successful production, assimilation and exploitation of novelty in the economic and social spheres".

For the purpose of statistics, the more harmonised definition of Technological Product and Process (TPP) Innovations has been introduced.[4] A TPP innovation has been implemented if it has been introduced on the market (product innovation) or used within a production process (process innovation). TPP innovations involve a series of scientific, technological, organisational, financial and commercial activities. The TPP innovating firm is one that has implemented technologically new or significantly technologically improved products or processes during the period under review. The minimum requirement is that the product or process should be new (or significantly improved) to the firm (it does not have to be new to the world). TPP innovations relating to primary and secondary activities are included, and so are process innovations in ancillary activities.

For the purpose of State aid it has not at this stage been possible to arrive at an unambiguous, legally applicable and economically sound definition of innovation that applies to all sectors[5]. However, the existence of innovation-specific market failure may provide guidance for identifying measures which may be justified for the purpose of fostering activities which contribute to the innovation process, e.g. public support to R&D. Therefore, despite the absence of a uniform definition of innovation, Member States have been able to support innovation through State aid, since in many cases the State aid rules allow for interventions which are targeted at market failures that particularly hinder innovative activities.

3. OVERVIEW OF STATE AID RULES APPLICABLE IN THE FIELD OF INNOVATION

3.1 Basic substantive rules

Before turning to the market failures it is useful to have an overview of the current State aid rules which can be used to promote innovation. The basic substantive rules on the control of State aid in the EU are set out in Article 87 of the EC Treaty. This article provides that State aids are in principle incompatible with the common market. The principle of incompatibility covers measures that meet all the criteria listed in Article 87(1), i.e. they: a) involve a transfer of State resources; b) entail an economic advantage for undertakings; c) distort competition by selectively[6] favouring certain beneficiaries; and d) produce an effect on intra-Community trade. Horizontal measures that apply throughout the economy do not constitute State aid as they are not considered selective, even if in practice some beneficiaries or sectors of the economy may receive a proportionally greater advantage.

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3 COM (2003) 112 final.

4 This was proposed by the OECD, the European Commission and Eurostat in guidelines for collecting and interpreting technological innovation data (the Oslo Manual). The aim was to establish a set of coherent and, as far as possible, precise definitions of different types of innovations. This definition is also the one which is used in the Community Innovation Survey.

5 However, sectoral application in the field of State aid to innovation does exist: the framework on State aid to shipbuilding provides for specific measures in relation to aid for innovation, see OJ C 317 30.12.2003, p. 11. This vade-mecum does not deal with the sectoral aspects of innovation but only with its horizontal aspects.

6 Selectivity could be with respect of the type of firms (e.g. SMEs), their location (e.g. a specific region) or their sector of activity. In the extreme, aid could be addressed at one specific firm.

The principle of incompatibility of State aid with the Treaty is not, however, absolute. Article 87 paras. (2) and (3) contains a number of exemptions under which State aid may be considered acceptable by the Commission. In particular, Article 87(3)(c) states that the Commission may consider compatible with the common market "*aid to facilitate the development of certain economic activities … where such aid does not adversely affect trading conditions to an extent contrary to the common interest*". In exercising its wide discretionary powers for the application of this exemption, the Commission balances the necessity and the proportionality of the aid measure in achieving a Community objective versus the distortion of competition brought about by it. To publicise its approach and the criteria used in this assessment, the Commission has issued a number of documents based on Article 87(3)(c) in the form of regulations, communications, notices, frameworks, guidelines and letters to Member States with regard to various categories of aid based on the form of the aid, its purpose, the size of the undertakings, their location, or the sector of the economy.[7]

3.2 Measures not constituting State aid

As seen above, a measure constitutes State aid only if it meets the cumulative criteria laid down in Article 87(1). The Commission has issued a few documents to clarify when it considers that one of these criteria is not met, and therefore a certain measure does not constitute State aid. The following are the main relevant ones for Member States devising measures in the field of innovation.

De minimis: Regulation No 69/2001[8] provides that small amounts of up to € 100,000 per beneficiary undertaking over any three-year period do not constitute State aid within the meaning of Article 87(1). This is based on the assumption that they do not have an effect on competition and trade between Member States. This also means that such amounts may be granted by Member States in addition to State aid permissible under any other relevant rule. *De minimis* amounts may be granted in any form (grants, soft loans, guarantees, tax breaks etc.) and for any objective.

Tax measures. The Commission notice on the application of the State aid rules to direct business taxation[9] focuses on the form of aid rather than on its objective. The notice confirms that State aid rules apply to all aid measures whatever their form, and therefore also to tax measures. It clarifies the distinction between selective tax measures that constitute aid and general measures that are open to all economic agents and do not confer discretionary powers on the tax administration. For instance, measures pursuing general economic policy objectives through a reduction of the tax burden on certain production costs (e.g. R&D) do not constitute State aid if available for all economic agents throughout the economy. The notice also explains under which conditions a certain tax measure does not constitute State aid as it is justified "by the nature or general scheme of the tax system". If a tax measure does constitute aid, the assessment of its compatibility with the Treaty is carried out according to the criteria

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7 For further information on these documents see http://europa.eu.int/comm/competition/state_aid/legislation. In addition, some of the rules are summarized in Annex 2.

8 Commission Regulation (EC) No 69/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to de minimis aid, OJ L10, 13.01.2001, pp. 30-32.

9 Commission Notice on the application of the State aid rules to measures relating to direct business taxation, OJ C384, 10.12.1998, pp. 3-9. See also the Report on the implementation of the Commission notice on the application of the State aid rules to measures relation to direct business taxation, COM (2004) 434 final, 09.02.2004.

set out in the various frameworks and guidelines mentioned below, in the same way as any other form of aid.

State guarantees. The Notice on State aid in the form of guarantees[10] explains the principles applied by the Commission in assessing whether State guarantees constitute State aid within the meaning of Article 87(1). Among the criteria required to exclude the presence of an advantage for an enterprise are that the guarantee is linked to a specific financial transaction, covers less than 80% of the amount of the loan and is not granted to enterprises in financial difficulty. Furthermore, the terms of the guarantee must be based on a realistic risk assessment and must reflect the market price for a similar guarantee. If the relevant criteria are not met and there is a State aid, the compatibility with the Treaty is assessed under the relevant rules contained in the various documents described below.

3.3 Relevant rules on horizontal State aid and permissible instruments[11]

A number of documents setting out the Commission's practice in the assessment of 'horizontal' or cross-industry State aid applicable to any sector and any region are also relevant in the field of innovation. They allow a wide variety of permissible instruments for granting aid for innovation.

SME Aid. Regulation No 70/2001[12] allows aid to SMEs for tangible and intangible investments as well as for consultancy from outside providers and for costs of first participation in a fair or exhibition. Permissible instruments are grants, soft loans, tax deductions and exemptions, and guarantees. Furthermore, as a result of a recent amendment[13] the Regulation also covers aid for research and development costs borne by SMEs as defined in the framework for State aid for research and development (see below in the category "R&D Aid"). The size of the beneficiary enterprise is also relevant, as the maximum level of aid is more generous for small firms than for medium-sized firms.[14]

R&D Aid. The Community framework for State aid for research and development[15] allows aid to companies that undertake research and development projects that they would not have undertaken without the State support. Aid intensity depends in particular on how far the research is from the market, and ranges from 100% for fundamental research, to 75% for industrial research and 50% for precompetitive development including top-ups (e.g. for projects involving SMEs). Permissible instruments are grants, soft loans, tax reliefs as well as State guarantees and loans that are reimbursable in case of success of the research activity. Innovation in the R&D framework does not constitute a separate category of R&D, but many

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[10] Commission notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees, OJ C71, 11.03.2000, pp. 14-18.

[11] See Annex 2 for a more detailed description of the rules in section 3.3.

[12] Commission Regulation (EC) No 70/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to State aid to small and medium-sized enterprises, OJ L10, 13.01.2001 pp. 33-42.

[13] Commission Regulation (EC) No 364/2004 of 25 February 2004 amending Regulation (EC) No 70/2001 as regards the extension of its scope to include aid for research and development, OJ L63, 28.2.2004, pp. 22-26.

[14] It must also be noted that the new definition of SME that will enter into force on 1.1.2005 also contains a definition of micro enterprises: Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of small and medium sized enterprises, OJ L124 20.5.2003, p. 36 (Article 2(3)).

[15] OJ C 45, 17.02.1996.

costs relating to innovation activities fall within the existing categories for which R&D aid may be allowed.

Regional Aid. The Guidelines on national regional aid[16] are reserved for particular regions and have as their specific aim the development of those regions. Regional aid is designed to develop the less-favoured regions by supporting productive investment (initial investment) and job creation. It promotes the expansion, modernisation and diversification of the activities of enterprises located in those regions and encourages new firms to settle there. The granting of such aid is conditional on the maintenance of the investment and the jobs created during a minimum period. The form of the aid is variable: grant, low-interest loan or interest rebate, government guarantee, tax exemption, reduction in social security contributions, amongst others. The level of the aid is defined in terms of intensity compared with reference costs (eligible expenditure). Eligible expenditure may also include certain categories of intangible investment (e.g. patents, operating or patented know-how licenses, unpatented know-how) up to a limit of 25% of the standard base in the case of large firms, subject to conditions that ensure that they remain associated with the recipient region.

Risk capital aid. The Commission communication on state aid and risk capital[17] recognises a role for public funding of risk capital measures limited to addressing identifiable market failures. Public authorities, under certain conditions, can use public capital in order to increase the supply of risk capital. In general, the Commission assesses the existence of State aid at the level of the investors, the intermediary vehicle (fund) and the enterprises invested in. The assessment also takes into account whether the proposed measures encourage market investors to provide risk capital to target enterprises and are likely to result in decisions being taken on a commercial basis. The forms of incentives considered include the constitution of investment funds, grants to venture capital funds to cover part of their administrative costs, guarantees to risk capital investors and fiscal incentives to investors. However, the communication is not applicable in the case of measures that provide capital to an enterprise solely in the form of loans.

Employment aid. Regulation No 2204/2002[18] allows aid for the creation of jobs (including for instance the recruitment of early graduates), the recruitment of disadvantaged or disabled people or coverage of additional costs of employing disabled people. Permissible instruments are grants, soft loans, tax deductions and exemptions, and guarantees relating to wage costs (including compulsory social security contributions).

Training aid. Regulation No 68/2001[19] allows granting of aid for training performed by the beneficiary undertaking or by public or private institutions on its behalf. Permissible instruments are grants, soft loans, tax deductions and exemptions, and guarantees.

Environmental aid. The environmental aid guidelines[20] stipulate that State aid for R&D in the environmental field is subject to the rules set out in the Community framework for State aid for research and development. However, these guidelines may be applied for other innovative

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16 OJ C 74, 10.03.1998, p. 9 ff.

17 OJ C 235, 21.08.2001, p. 3 ff.

18 Commission Regulation (EC) No 2204/2002 of 12 December 2002 on the application of Articles 87 and 88 of the EC Treaty to State aid for employment, OJ L337, 13.12.2002, pp. 3-14.

19 Commission Regulation (EC) No 68/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to training aid OJ L10, 13.01.2001 pp.20-29.

20 Community guidelines on State aid for environmental protection, OJ C 37, 3.2.2001, p. 3.

State aid measures in the environmental field provided that their criteria are met. In such cases, permissible instruments are in particular grants and tax reductions or exemptions.

Aid approved under Article 87(3)(c). Even if an aid measure cannot be exempted under any of the above specific State aid documents, the Commission might approve a measure directly on the basis of Article 87(3)(c). However, this would only be possible in those cases in which it can be demonstrated that – while the application of existing frameworks is not appropriate – the aid is, nevertheless, necessary to achieve a fundamental Community objective (e.g. for the promotion of innovation Articles 157 and 163 of the Treaty are relevant), proportional to its aims and trade between Member States is not affected to an extent contrary to the common interest.

4. TARGETING MARKET FAILURES IN THE FIELD OF INNOVATION

The innovation process suffers from a number of market failures that may lead to an inefficient allocation of resources. In particular, these market failures appear to hinder investment in innovation by SMEs. Public interventions in the field of innovation aim at mitigating these market failures, typically by altering the supply of inputs or by influencing the choice of companies to perform R&D and to innovate. However, there is a wide range of different policy instruments which can ameliorate the conditions for innovation activities. Among the various forms of government intervention, only those that grant selective advantages to specific firms or economic activities by means of State resources constitute aid.[21] The assessment of State aid to innovation is particularly complex since innovation is at the very heart of the competitive process and public intervention may significantly alter the relative position of competitors. Therefore it should be carefully assessed whether or not State aid is at all necessary to mitigate a market failure, given the competition distortion that it generates and the scope for alternative measures which do not involve State aid.

The sections below describe the types of market failure most commonly identified in the field of innovation, the instruments involving State resources that are generally envisaged to address them[22] and the State aid rules that are relevant to the assessment of those instruments. In addition, a selection of cases approved by the Commission in the field of innovation is described in Annex I.

4.1 Public good and externalities

The most direct market failure linked to innovation relates to the characteristics of what the economic literature describes as ‘public goods’. Knowledge and ideas are, to a large extent, non-excludable, meaning that it is often difficult to monitor or exclude the use of the good and charge an appropriate price. As a consequence, the innovating firm cannot fully appropriate the returns of its investment and may give up worthy projects. The difficulty of appropriating the returns will in general be greater for innovative activities that are close to basic research as opposed to innovation which is closer to the market. The problem may also be greater for SMEs, since they generally have fewer resources to protect their innovations through e.g. patents.

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21 Commission services are seeking to clarify an improve awareness of the forms of public support to research that cause no distortion to competition and therefore do not constitute State aid.

22 It should be noticed that some of these instruments do not involve public funding and do not constitute State aid.

On the other hand, since knowledge and ideas are also non-rival goods, the consumption or use of the good by one individual does not reduce the value of use or consumption of the same good by other individuals. Due to its public good characteristic, innovation typically generates positive externalities (spillovers) that are captured by other firms and benefit society at large. The most common example of externality arises when innovation in one product lowers the production costs of other products.

The factors described above drive a wedge between the social and the private benefit of innovation, which leads to an inefficiently low level of private investment in R&D and innovation activities. In order to bridge the gap, this may require actions from authorities to increase the private benefit through either State support or protection of the innovation[23]. However, as regards the State support measures, the positive effect must be carefully balanced with the possible negative effects due to distortion of competition: the principle that public funding is less desirable in case of activities close to the commercialisation stage remains valid.

Instruments	**Relevant State aid rules**
Support to performing R&D firms	R&D framework; Notice on business taxation (for tax measures)
Assistance to enterprises in the patenting process	SME BER, R&D Framework
Funding of shared knowledge (partnerships industry/university)	R&D Framework
Competitive funding of research and innovation (grant programmes)	SME BER, R&D Framework
Spin-off of enterprises	Possible approval directly under Art. 87(3)(c) (e.g. Case N412/2002)
Aid to innovative and environmentally sound products, services and processes	Environmental aid guidelines, R&D Framework
Aid to innovation investments	Regional aid guidelines, R&D Framework, SME BER
Aid to incubation facilities	Regional aid guidelines, SME BER, possible approval directly under Art. 87(3)(c)

23 In cases where negative externalities of standard technologies are not internalised, state support might need to compensate also for this distortion. This aspect is e.g. taken into account in the Community guidelines on State aid for environmental protection in point 63 and 64. OJ C 37, 03.02.2001, p. 12-13.

Illustration: Case N 525/01 – Ireland - Cluster Scheme Incubator

This scheme aims at the promotion of investment in the creation of incubators for small start-up firms operating in the high-technology sector. It is intended to cover the gap in the supply of premises with specific telecommunication infrastructure and flexible rental arrangements. The aid is in the form of grants to property developers to encourage them to build specific premises for eligible SMEs, chosen through a tender procedure. The developers then rent the premises to the SMEs in the designated areas for a price lower than market price, and therefore the aid is passed on to the SMEs. However, it is not excluded that part of the aid is retained by the property developers themselves.

As for the property developers, the Commission considered that the scheme constituted State aid under Art. 87(1) Treaty. However, it authorised the scheme under the Guidelines on Regional aid, since the sites covered by the scheme were all located in assisted areas and all the other conditions laid down in the guidelines were fulfilled. As for the SMEs, the Commission did not consider it State aid as the Irish authorities ensured that the maximum benefit for them would be within the limits of the *de minimis* Regulation (i.e. €100,000 over a three-year period).

4.2 Inefficient information dissemination

A slow process of dissemination of information and incorporation of knowledge into products and services will also lead to an inefficient economic outcome, because the knowledge will not be fully exploited thoughout the economy. A particular source of information asymmetries leading to a low level of innovation is the existence of weak institutional set ups and reduced interaction among economic agents. This systemic inefficiency is more acute for SMEs, which face proportionally higher search costs and have smaller advertising budgets.

Innovation related measures are increasingly aimed at providing interfaces and building bridges across relevant actors of the system. Companies experience difficulties in gaining access to scientific knowledge on which to base their business activities. Most measures implemented in this field by public authorities promote collaboration and networking to facilitate knowledge diffusion (e.g. industry-science relations, technological and scientific networks, science and technology parks, contract research organisations, intermediation bodies, technology brokers). Most of the actions launched at a regional and local scale try to address this source of market failure by strengthening the flow and sharing of information between actors and independent communities.[24]

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24 See the type of measures proposed in the European Commission III Cohesion Report. European Commission, 2003 and the actions supported by DG Regional Policy in the context of the innovating regions initiative.

Instruments	Relevant State aid rules
Promotion of clustering and networking activities	Regional aid guidelines, SME BER, and possibly direct approval under Art. 87(3)(c)
Measures to promote knowledge diffusion (knowledge services, libraries, education, training, fairs)	Regional aid guidelines, R&D Framework and SME BER (i.e. for consultancy and participation in fairs and exhibitions)
Facilitation of technology transfer and interfaces (e.g. industry-science relations, research joint ventures for development of innovative products/processes, science and technology parks)	R&D Framework (for purchase of technology), SME BER, and possibly direct approval under Article 87(3)(c)
Support to intermediary actors (e.g. technology consultants, IPR brokers)	SME BER, R&D Framework.

Illustration: Case N 558/2001 – Germany (Scheme in favour of technology transfer)

The scheme is intended to facilitate technology transfer between certain providers of technology and SMEs. For this purpose, grants are meant to cover the operating costs of technology centres or costs of specific projects aimed at improving and accelerating the transfer of technology as well as the creation of new enterprises. The technology centres pass the grants on to SMEs, mainly newly created and active in the technology sector, notably in the form of consulting services at preferential conditions.

The Commission approved this scheme directly on the basis of Article 87(3)(c), considering the pursuit of a Community objective laid down in Article 157 EC Treaty, the fact that the beneficiaries were SMEs, and the promotion of the creation of SMEs in assisted areas (i.e. Article 87(3)(a) regions).

4.3 Imperfection of capital markets

The uncertainty related to innovation projects is normally higher than the uncertainty related to standard types of projects, e.g. an investment to expand production. In addition, certain projects might have a very long time horizon, requiring rather patient investors. The relatively high uncertainty in the field of innovation tends to aggravate the effect of market failures present in the capital markets.

Because of inefficiencies in the capital market, firms might not be able to raise own capital to invest in projects that put at risk a significant amount of resources, even when the expected return appears proportional to the risk involved. Again the situation is more difficult for SMEs, since they tend to have relatively small financial means themselves and fewer possibilities to diversify risk away within their own activities.

At the same time, it might be impossible to resort to external sources of funding because often it is very complex and costly to make reliable calculations of the expected profit and risk of a project. This difficulty is made more serious by the asymmetry in the information available, on the one hand, to the proponent of the project and on the other hand to the investors. This problem is also more acute for SMEs, since they will normally undertake smaller projects, which might bring the costs of the risk analysis too far out of proportion.

Public intervention might try to address the issue by promoting the provision of venture capital or through direct funding.

Instruments	**Relevant State aid rules**
Promotion of the risk capital market and financing of innovation via seed capital, venture capital, business angels in start-up and development phases	Communication on risk capital
Public funding to pre-competitive research (while letting competition forces operate when moving closer to the market), Research joint ventures	Framework for R&D
Public funding of large, risky projects	Regional aid guidelines, Framework for R&D Individual cases, Article 87(3)(b) and (c)

Illustration: Case N 320/2003 - KESYT (High technology venture capital fund in Greece)

KESYT ("High Technology Venture Capital Fund") is a venture capital fund intended to provide risk capital to SMEs in their start-up or early stages active in the high-technology innovation sector in Greece. Preferential terms are given to private investors following an EU-wide call for tender. In particular, returns from equity investments are preferentially allocated to the private investors up to a certain percentage. The SMEs in which KESYT invests are enterprises in their start-up or their early stages active in high-technology sectors (e.g. aviation, computer and automated business environment, communication technology, lasers, micro-organisms and genetic engineering, semiconductors).

The Commission concluded that the aid granted by KESYT fulfilled the conditions set out in the Communication on State Aid and Risk Capital and therefore found the measure to be compatible with the common market pursuant to Article 87(3)(c) of the EC Treaty.

4.4 Labour market mismatches

The introduction and spread of new technology has implied an increase in the relative demand for highly skilled workers. This recent trend of skill-biased technological change has generated a mismatch in the labour market. A series of negative externalities appear due to labour market rigidities such as the market not producing the right signals for the provision of the required skills, the time it takes to adapt to the changes, the under provision of the required skills by the educational system. Further sources of market rigidity include the insufficient geographical mobility of employees with the required qualifications as well as the risk aversion of employees to changing jobs.

Instruments	Relevant State aid rules
Support to investment in human capital, training, life long learning, improvement and continuous training of existing personnel, including researchers	Training BER, employment BER, possible approval under Article 87(3)(c)
Support to recruitment of scientists, engineers and doctoral candidates	Employment BER, Notice on direct business taxation (for tax measures for employers/employees)

Illustration: –Case N 501/2003 – Germany – Prolongation of the programme for the employment of innovation assistants in Berlin (Case N 618/2001)

This scheme is the prolongation of the scheme of 2001 and seeks to promote employment of 'innovation assistants' in SMEs. The scheme covers the recruitment of highly-qualified staff (university graduates immediately after university, including PhDs) to newly created and permanent posts mainly for R&D, innovation and environmental management activities. It is aimed both at the creation of new jobs and at the improvement of innovative processes in SMEs established in the Berlin area (i.e. an assisted region until 31 December 2006).

The Commission decided that the scheme constituted State aid under Article 87(1) EC Treaty but authorised it as it was in line with the relevant conditions of the Employment regulation. With regard to the aid intensities, the Commission also noted that the scheme ensured consistency with the ceilings laid down in the regional aid guidelines as well as in the SME block exemption regulation.

5. CONCLUSION

This Vade mecum has attempted to identify the key market failures which affect the innovation process and to illustrate the possibilities to foster innovation in accordance with existing State aid rules.

However, while some of the market failures identified above can be rather specific and can thus be addressed with well targeted measures, other types of market failure, such as externalities, can be very general in scope. In this latter case, due to the omni-presence of externalities and the very wide range of activities involved in the innovation process, it has so far not been possible to define a set of rules ensuring that only the most appropriate type and level of aid, if any, is authorised.

Three elements do however appear to emerge fairly clearly. First, it should be noted that the market failures appear to be larger the smaller the company is. This could justify different aid intensities for micro, small and medium sized enterprises and possibly excluding larger companies from certain types of aid. Secondly, the market failures tend to affect newer enterprises and activities more than well-established ones. Finally, although the innovation process is increasingly departing from a 'linear' model, where activities are phased from basic research to commercial implementation, it remains true that, on the one hand, market mechanisms are less capable of correctly assessing and adequately funding fundamental research, while, on the other hand, public support bears greater risks of distorting competition the closer the activity to its commercialisation phase.

As indicated above, the Commission has announced that it will adopt a Communication on State aid and innovation in 2005. In addition, the majority of the instruments mentioned in this Vade-mecum will undergo a detailed review in 2005-2006.

Accordingly, the services of the Commission would welcome any comments on this Vade-mecum, on its analysis of the market failures which affect the innovation process and on the strengths and weaknesses of the system of aids for innovation which it describes. Comments should be addressed to DG Competition, SAC-Innovation, SPA 3 7/2, B-1049 Brussels, Belgium before 31 December 2004. Any comments received will be made available on the DG COMP web site.

ANNEX 1: EXAMPLES OF STATE AID CASES IN THE FIELD OF INNOVATION

a) Intermediaries

State aid N 318/2003 – Germany – Promotion of Technology Centres in Saxony-Anhalt	
Description	The scheme aims at activating and improving technology transfer between technology suppliers, like for instance universities or research establishments, and technology users, i.e. small and medium-sized enterprises (SMEs) and at the creation of innovative and technology-oriented SMEs and SMEs in their start-up stage. Under the scheme, grants are directly awarded to the technology centres located in Saxony-Anhalt, an assisted area pursuant to Article 87(3)(a) Treaty until 31 December 2006, in order to support technology transfer projects and to finance the operating costs of the centres. Only small companies and medium-sized enterprises in their start-up phase can benefit from the support given by the technology centres. In particular innovative and technology-oriented SMEs are targeted to benefit from the services of the technology centres. The main tasks of the technology centres are to ensure an innovation-orientated development of the regional economy, in particular by promoting technology-oriented start-up firms and initiating R&D projects.
Instrument	Digressively reduced grants to the technology-centres
Commission decision	The Commission concluded for the existence of State aid in the meaning of Article 87(1) Treaty both at the level of the technology centres and at the level of the enterprises using the services provided by the centres. As regards the aid to the technology centres, the Commission took note of the fact that the aid scheme intends to activate the dissemination and commercial use of new German and international R&D in the field of overall management and enterprise development, hence favouring technology transfer and co-operation between companies. Pursuant to Article 157 EC, the promotion of technology transfer and the co-operation between companies are two of the major objectives of the European Union. The Commission also considered that the measure would contribute to the regional development of the Land of Saxony-Anhalt, a region qualifying under Article 87(3)(a) Treaty until 31 December 2006, and that the level of the aid would be very limited and proportional to the handicaps it seeks to alleviate, limited in time and digressive. The Commission therefore considered that the conditions of the regional aid guidelines were fulfilled and authorized the aid at the level of the technology centres on the basis of Article 87(3)(a) Treaty. With regard to aid at the level of the enterprises using the services of the technology centres, the Commission was satisfied that any aid given to these enterprises was within the limits of the *de minimis* Regulation.
Legal basis	Regional aid guidelines, *de minimis* Regulation
Reference	OJ C67, 17.3.2004, p. 9
Similar cases	See also cases State aid N 558/2001 – Germany – Scheme of the Land of Saxony in favour of technology transfer (OJ C170, 16.7.2002, p. 16) and State aid C 3/04 (ex N 644g/2002) – Germany - Aid to construction and extension of industrial centres/technology centres that provide accommodation and common services for newly created SEs and newly created innovative and technology-oriented SMEs for the period 2004-2006, for which the formal investigation procedure under Article 88(2) Treaty has been opened (OJ C84, 3.4.2004, p. 2).

State aid N 213/2003 – United Kingdom - Project ATLAS broadband infrastructure scheme for business parks	
Description	The ATLAS-project, a measure creating a scheme for broadband infrastructure for business parks, is aimed at lowering prices of broadband services for commercial users located in business parks. The project will be geographically limited to providing infrastructure on business parks. Technically, the infrastructure will comprise only "passive" infrastructure (ducts, chambers, fibres and Meet-Me-Rooms).
Instrument	Publicly funded infrastructure for business parks
Commission decision	The Commission concluded that the project involves aid within the meaning of Article 87(1) EC to the service provider and to the enterprises using these services as it is publicly funded, distorts competition and has an effect on trade between Member States. The Commission also considered that the economic advantage to the telecom operators and the service providers can, at least partially, translate into an economic advantage for the enterprises in the business parks. However, the Commission considered that the public investment in the ATLAS-project will only be provided to the extent necessary to develop the use of broadband services, particularly by SMEs. This is in line with Community priorities as indicated in the e-Europe 2005 Action Plan. The intervention is designed in a way that does not distort competition to an extent contrary to the common interest. The Commission noted that the project intends to ensure the widespread availability and the use of high-speed broadband services at conditions closer to those in areas with a greater density of population and businesses. As the existing frameworks and guidelines could not be applied to assess aid measures that specifically target this objective, the Commission therefore approved the measure directly on the basis of Article 87(3)(c) EC.
Legal basis	Direct application of Article 87(3)(c) Treaty
Reference	Not yet published

State aid NN 87/2002 – Denmark - Centre for management	
Description	The objective of the Centre for Management is to promote the dissemination and commercial use of new Danish and international R&D in the field of overall management and enterprise development. The Centre is intended to improve the awareness and knowledge about overall management values and tools in enterprises, and to strive to ensure that enterprises have the necessary qualifications to handle them.
Instrument	Grants to the Centre of management

Commission decision	The Commission assessed the existence of State aid in the meaning of Article 87(1) EC both at the level of the Centre for Management and at the level of the enterprises using the services provided by the Centre. The Commission found that the measure does not constitute State aid in the meaning of Article 87(1) EC to the Centre for Management itself. The State resources transferred to the Centre are only used to finance the non-commercial activities, for which the Centre is in principle not in competition with consultancy firms. As regards the clients of the Centre, in so far its commercial activities are concerned, they do not receive any advantage hence State aid under Article 87(1). By contrast, the measure constitutes State aid within the meaning of Article 87(1) to the enterprises using the services provided by the Centre for Management insofar as its non-commercial activities are concerned. However, the Commission concluded that the aid for the enterprises using the non-commercial activities of the Centre could be approved directly on the basis of Article 87(3)(c) Treaty. The aid scheme intends to activate the dissemination and commercial use of new Danish and international R&D in the field of overall management and enterprise development, thus favouring technology transfer and co-operation between companies. The aid scheme therefore contributes to the fundamental objectives of Article 157 Treaty. As regards products and services sold below production costs, the Commission noted that the aid would be very limited and fulfilled all the conditions of Article 5(a) of the SME regulation. Finally, the Commission took into account that the measure only intended to compensate for the specific market failure as regards services the market does not provide.
Legal basis	Direct application of Article 87(3)(c) EC
Reference	OJ C 195, 19.8.2003, p. 16

State aid NN 152/2001 (ex N 516/2001) – Netherlands - Digital University	
Description	The Dutch authorities granted a subsidy of € 11.3 million to the Development and Expertise Centre of the Digital University to cover part of the total costs of its activities for 2001-2002, estimated at € 31.3 million. The remaining costs were covered through the compensation received from higher educational institutions for the material developed by the Centre. The non-commercial Development and Expertise Centre performed non-commercial functions consisting of developing on-line learning material and methods/instruments for the on-line learning process. The Centre would disseminate its expertise and developed products in a non-discriminatory way to the whole system of higher education in the Netherlands and to other interested parties against a reasonable compensation.
Instrument	Direct grants
Commission decision	The Commission decided that the subsidy did not constitute aid as the activities of the Centre were not regarded as an economic activity within the meaning of Art. 87 (1) Treaty. In particular, the subsidy was intended only for the non-commercial activities of the Centre and not for the more commercial-oriented entities, which were legally and financially separated. Another important factor taken into account in the no-aid decision was the fact that the results of the development activity of the Centre would become available for all institutions for higher education and for other parties in a non-discriminatory manner.
Legal basis	Article 87(1) Treaty
Reference	OJ C 130, 1.6.2002, p. 4

b) 'Split' approval

State aid N 550/2003 – Germany Prolongation of the programme for technology and innovation in Mecklenburg-Western Pomerania	
Description	The scheme aims at furthering research and development activities, the recruitment of highly qualified staff and the promotion of SMEs in Mecklenburg-Western Pomerania, an Article 87(3)(a) region until 31 December 2006. The scheme is composed of five sub-programmes. Three provide grants for industrial research and pre-competitive activities. Another sub-programme focuses on recruitment of highly qualified staff (university graduates and immediately after university) on newly created permanent posts for R&D and similar. The last sub-programme aims at consultancy and other services provided by outside consultants and service providers not relating to the enterprise's ordinary operating expenditures.
Instrument	Grants
Commission decision	The Commission found that the measure constitutes State aid within the meaning of Article 87(1). However, the Commission authorised the scheme in accordance with Article 87(3)(c) as the sub-programmes complied with the following relevant State aid rules: the three sub-programmes concerning research and development activities with the R&D framework; the sub-programme on recruitment of highly qualified staff with the employment regulation; the sub-programme on consultancy services with the SME regulation.
Legal basis	R&D Framework; SME regulation; Employment regulation.
Reference	Not yet published

State aid N 375/2002 – Greece -ELEFTHO Programme	
Description	The aim of the scheme is to facilitate the transfer of technology and to promote the creation and development of knowledge-intensive enterprises in Greece. To achieve this objective, the Greek authorities support private enterprises to encourage them to establish and operate science and technology parks and business incubators and to provide the knowledge-intensive and innovation-oriented companies that are located in these facilities with advisory services and seed capital.
Instrument	Grants; equity capital
Commission decision	The Commission established that the Eleftho-programme constitutes State aid in the meaning of Article 87(1) EC. The ultimate beneficiaries of the scheme are the tenant enterprises hosted in the incubators and parks. The Commission however authorised the scheme on the basis of Article 87(3) Treaty. First, the Commission took into account the fact that the entire territory of Greece is eligible under Article 87(3)(a) EC. The various activities were considered to comply with the relevant rules on State aid. The aid granted in relation to the investment in the parks and the incubators was

	found in conformity with the provisions on initial investment aid laid down in the Regional aid guidelines. The aid granted in relation to the equity investments by the operators in the tenant enterprises was found to comply with the risk capital communication. The aid received by the tenant enterprises in relation to the advisory and training services was in conformity with the SME regulation and with the training aid regulation.
Legal basis	Regional aid guidelines, risk capital communication, SME Regulation; Training aid regulation
Reference	OJ C 58, 13.3.2003, p. 8

c) Innovative technology projects

These cases are mainly assessed under the R&D guidelines. The cases on R&D measures are numerous. Please refer to the State aid register on the DG Comp Website http://europa.eu.int/comm/competition/state_aid/register/ii/.

State aid N 92/2004 – Greece Demonstration Projects of Innovative Energy Technologies	
Description	The scheme aims at promoting investments in innovative technologies of the energy sector. The Greek authorities grant aid in form of grants to demonstration investment projects, in the entire Greek territory, that aim to the promotion of energy saving. The eligible demonstration projects concern initial investment both tangible (land, buildings, machinery) and intangible (transfer of technology, consultancy services for SMEs, dissemination and promotion actions during and after completion of the projects).
Instrument	Grants
Commission decision	The Commission concluded State aid in the meaning of Article 87(1) EC to the undertakings carrying out investment in innovative technologies of the energy sector. However, as the investment aid granted under the scheme was in line with the provisions of the regional aid guidelines, the Commission considered the scheme to be compatible with the common market in accordance with Article 87(3)(a) EC.
Legal basis	Regional aid guidelines
Reference	Not yet published

State aid N 41/2004 – Germany (Lower Saxony) Innovation support programme approved on basis of R&D framework	
Description	Under this scheme, the authorities of Lower Saxony support projects of industrial research as well as pre-competitive development projects to be carried out in Lower Saxony. The aim is to speed up the innovation process in the economy. The scheme is also aimed at improving environmentally sustainable development through R&D in the energy sector. The beneficiaries of the programme are enterprises as well as public research institutions and universities.
Instrument	Grants
Commission decision	The Commission decided that grants given to public research institutions under this programme are not State aid, as they constitute public financing of R&D activities by public non-profit-making higher education or research establishments not covered by Article 87(1) Treaty. By contrast, the Commission found that the scheme was covered by Article 87(1) Treaty with regard to private undertakings, as they receive an advantage when involved in eligible R&D projects. The scrutiny by the Commission led to the conclusion that the measure fulfilled the conditions of the R&D Framework. Therefore the Commission decided to consider the aid to be compatible with the Treaty under Article 87(3).
Legal basis	R&D Framework
Reference	Not yet published

State aid N 543/2003 - United Kingdom – CIS Photovoltaic re-cladding project	
Description	This project involves the re-cladding with electricity generating photovoltaic (PV) cell panels of the service tower of the 25-storey Co-operative Insurance Society (CIS) building in Manchester. This building is the hub of CIS's UK operations, housing up to 4000 staff and the main computer systems together with other support services for the business. Photovoltaic (PV) systems have a dual function in building sustainability as they can be used as a construction material to clad, glaze or roof buildings and they can also play an important role in energy efficient building design, due to its additional function as solar shading that enables the conversion of light into electricity, cleanly and silently for up to 25 years. Furthermore, the use of PV technology does not produce climate change emissions and the technology chosen for this project relied on materials with a comparatively low environmental impact in extraction, pre-processing and manufacture.
Instrument	Non-repayable grant of GBP 885,236 (€ 1,329,582) awarded by the North West Development Agency (NWDA) to the owner of the building, the Co-operative Insurance Society. In addition, a grant of GBP 175,000 (€ 262,842) is awarded under the UK Major Photovoltaic Demonstration Programme (i.e. State aid N158/2002).
Commission decision	The Commission concluded that the award of the grants under this project constituted State aid under Article 87(1) but considered it compatible with the Treaty. Specifically, the project complied with the eligible costs and the aid intensities laid down in the Guidelines on State aid for environmental protection. The decision was based on the Commission policy to consider the use of renewable sources of energy, such as solar power, as an action to protect the environment and one of the long-term objectives to be encouraged the most. In particular, the Commission expected that through this project about 10% of its electricity would be generated through an environmentally sound process and considered its large-scale demonstration for the attractiveness of PV solutions given its visibility and scale of investment in the UK.
Legal basis	Environmental guidelines
Reference	Not yet published

State aid N 365/2003 – Germany Sustainability in Practice	
Description	The programme aims at promoting research activities in the field of so-called sustainability concepts and features four sub-programmes. The “Social Activity towards Sustainability” sub-programme concentrates on the potential effects of globalisation, socio-demographic changes and the ecological alteration of society. In the programme “To Operate Economically: Changes of the Economic System towards Sustainability”, the government aid concentrates on value-added chains, production systems safeguarding the use of raw materials, key technologies for sustainability, management processes and strategies for climate protection. Potential projects under the sub-programme “Sustainable Utilisation Concepts for Regions” are the development of new concepts for the rehabilitation of polluted or contaminated soil and concepts for the improvement of flood protection. Finally, the sub-programme “Sustainable Utilisation Concepts for Resources” focuses on the sustainable use of water (e.g. the development of water technology) and sustainable projects for biological resources (concepts for the conservation of the biological diversity (biodiversity)).
Instrument	Grants
Commission decision	The Commission found this scheme to constitute State aid under Art. 87(1), but approved it on the basis of the Art. 87(3) Treaty, as the measure complied with the R&D framework. In its assessment, the Commission took into account that such R&D activities mainly in the field of social sciences fall within the scope of the R&D framework and that it approved several cases of R&D aid in the fields of tourism, crime reduction and other social sciences. The Commission also noted that “Sustainable Development, Global Change and Ecosystems” is one of seven priority thematic areas as defined in the current 6th framework programme of the European Community for research, technological development and demonstration activities.
Legal basis	R&D Framework
Reference	OJ C 34, 7.2.2004, p. 7

State aid N 827/2000 – Netherlands – Medea + programme (Eureka 2365)	
Description	Medea+ is a EUREKA programme and is an acronym for Microelectronics Development for European Applications plus, aiming at stimulating cross-border co-operation in the field of R&D by generating knowledge in the field of micro-electronics in Europe. It was formally adopted as ‘EUREKA project 2365’ during the ministerial conference of 23 June 2000, and thirteen European countries, including eleven Member States, expressed their interest in this programme. The programme covers two basic areas: (i) silicon application platforms, comprising research concerning system platforms, architectures and building blocks in the various application fields to achieve de facto standards; (ii) enabling technologies, comprising research directed to work out the international roadmap for semiconductors. This case concerns a scheme implemented by the Netherlands. The budget of this scheme is equal to NLG 600 million (i.e. € 272 million), earmarked to cover personnel costs from the staff directly involved in the research project, costs of material, supplies and similar products incurred directly as a result of the research activity, depreciation costs of instruments and equipment used for the research activity, costs of consultancy and equivalent services, including the costs of technical knowledge and patents used exclusively for the research activity, and

	costs of overheads incurred directly from the research activity. The scheme has a duration from 2001 to 2008, identical to the duration of the Medea+ programme. The results of the research are disseminated between the participants of the projects. The involved companies and research institutes obtain the ownership of generated knowledge within the projects. The Medea+ organisation undertook to maximise its efforts to realise a dissemination of the research results in and outside Medea+ respecting intellectual and industrial ownership. The results of Medea+ are made available through publications, through the Medea+ website and the Medea+ forum, which are organised yearly.
Instrument	Grants
Commission decision	The Commission considered the scheme to give rise to State aid, but approved it on the basis of the R&D Framework. The scheme, part of the Medea + cooperation program supported by the Commission, was in line with the eligible costs and the aid intensities laid down in the R&D Framework and more in general with the Commission policy to enhance the competitiveness of the ICT sector in Europe.
Legal basis	R&D Framework

State aid N 801/2000 – Germany **EUV lithography**	
Description	The measure is intended to promote the participation in a joint Eureka project aimed at the development of extreme ultraviolet lithography (EUV) lithography technologies in Europe. The scheme provides for a non-repayable grant of a total amount of DEM 120 million (€ 60 million) earmarked for the project over a five-year period for supporting a co-operative research project (industrial research and pre-competitive development) of several large companies, SMEs and research institutes on EUV. All the principal EU enterprises engaged in EUV lithography are involved in the project.
Instrument	Non-repayable grants.
Commission decision	The Commission found that the measure constituted State aid in the meaning of Article 87(1) EC insofar as the enterprises were concerned. As regards compatibility, the Commission considered that the project covered industrial research and pre-competitive development. Taking into account a scientific evaluation of the measure, the Commission assessed each of the project's work packages. None of the products or processes that would be developed during the project would be in a position to be useable or convertible for a commercial or industrial application. As all the conditions set out in the R&D framework were fulfilled, the Commission authorised the scheme under Article 87(3).
Legal basis	R&D Framework
Reference	OJ C 333, 28.11.2001, p. 8
Similar cases	See also for instance the cases N 430/2001 – Netherlands ("Extatic lithography"), N 433 – 2001 – Netherlands ("Individual R&D case on imagery methodology for nanoelectronic components for lithography") and N 116/2003 – Germany ("Individual R&D case on imagery methodology for nanoelectronic components")

d) Risk capital measures

State aid N 5/2004 – UK Greater London High-Technology Seed and Creative Industries Funds	
Description	The measure seeks to address market failure in providing equity and quasi-equity finance to seed, start-up and other early stages small and micro companies in high-technology and creative industries sectors operating in the Greater London area. Two distinct funds are intended to be established: First, the High-Technology Seed Fund will provide finance to potential high growth technology-based companies to support proof of concept and pre-trading development activity and to help commercialisation. Second, the Creative Industries fund will provide finance to potential high growth early-stage businesses operating in the creative industries sectors.
Instrument	Equity and quasi-equity capital
Commission decision	The Commission assessed the measure in the light of the risk capital communication and concluded that aid was present at the level of investors and at the level of the investee companies. However, the features of the funds were considered as positive elements according to this communication and therefore the measure was approved on the basis of Article 87(3)(c) Treaty.
Legal basis	Risk capital communication
Reference	Not yet published

State aid N 632/2003 – Belgium – ARKimedes scheme	
Description	The ARKimedes scheme intends to address the lack of venture capital available in Flanders by creating new venture capital funds to provide risk capital to SMEs having an economic activity in the Flemish Region. The Flemish authorities will focus the measure on small and micro-enterprises and on medium-sized enterprises in their start-up phase and early stages. The maximum amount of one investment tranche is € 1 million, with a minimum interval between successive tranches of 1 year.
Instrument	A mix of equity and quasi-equity investments (capital increase, loans with options or warrants, convertible loans, options or warrants)
Commission decision	The Commission considered this measure to constitute State aid under Article 87 (1) Treaty and assessed its compatibility under the risk capital communication. The Commission reached a decision of compatibility with the Treaty considering the relevant and substantial evidence of the market failure provided by the Flemish authorities and the existence of a number of positive elements as set out in the risk capital communication. As for the level of the investment tranches of up to € 1 million, in addition to the economic evidence of market failure the Commission considered that as subsequent investment tranches could only be provided after one year, this would have a similar economic effect to the normal application of the safe-

	harbour thresholds contained in the communication (i.e. a maximum of € 500,000 every six months in non-assisted areas). Furthermore, the Commission considered the absence of direct public funding for the measures concerning capital investments.
Legal basis	Risk capital communication
Reference	Not yet published

State aid No N 320/2003 – Greece KESYT - High Technology Venture Capital Fund	
Description	KESYT is a venture capital fund to provide risk capital to SMEs in their start-up or their early stages active in the high-technology innovative sector in Greece. Preferential terms are given to private investors via an EU-wide open call for tender, thereby stating any subordination of public sector funding in order to invest. In particular, returns from equity investments will be preferentially allocated to the private investors up to a certain percentage (hurdle) that will be laid down in the shareholders agreement. Once the hurdle is attained, returns will be allocated proportionally between the public and private investors (pro rata). A fund manager will be recruited through an EU-wide call for tender and its remuneration will be profit driven (management fee and success fee). Investment decisions will be taken by the fund manager on exclusively commercial basis.
Instrument	Equity capital
Commission decision	In its assessment, the Commission concluded for the existence of aid at the level of the investors and at the level of the enterprises invested in. As the aid granted under KESYT fulfilled the conditions set out in the risk capital communication, the Commission found the measure to be compatible with the common market pursuant to Article 87(3)(c) EC. The Commission noted that the scheme contained many positive elements set out in the communication. In particular, the fact that KESYT would only provide funding to SMEs in their start up or in their early stages established in assisted areas, that KESYT investments would be limited to the equity of target enterprises and that each tranche of finance would be limited to € 1 million.
Legal basis	Risk capital communication
Reference	OJ C 11.3.2004, p. 2

State aid No N 280/2003 Germany Innovation fund of IBG in Saxony-Anhalt	
Description	The scheme aims at facilitating the access of technology-orientated SMEs to risk capital, and thus to contribute to the regional development of Saxony-Anhalt, a region qualifying for assistance under Article 87(3)(a) EC until 31 December 2006. According to Germany, a particular problem exists with respect to access to risk capital for SMEs in particular in Eastern Germany, since venture capital operations concerning low volumes of capital are not sufficiently profitable to encourage private venture capital undertakings to seek business there.
Instrument	Equity capital

Commission decision	The Commission concluded that the notified measure involves State aid within the meaning of Article 87(1) EC as regards the level of the fund and the enterprises invested in. However, as the measure complied with the risk capital communication, it qualified for exemption under Article 87(3)(c) EC.
Legal basis	Risk capital communication
Reference	OJ C 67, 17.3.2004, p. 9

State aid N 548/2002 – Greece **New Economy Development Fund S.A. (Taneo A.E.)**	
Description	The New Economy Development Fund S.A., or TANEO, is a fund-of-funds. The Greek Government and private investors invest in TANEO, with the Government's return on investment being subordinated to the return of the private investors. TANEO invests in new venture capital funds created for the purpose of investing, on commercial terms, in SMEs preferably in sectors of the "new economy", such as telecommunications, biotechnology, etc. TANEO invests in these new venture capital funds on the same terms as private investors, and always takes a stake of less than 50%. To give an incentive to private investors to provide capital to TANEO, the Greek Government is prepared to offer favourable terms to the private investors. Such terms are not present in a purely commercial investment situation, so the Greek Government cannot be said to be acting as a private investor in a market economy.
Instrument	Equity capital
Commission decision	The measure has been found to constitute State aid under Article 87(1) EC in favour of the private investors in TANEO. In addition, there is an element of aid to TANEO itself in that the company is exempt from certain taxes. But since TANEO invests *pari passu* with other private investors in the new venture capital funds, and these in turn invest on commercial terms in SMEs, there is no aid at any other level. The compatibility of the fund with the Treaty was assessed under the risk capital communication. The Commission noted that the scheme contained only positive elements as regards four out of the six relevant criteria, and was weak on the two other. The weakness of the scheme was that in the worst case scenario, the private investors in TANEO would only take a rather small risk which might reduce their incentive to take profit-driven investment decisions. However, where a transfer made by the State would be compatible with the State aid rules, the Commission believed that a measure which provides a minimum incentive to other economic operators to make the same transfer should also be authorised. In this case there are mechanisms to ensure that the incentive is so minimised. In view of all the positive elements of the scheme and the fact that it operates in an assisted area under Article 87(3)(a) EC, the Commission accepted that the distortion of competition was not such as to be contrary to the common interest of promoting small and medium-sized enterprises in innovative sectors. The Commission accordingly decided to consider the aid to be compatible with the EC Treaty.
Legal basis	Risk capital communication
Reference	OJ C 34, 13.2.2003, p. 6. This scheme was amended with an extension of the previous deadline for investments: State aid N 105/2004 – Greece - Amendments to TANEO Risk capital fund, not yet published.

State aid N 630/2001– Spain Capitalisation of technology-based enterprises	
Description	The measure seeks to set up a new horizontal aid scheme with the aim of improving the access of technologically innovative small enterprises to investment capital, in their initial phases of creation and development. To contribute to this objective, the scheme foresees that the State will give loans to the risk-capital entities and they will acquire shareholder participations in the capital of small technology based enterprises in the setting up phase of their activity or within the first two years period of activity. The maximum amount of investment of the financial entity into the equity of the small technologically based enterprises is of 500.000 € per six-month period.
Instrument	Loans to risk capital entities
Commission decision	The Commission considered this scheme to give rise to State aid under Art. 87(1) as there was aid both at the level of the financial entities and of the target technology-based enterprises within the meaning of the risk capital communication. However, given the presence of several 'positive' elements as set out in the Communication, it authorised the scheme under Article 87(3)(c).
Legal basis	Risk capital communication.
Reference	OJ C 32, 5.2.2002, p. 18. The scheme was prolonged as State aid No N 46/2004 (not yet published).

State aid N 705/1999 – UK - HIGH TECHNOLOGY FUND	
Description	The UK High Technology Fund is a fund-of-funds, i.e. it invests it capital in existing funds with a predominant focus on early-stage high-technology investments (approximately 10, managed by experienced management teams). In order to encourage investors to participate in the fund-of-funds, the Department of Trade and Industry (DTI) would assume a sponsoring role by holding a share of the Fund comprised between 13.33% and 50%, with the rest of the equity provided by commercial investors. The Fund features two incentive elements. The first is that if the investors would receive an internal rate of return lower than 10% per annum, the DTI would renounce to its share of distribution by the Fund to the extent necessary to let the other investors achieve such 10% annual return. The second incentive is a postponed draw-down of the committed capital of private investors until the whole of the DTI's investment has been drawn down. This deferral of payment means that the private investors would earn a higher return on investment than the DTI. The Fund is managed by an independent manager, selected through an open tender Procedure, with an incentive for the Fund Manager consisting of 10% of all profits from the Fund over and above the profits required to give the private investors their 10% per annum. The Fund has a 12-year life from the date of its final closing, with a possibility to extend it up to 15 years subject to a majority vote of the stakeholders.
Instrument	Equity capital
Commission decision	The Commission concluded that there was State aid as the scheme conferred an advantage to the private investors in the UK High Technology Fund. Given the absence of a specific framework to assess the compatibility with the Treaty of this kind of schemes, the Commission

	first considered the intended effect of the aid to persuade private investors to provide funds for investment in the High Technology Funds which would receive capital from the High Technology Fund, and via these HTFs to the high-technology companies in which the HTFs invest. In these circumstances, the Commission took into account the potential positive benefits not only for the immediate beneficiaries but rather for the final target companies, and approved the scheme directly on the basis of Article 87(3)(c) of the Treaty.
Legal basis	Direct application of Article 87(3)(c) EC (before the entry into application of the risk capital communication)

e) Tax measures (especially for R&D/innovation investments/ employees)

State aid N 190/2003 – France - Young French innovative enterprises	
Description	This scheme concerns R&D projects carried out by young innovative SMEs created from less than eight years. To be eligible, SMEs must allocate at least 15% of their total expenses to R&D activities and must carry out one or more R&D projects qualifying as fundamental, industrial or pre-competitive research within the meaning of the R&D Framework. The instrument consists of an exemption from the employer share of social security contributions with regard to remuneration of personnel involved in the eligible R&D projects. The exemption is total for personnel entirely working on these R&D projects and proportional for personnel working for a portion of their time on these projects.
Instrument	Exemption from social security contributions due by the employer
Commission decision	The Commission concluded that this exemption constituted State aid within the meaning of Art. 87 (1) Treaty, but considered it compatible with the Treaty on the basis of the R&D Framework. The grounds for approval were that beneficiaries were SMEs, eligible R&D expenses concerned research projects at one of the stages provided by the R&D framework, and the aid intensity was lower than the allowed 35% of eligible costs (i.e. the employer social security contribution is 30% of the personnel salary, plus a maximum contribution of 2% for the insurance covering accidents on the workplace and professional sickness).
Legal basis	R&D Framework
Reference	OJ C 301, 12.12.2003, p. 6

State aid N 802/1999 – UK Tax credit for R&D	
Description	The scheme features a tax credit for R&D activities performed by SMEs to encourage investment in R&D and innovation. SMEs undertaking R&D activities in the fields of science and technology with a minimum expenditure of GBP 25,000 per year qualify for the scheme. This credit is granted for the direct cost of personnel involved in R&D activities and for the cost of consumable stores directly used in this activity as well as 65% of payments to a subcontractor in cases where the SME subcontracts all or part of the R&D activity while retaining ownership rights over any intellectual property generated. Eligible SMEs can deduct from corporate tax up to 50% of the ordinary deduction for R&D expenditures. If an eligible SME is not yet generating profits (i.e. start-up and high-technology companies), they are entitled to surrender the R&D tax credit against a cash payment of 24% of the qualifying expenditure effected by the Exchequer.
Instrument	Tax credit
Commission decision	The Commission decided that the R&D tax credit constituted State aid within the meaning of Art. 87(1) Treaty, as it was a selective tax advantage for the SMEs under the Notice on direct business taxation. However, the Commission authorised the scheme on the basis of the R&D Framework, considering that the beneficiaries were SMEs, that the eligible research was in line with the eligible categories laid down in the R&D Framework, and that the allowed aid intensities were complied with (i.e. 10% or 15% for SMEs paying corporation tax respectively at 20% or 30% tax rate; 24% for SMEs not in a profit situation asking for a cash payment to the Exchequer).
Legal basis	Notice on business taxation; R&D Framework

State aid N 41/1999 – Denmark and N 672/1999 – Sweden Special tax incentives for highly specialised workers coming from abroad	
Description	The Danish scheme features a low flat rate of income tax of 25% for individuals recruited abroad for a period of six months up to three years and employed by Danish companies or research institutions. The objective is to attract highly qualified researchers and key personnel from abroad that could be discouraged from the high level of Danish tax. The Swedish scheme features a reduction of the income tax base by 25% for highly qualified workers recruited abroad and a reduction of 25% on the social security charges in favour of their employers. These advantages are granted for a period of up to three years, provided the employment relationship is not anticipated to last longer than five years.
Instrument	Reduction of income tax; reduction of employer's share of social security contribution
Commission decision	The Commission decided that both measures did not constitute State aid as they were not selective within the meaning of the Notice on business taxation. In both cases, the schemes applied to both the private and public sector, to manufacturing, trade and services and to large companies as well as SMEs, and there were no regional restrictions. The Commission also considered that the eligibility criteria were clear and objective and there was no discretion for the managing authority, whose role was limited to evaluating the researcher on the basis of his qualifications and placing him in one of the available categories. Finally, the fact that the budget and duration of the schemes were not limited was also a relevant element. In the Danish

	case, the Commission also took into account that the tax was due by individuals and thus the benefit would almost entirely accrue to such individuals rather than to the firms employing them. Therefore the no-aid decision was based on the conclusion that the Danish and Swedish measures were not *de facto* selective as they did not favour certain undertakings or the production of certain goods.
Legal basis	Notice on business taxation
Reference	OJ C 284, 7.10.2000, p. 8

f) Cooperation projects and clusters

State aid N 519/2003 - Germany – Land of Saxony-Anhalt scheme providing grants for innovative, technology oriented cooperative projects in the area of furniture technologies	
Description	The scheme aims to improve the performance of trade and industry in the area of R&D and in particular the difficulties encountered by SMEs. For this purpose, the scheme promotes the carrying out of cooperative projects, i.e. interdisciplinary cooperation between firms in trade and industry and public non-profit higher education and research establishments. Eligible costs include personnel costs and costs of instruments and equipment used solely and continuously for R&D activities; costs of consultancy and equivalent services used exclusively for the research activity, including the research, patents etc. purchased from outside sources; additional overheads incurred as a result of the research activity (e.g. cost of materials, supplies etc.) and other operating expenses (e.g. cost of materials, supplies etc.) borne indirectly for the research activity. For the purpose of the aid, cooperation consists of at least two partners of which one must be a commercial firm, whereas cooperation involving only institutes and individual research bodies excluding firms is ineligible to the scheme.
Instrument	Direct grants
Commission decision	The Commission decided that the financing of fundamental research by public non-profit research establishment did not constitute State aid within the meaning of Art. 87(1) Treaty. This was based on the fact that insofar as they engage in commercial activity at all, non-profit higher education and research establishments do so to an insignificant and barely quantifiable extent. This was also based on the requirement laid down in the R&D Framework that these establishments are to behave in the same way as private firms subject to competition, especially where they receive payment at market rates for the services they perform. With regard to grants provided to the private firms, the Commission decided that State aid was involved, but authorised such aid under Art. 87(3)(c) on the basis of the R&D framework. As all conditions of the framework concerning eligible costs, R&D stages, and the relevant aid intensities were met, the Commission concluded for the compatibility of this scheme with the common market.
Legal basis	Article 87(1) Treaty; R&D framework
Reference	Not yet published.

State aid N 412 /2002 – Greece Aid Scheme for spin-off enterprises	
Description	This scheme is one of the actions taken by the Greek government to promote the development of knowledge-intensive and innovative enterprises, which is one of the focal objectives of the Structural Funds. The objective of the Programme for Exploitation of Research Results (PRAXE) is to provide incentives for the development of new business activities in Greece by academics, researchers, high level technicians and other agents with high innovative potential. The programme is divided in two phases. The first phase (PRAXE/A) covers the preparatory activities of researchers and research institutions before establishment of an enterprise, such as experimental development, patenting, drafting of a business plan and searching for potential private investors. The amounts granted in this phase are within the *de minimis* thresholds. The second phase (PRAXE B) covers start-up or other early stages of development and anticipates a call for tenders to invite interested spin-off companies to submit proposals for public support. Under PRAXE B, grants are given to spin-off companies as a complement and subject to private equity being invested in the firm. In particular, the private investor is required to contribute first to the capital of the firm and then the grant will be transferred to the firm. Grants cover initial investments for both material infrastructures (equipment, buildings, land) and intangible assets (patents, operating or patented know-how licenses and unpatented know-how related to the transfer of technology). Also consultancy services (e.g. technical, legal organisational and financial advice) aimed at supporting the development of innovative projects are covered, and general start-up costs (e.g. salaries of persons developing their ideas or providing technical assistance, rents and travelling expenses).
Instrument	Grants
Commission decision	The Commission considered that the measure involved State aid within Art. 87(1), but authorised it under articles 87(3)(a) and (c) of the Treaty. In particular, the aid granted in relation to the investments of spin-off companies was in conformity with the provisions on initial investment aid laid down in the regional aid guidelines. Aid granted in relation to consultancy services was in accordance with the SME regulation (in the case of SMEs) and with the *de minimis r*egulation (in the case of large companies). Aid granted to the spin-off companies in relation to other general start-up costs, although constituting operating aid to support the transfer of technology, was targeted at priority objectives of the Community, i.e. SME development and technology transfer. Given the absence of a specific framework for approval, the Commission based its approval directly on Article 87(3)(c) Treaty taking into account the necessity and proportionality of the aid in relation to the fundamental Treaty objectives pursued by the scheme: SME development (Article 157 Treaty), research and technological development (Article 163 Treaty) and economic and social cohesion (Article 158 Treaty), as the programme contributed to the development of Greek areas eligible under Art. 87(3)(a) Treaty.
Legal basis	*De minimis* regulation; Regional aid guidelines; SME regulation; direct application of Article 87(3)(c)
Reference	OJ C 148, 25.6.2003, p. 11

State aid N 525/2001 – Ireland - Cluster Scheme Incubator	
Description	This scheme is meant to ensure the promotion by Irish development agencies of investment in the provision of incubators for small start-up firms operating in the high-technology sector. The scheme is intended to cover the gap in the offer of premises with specific telecommunication infrastructure and flexible rental arrangements. The aid is in the form of grants to property developers to encourage them to build specific premises for these SMEs, chosen through a tender procedure ensuring that the minimum amount of grant is paid out. The developers then rent the premises to the SMEs in the designated areas for a price lower than market price, and therefore the aid is passed on to the SMEs. However, it is not excluded that part of the aid is retained by the property developers themselves.
Instrument	Grants
Commission decision	As for the property developers, the Commission considered that the measure constituted State aid under Art. 87(1). However, the Commission authorised the scheme on the basis of the Regional aid guidelines, since the sites covered by the scheme were all located in assisted areas (i.e. Art. 87(3)(a) and (c) areas), the scheme was limited to aid for new investment (i.e. it would only support the construction of buildings relating to a new activity), and eligible costs and aid intensity were also in line with the guidelines. As for the SMEs, the Commission did not consider that State aid was present, as the Irish authorities ensured that the maximum benefit for them would be within the limits of the *de minimis* Regulation (i.e. €100,000 over a three-year period).
Legal basis	Guidelines on regional aid; *De minimis* regulation

State aid N 341/2000 – Germany - Initiative «InnoRegio»	
Description	This scheme comprises three different sub-schemes. The first is directed to private enterprises and public research institutes in the field of higher education representing no-profit organisations. The grants are linked to R&D activities for fundamental, industrial, or pre-competitive research in a number of sectors, including health, biotechnology, renewable materials, information technology, and energy and new energy products. A number of R&D expenditures are covered by the scheme, including personnel costs, costs for equipment and premises for the R&D activity, costs for consultants (e.g. for patents), and miscellaneous indirect costs. The second sub-scheme is intended to promote consultancy to SMEs in the field of innovation, in particular external consultancy for the use of new technologies and the furthering of their innovation potential within the framework of the regional program "InnoRegio". The third sub-scheme provides grants for costs for training, both general and specialised, borne by both SMEs and large enterprises in all sectors.
Instrument	Non-reimbursable grants
Commission decision	The Commission found that the first sub-scheme constituted State aid, but authorised it on the basis of the 1996 R&D Framework as all the relevant conditions concerning the stages of R&D activities, eligible costs and aid intensities were complied with. The Commission concluded that also the second sub-scheme constituted State aid within Art. 87(1) Treaty, but authorised it as it was in line with the 1996 Guidelines on State aid for SMEs. Once again, the Commission found that also the third sub-scheme was aid within the meaning

	of Art. 87(1), but authorised it on the basis of the 1998 framework for training aid as all the relevant conditions were respected.
Legal basis	R&D framework (1996); Guidelines on State aid for SMEs (1996); framework for training aid (1998)

State aid N 128/2000 - Österreich (Wien) **Forschungskooperationsprojekt ÖAW, IMBA/IMP, Boehringer**	
Description	The scheme aims at the promotion of the fundamental genome research in the field of molecular cell and development biology, especially of molecular mechanisms, and of cancer development and course as well as other human diseases. For this purpose, an institute for fundamental biomedical research was to be built, and the research would be carried out by two public, non-profit oriented research institutes in co-operation with the industry.
Instrument	Grant; Loan
Commission decision	The Commission found no presence of State aid in the meaning of Article 87(1) EC at the level of the public, non-profit oriented research institutes in application of point 2.4 of the R&D framework. However, the Commission could not exclude the presence of State aid at the level of the enterprises co-operating with the research institutes, but raised no objections against the measure as the research could be considered as fundamental research and any aid complied with the provisions of the R&D framework.
Legal basis	R&D Framework
Reference	OJ C 322, 11.11.2000, p. 10

g) Training and employment measures

State aid N 501/2003 – Germany – **Prolongation of the programme for the employment of innovation assistants in Berlin (State aid N 618/2001)**	
Description	The aid scheme is a prolongation of the 2001 scheme and aims at the promotion of employment of so-called innovation assistants in SMEs. The scheme focuses on recruiting highly qualified staff (university graduates immediately after university, including PhDs) on newly created and permanent posts for the following activities: R&D (including design and preparatory production activities); innovation and environmental management; production, production management and logistics; finance, controlling and organisation; marketing and distribution. The scheme supports both the creation of new jobs and the improvement of innovative processes in SMEs established in the Berlin area (i.e. an Article 87(3)(c) EC region until 31 December 2006). The scheme provides for grants for up to 45% of the annual gross wage costs for new undertakings and up to 65% of the wage costs for firms younger than 3 years, with a cap of €41,000 per year.
Instrument	Grants

Commission decision	The Commission found that the measure constituted State aid under Art. 87(1) Treaty but authorised it as it was in line with the conditions and ceilings laid down in the Employment regulation. The Commission also noted that the as for the aid intensities the scheme ensured consistency with the ceilings set out in the regional aid guidelines as well as in the SME regulation.
Legal basis	Employment regulation
Reference	Not yet published

State aid N 491 /2002 – Portugal - Grants to firms engaging post graduate degree holders	
Description	The notified scheme consists in the award of grants to undertakings engaging post-graduate degree holders. The measure aims at reinforcing the scientific and technological capacity of Portuguese firms and thereby to increase their potential to innovate. Both firms and technology centres in any sector of the economy are eligible for the scheme, provided they submit a business plan for the acquisition of scientific and technological capacity aimed at increasing the competitiveness of the firm. The grants are awarded to cover part of the remuneration costs borne by the beneficiaries, with intensity higher in the first years of hiring (i.e. 75% of the remuneration for the first year, 50% for the second, and 25% for the third) and different ceilings for PhD-holders (€2,100 per month) and for MSc-holders (€1,400 per month).
Instrument	Grants
Commission decision	This programme had been in place since 1997 and was considered in line with the *de minimis* rule. The Commission assessed the newly notified scheme especially in light of the similar Danish and Swedish for highly qualified workers (N 41/99 – Denmark and N 672/99 – Sweden, see above), and concluded that no aid within the meaning of Art. 87(1) was involved as there were no sectoral, regional or other criteria limiting the scheme to certain undertakings (i.e. no *de facto* selectivity) and the eligibility criteria were clear and objective and did not confer discretionary power on the managing authority.
Legal basis	Article 87(1) Treaty; Notice on business taxation
Reference	OJ C 148, 25.6.2003, p. 11

State aid N 825/2001 – Germany - Transfer Programme of Innovation Assistants – Rheinland-Pfalz	
Description	The scheme includes two sub-programmes aiming at the promotion of R&D activities, particularly at the pre-competitive stage, and at the recruitment of highly skilled personnel. The sub-programme ‘R&D’ concerns innovation assistants in the field of ‘innovation and knowledge management’ in SMEs (especially start-ups) involved in R&D projects to convert results of pre-competitive development activities into new, substantially changed or improved products, processing or services. The sub-programme ‘job creation’ concerns recently graduated in economic and social sciences not yet in the labour market and to be employed in

	the field of ‘evaluation of innovation opportunities’ in SMEs.
Instrument	Grants to cover part of the costs of both categories of personnel.
Commission decision	The Commission considered that the grants awarded under the scheme constituted aid in the meaning of Art. 87(1) Treaty. However, it authorised the sub-programme R&D on the basis of the R&D Framework and the sub-programme job creation on the basis of the 1995 guidelines on aid to employment as all the respective conditions concerning e.g. beneficiaries, eligible costs, aid intensities and cumulation were met.
Legal basis	R&D Framework; Guidelines on aid to employment (1995)
Reference	OJ C 127, 29.5.2002, p. 7

State aid N 470/99 – UK - Industry Forum Adaptation Scheme	
Description	This scheme foresees grants for intermediary organisations representing sectors of business in the UK, e.g. trade associations, research and technology organisations and other industry representative organisations (i.e. representing at least 100 individual companies). It covers training and consultancy in the workplace in order to promote a permanent improvement in business competitiveness through transfer of world-class best practices within sectors. The ultimate beneficiaries are the enterprises themselves, with priority given to SMEs (but large companies are not excluded). The scheme is in line with the *de minimis* threshold as no single company receives a correspondent amount for services higher than €100,000 over 3 years.
Instrument	Grants
Commission decision	Given the commitment to comply with the *de minimis* rule and to ensure no element of operating aid, the Commission concluded that no State aid was present in the scheme. For the sectors not covered by the *“de minimis”* rule but covered by the scheme (i.e. transport, agriculture and fisheries), the UK authorities committed to notify each individual aid to the Commission.
Legal basis	*De minimis* regulation

ANNEX 2: STATE AID FICHES ON THE MAIN RULES RELEVANT IN THE FIELD OF INNOVATION

FICHE I – Amounts de minimis	
Legal basis	This fiche summarises the .Commission Regulation (EC) No 69/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to *de minimis* aid. (Official Journal No L 10, 13.1.2001, p. 30).
Scope	The Regulation covers small amounts of State aid (.*de minimis* aid.) which do not constitute State aid in the sense of Article 87(1) EC and which are therefore not subject to the notification requirement. This *de minimis* rule does not apply to the transport sector and a specific de minimis rule apply in the field of production, processing or marketing of agricultural and fisheries products listed in Annex I to the EC Treaty.
Concept	The *de mimimis* rule sets a threshold figure for aid below which Article 87(1) can be said not to apply, so that the measure need no longer be notified in advance to the Commission. The rule is based on the assumption that, in the vast majority of cases, small amounts of aid do not have an effect on trade and competition between Member States.
Criteria	To benefit from the *de minimis* rule, aid has to satisfy the following criteria: • The ceiling for the aid covered by the *de minimis* rule is € 100,000 (cash grant equivalent) over any three year period. The relevant period of three years has a mobile character, so that for each new grant of *de minimis,* the total amount of *de minimis* aid granted during the previous three years needs to be determined. • The ceiling will apply to the total of all public assistance considered to be *de minimis* aid. It will not affect the possibility of the recipient obtaining other State aid under schemes approved by the Commission; • The ceiling applies to aid of all kinds, irrespective of the form it takes or the objective pursued. The only type of aid which is excluded from the benefit of the *de minimis* rule is export aid.
Cumulation	The above ceiling (€ 100,000 of *de minimis* aid over a three year period) applies to the total amount of *de minimis* aid granted to a single company. When granting a *de minimis* aid to a particular undertaking, the Member State concerned must check whether the new aid will not raise the total amount of *de minimis* aid received by that undertaking during the relevant three year period above the € 100,000 ceiling. The Member State is responsible for establishing the instruments needed to ensure an effective control of the respect of the *de minimis* cumulation ceiling. This can be done in two ways: • Either the Member State sets up a central register of *de minimis* aid containing complete information on all *de minimis* aid granted by any authority within the Member State. • Alternatively, the Member State explicitly informs the enterprise about the *de minimis* character of the aid and obtains from the enterprise concerned full information about other *de minimis* aid received during the previous three years. Under all conditions, the Member State remains responsible for ensuring the respect of the cumulation ceiling.

Fiche II – Aid for small and medium-sized enterprises	
Legal basis	Commission Regulation (EC) No 70/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty on State aid to Small and Medium-Sized Enterprises (OJ L 10, 31.1.2001, p. 33) and Commission Regulation (EC) No 364/2004 of 25 February 2004 amending Regulation (EC) No 70/2001 as regards the extension of its scope to include aid for research and development (OJ L 63, 28.2.2004, p. 22)
Concepts	**Definition of SMEs:** A *medium-sized enterprise* is an enterprise satisfying all of the following criteria: - has fewer than 250 employees and - has either an annual turnover not exceeding € 40 million, or a balance-sheet total not exceeding € 27 million, and - is independent. A *small enterprise* is an enterprise that satisfied all of the following criteria: - has fewer than 50 employees and - has either an annual turnover not exceeding € 7 million, or a balance-sheet total not exceeding € 5 million, and - is independent. The criteria must be applied to the company as a whole (including subsidiaries located in other Member States and outside EU). **The following new SME-definition will enter into force on 1.1.2005:** Regulation No. 70/2001 refers to the definition of SMEs, as contained in the Commission Recommendation 96/280/EC of 3 April 1996. On 6 May 2003, the Commission has adopted a new definition which as of 1 January 2005 will replace the previous one. Since the reference contained in the regulation is not of a dynamic character, the regulation has to be amended accordingly. Content of the new SME-definition • • Substantial increase of the financial ceilings (turnover of balance sheet total) as a result of inflation and productivity increases since 1996 • • Introduction of a clear typology of enterprises (autonomous, partner and linked) to give a more realistic picture of their economic strength • • Within the typology of enterprises an exemption is introduced for investment in spin-offs by universities and research institutes to promote investment in research Enterprise category — Headcount — Turnover — or — Balance sheet total Medium-sized — < 250 — ≤ 50 mill € (1996: 40 mill) — ≤ 43 mill € (1996: 27 mill) Small — < 50 — ≤ 10 mill € (1996: 7 mill) — ≤ 10 mill € (1996: 5 mill)

	Micro < 10 ≤ 2 mill € ≤ 2 mill €
Eligible costs	Aid can be provided in relation to the following categories of expenditure: • Investment in tangible assets (land, buildings, plant/machinery) and in intangible assets (expenditure entailed by technology transfer). Expenditure on transport equipment in the transport sector is not eligible. • The costs of services provided by outside consultants and the costs of the first participation of an enterprise in a particular fair or exhibition.
Aid intensities	<table><tr><td></td><td>**Non-assisted regions**</td><td>**Art. 87(3)(a) regions**</td><td>**Art. 87(3)(c) regions**</td></tr><tr><td>**Investment**</td><td></td><td>Regional</td><td>Regional</td></tr><tr><td>Small firms</td><td>15%</td><td>aid ceiling</td><td>aid ceiling</td></tr><tr><td>Medium-sized firms</td><td>7.5%</td><td>+15%</td><td>+10%</td></tr><tr><td>**Services by outside consultants**:</td><td>up to 50%</td><td>up to 50%</td><td>up to 50%</td></tr></table> **<u>Important:</u>** The maximum intensity of investment aid should never be allowed to exceed 30% net in the case of Article 87(3)(c) regions, nor 75% net in the case of Article 87(3)(a) regions.
Special conditions	• Aid measures satisfying the conditions laid down in the Regulation are exempted from the ex ante notification requirement. However, large projects satisfying the following thresholds are not exempted from individual notification: - The total eligible costs of the whole project are at least € 25,000,000 and the gross aid intensity is at least ½ of the applicable aid intensity ceiling <u>or</u> - the total gross aid amount is at least €15,000,000. • Within 20 working days following the implementation of the exempted aid scheme or the granting of the exempted individual aid, the Member State must submit to the Commission a summary description of the aid measure. • As regards aid for research and development, please refer to the specific fiche on aid for research and development.

<table>
<tr><th colspan="2">Fiche III - Aid for research and development</th></tr>
<tr><td>Legal basis</td><td>Community framework for State aid for Research and Development (OJ C 45, 17.02.1996, p. 5), the Commission Communication amending the Community framework for State aid for Research and Development (OJ C 48, 13.2.1998, p. 2) and Commission Regulation (EC) Bi 364/2004 of 25 February 2004 amending Regulation (EC) No 70/2001 as regards the extension of its scope to include aid for research and development</td></tr>
<tr><td>Concepts</td><td>▪ Fundamental research: Activity designed to broaden knowledge not linked to industrial or commercial objectives;
▪ Industrial research: Planned research aimed at the acquisition of new knowledge, the objective being that such knowledge may be useful in developing new products, processes or services or in bring about a significant improvement in existing products, processes or services;
▪ Pre-competitive research: The shaping of the results of industrial research into a plan, arrangement or design for new, altered or improved products (including the creation of a prototype which could not be used commercially).</td></tr>
<tr><td>Eligible costs</td><td>▪ Personnel costs of staff employed solely on the research activity;
▪ Costs of instruments, equipment and land premises used solely and on a continual basis for the research activity (Normal investment excluded);
▪ Cost of external consulting and equivalent services;
▪ Additional overheads incurred directly as a result of the R&D;
▪ Other operating expenses incurred directly as a result of the research activity.</td></tr>
<tr><td>Aid intensities</td><td><table>
<tr><th>Type of R&D:</th><th>Fundamental</th><th>Industrial</th><th>Precompetitive</th></tr>
<tr><td>Standard rate
(large firms outside assisted areas)</td><td>100%</td><td>50%</td><td>25%</td></tr>
<tr><td colspan="4">The following bonuses may apply:</td></tr>
<tr><td>• SME</td><td>-/-</td><td>+10%</td><td>+10%</td></tr>
<tr><td>• Art. 87(3)(a) region</td><td>-/-</td><td>+10%</td><td>+10%</td></tr>
<tr><td>• Art. 87(3)(c) region</td><td>-/-</td><td>+5%</td><td>+5%</td></tr>
<tr><td>• Project linked to EU R&D framework programme</td><td>-/-</td><td>+15%</td><td>+15%</td></tr>
<tr><td>• Project involving cross-border co-operation</td><td>-/-</td><td>+10%</td><td>+10%</td></tr>
</table>
<u>Important:</u> Cumulation of the standard rate and the above bonuses is subject to an absolute limit of 75% for industrial research and 50% of pre-competitive development.</td></tr>
<tr><td>Special conditions</td><td>• In case where schemes apply to large companies, aid must be shown to have an incentive effect on company R&D (quantifiable indicators, demonstration of market failures, etc.).
• Aid for research and development, aid for technical feasibility studies and aid for patenting costs to SMEs can be exempted under the aforementioned Commission Regulation (EC) No 364/2004 if its conditions are met.
• For each aid scheme, annual reports on implementation are required.</td></tr>
</table>

Specific rules on innovation	Pursuant to point 2.3 of the framework, innovation does not qualify as a separate category of R&D. Aid for activities that could be regarded as innovative but do not correspond to the categories mentioned above can benefit from State aid only if it conforms with the Commission policy on investment aid.

Fiche IV – Regional aid

Legal basis	Guidelines on National Regional Aid (OJ C 74, 10.3.1998, p. 9 and OJ C 258, 9.9. 2000, p. 5) and the 2002 Multisectoral framework on regional aid for large investment projects (OJ C 70, 19.3.2002, p. 8), the latter replacing the 1998 Multisectoral Framework on regional aid for large investment projects (OJ C 107, 7.4.1998, p. 7)
Aim	The guidelines aim at promoting the development of less-favored regions • mainly by supporting initial investment or • in exceptional cases, by providing operating aid to establishments located in regions eligible for regional aid.
Concepts	Two categories of *eligible regions* can be distinguished: • *Article 87(3)(a) regions*: These regions where the standard of living is abnormally low or where there is serious underemployment (NUTS II regions with a GDP/cap lower than 75% of the EU average). • *Article 87(3)(c) areas*: These are problem areas defined on the basis of (national indicators proposed by the Member States. *Initial Investment*: investment on fixed capital relating to the setting up of a new establishment, the extension of an existing establishment, or the starting up of an activity involving a fundamental change in the product or production process of an existing establishment. *Operating aid:* Aid aimed at reducing a firm's current expenditure (e.g. salary costs, transport costs, rents, …). *Large investment projects* are initial investment project with eligible investment costs that are at least € 50 million. Under the regional aid guidelines, the aid intensity is calculated as *Net grant equivalent*, which represents the final benefit which the firm is deemed to derive from an aid after corporate taxes payable on this aid have been deducted.
Eligible costs	<u>Aid for initial investment **:**</u> Aid can be provided in relation to the following categories of expenditure: • Investment in tangible assets (land, buildings, plant/machinery) and in intangible assets (expenditure entailed by technology transfer). Expenditure on transport equipment in the transport sector is not eligible. • Gross wage-cost, calculated over a period of two years multiplied by the number of jobs created (net job creation in the establishment concerned).
Aid intensities	**Standard regions (NGE)** — **Outermost regions (NGE)** — **Low population density (NGE)** **Article 87(3)(a) regions:**

	• GDP/cap<60% of EU average: 50% 65% 50% • GDP/cap>60% of EU average: 40% 50% 40% **Article 87(3)(c) areas:** • Standard: 20% 30% 30% • Prosperous: 10% (20%) 20% 20% SMEs may receive a bonus of 15% in Article 87(3)(a) areas and of 10% in Article 87(3)(c) regions, but the maximum intensity of investment aid should never be allowed to exceed 30% net in the case of Article 87(3)(c) regions, nor 75% net in the case of Article 87(3)(a) regions. In any case, aid must be made conditional on the maintenance of the investment or of the employment created for at least 5 years. Cumulation rules have to be respected. For *large investment projects,* the aid intensity ceiling is reduced: • For the part of the eligible costs between € 50 million to € 100 million, the intensity is reduced to 50% of the applicable regional aid ceiling • For the part of the eligible cost exceeding €100 million, the intensity is reduced to 34% of the applicable regional aid ceiling. • Member States are required to notify every case of regional investment aid if the aid proposed is more than the maximum allowable aid that an investment of €100 million can obtain under the scale and the rules laid down in paragraph 21 of the MSF. Specific tests laid down in point 24 letters (a) and (b) of the MSF (2002) have to be carried out in order to assess whether individually notifiable projects will be eligible for investment aid.
Operating aid	Operating aid may be granted in Article 87(3)(a) regions, and only if all of the following conditions are satisfied: • It is justified in terms of its contribution to regional development; • Its level is proportional to the handicaps it seeks to alleviate; • It is limited in time and progressively reduced; • Any operating aid intended to promote exports between Member States is ruled out. Member States must demonstrate the existence and importance of any handicaps. Aid to offset additional transport costs can be provided only in the outermost regions and in low population density areas qualifying for regional aid.
Specific rules on innovation	• Pursuant to footnote 11 of the MSF (2002), if the Member State demonstrates that the aid beneficiary creates, through genuine innovation, a new product market, the tests laid down in point 24 letters (a) and (b) of the MSF (2002) do not need to be carried out, and the aid will be authorized under the normal scale mentioned above. • A similar preferential treatment of genuine innovation already applied under the old MSF (1998). Pursuant to its point 3.6 there could be exception to the reduction of the competition factor due to the beneficiary's high market share for the product concerned if the company created, through genuine innovation, a new product market.

Fiche V - Risk capital aid	
Legal basis	Commission Communication on State aid and risk capital (OJ C 235, 21.8.2001, p.3)
Presence of State aid	When assessing risk capital funds, the Commission examines whether State aid is present at each of the following levels: *Aid to the investors*: Where a measure allows investors to participate in a risk capital fund on terms more favourable than if they had undertaken this investment in absence of the measure, then those investors may receive State aid. The same applies where the investors participate in a fund on terms more favourable than public investors. *Aid to an intermediary vehicle or fund*: Normally, the fund is merely a vehicle for the transfer of aid, rather than being an aid beneficiary itself. However, in certain cases (notably existing funds with several investors), the fund may have the character of an independent enterprise. *Aid to the enterprises invested in*: The main test is whether investment in the enterprise has been made on terms acceptable to a normal economic operator in a market economy. Investors whose risks have been reduced, or whose rewards have been increased by a measure, may be said no longer to be such operators.
Existence of market failure	Market failure will normally be assumed in cases where each tranche of finance to an individual enterprise will be below € 500,000 in non-assisted regions or € 750,000 in Art. 87(3)(c) areas or € 1,000,000 in Art. 87(3)(a) areas. In cases where these ceilings would be exceeded, clear evidence should be provided of the existence of market failure.
Compatibility assessment under Article 87(3)(c)	Assessment of risk capital measures on the basis of existing State aid regulations, frameworks or guidelines: In a few cases, risk capital investments can be approved under existing regulations, frameworks or guidelines. This would be the case if the equity capital invested in a company is provided in conformity with the provisions laid down in one of these regulations, frameworks or guidelines (e.g. the *de minimis* or SME aid regulation). In most cases, this will not be possible for a number of reasons (e.g. the difficulty of establishing a grant equivalent of equity capital provided to companies, the difficulty of establishing a link with eligible costs, the fact that no State aid regulation, framework or guideline provides any basis for measures providing aid at the level of the investors). In cases where risk capital measures can not be cleared on the basis of existing State aid regulations, frameworks or guidelines, the Commission will assess the compatibility of State aid measures, taking into account the following elements: The Commission will regard the following characteristics as <u>positive elements</u> in its evaluation : • Investments are restricted to small enterprises and/or to medium-sized enterprises in their start-up or other early stages or in assisted areas. • The measure focuses on provision of risk capital rather than on provision of other forms of finance (e.g. loan capital).

	• Decisions to invest are profit-driven. This would be the case if there is a link between the financial performance of the fund and the remuneration of those responsible for the investment decisions. This would also be the case if there is significant involvement of market economy investors. capital being invested on a commercial basis in the equity of the target enterprises (.significant involvement: at least 50% of the fund's capital, or 30% in the case of measures operating in assisted areas). • The level of distortion of competition between investors and between investment funds is minimised. This could be achieved as a result of an open call for tender for the establishment of any preferential terms given to investors. Alternatively, the preferential terms could be established at the launch of the investment fund and could be made availability to all interested investors. • Investments by the fund take place on the basis of a business plan. • The measure provides for a clear .exit mechanism; • There are limits to the cumulation of aid measures to a single enterprise.
Specific rules on innovation	• The introduction (Point I.3) recognizes that there is an equity gap concerning European SMEs as regards high-tech innovative and mostly young firms with high growth potential. • The introduction (Point I.6) also refers to the philosophy underlying the strategy for developing the Community risk capital market attaches primary importance to the creation of new and innovative business through structural and horizontal measures. • The communication also recognizes the difficulties linked to the traditional concept of 'eligible costs' in the field of risk capital especially for many young or innovative enterprises (Point V.6). • The presence of the market failure concerning imperfect or asymmetric information particularly concerns highly innovative or risky projects (Point VI.3), which justifies a certain level of State aid on certain conditions. • In the compatibility assessment (Point VIII.3), the communication states that to the extent that many private sector funds focus on specific innovative technologies the Commission is prepared to accept a sectoral focus where this has a commercial as well as a public policy logic.

Fiche VI - Employment aid	
Legal basis	Commission Regulation (EC) No 2204/2002 of 12 December 2002 on the application of Articles 87 and 88 of the EC Treaty to State aid for employment (OJ L337, 13.12.2002, p. 3)
Notification obligation	Obligation to notify aid to single enterprise exceeding gross amount of EUR 15 million over three years.
Scope	The BER covers only schemes (i.e. not individual aids) which are selective (limited to certain regions or certain sectors). The BER applies to the agricultural sector but not to the coal, shipbuilding, and transport sector. The BER does not apply to certain employment policy measures as they are not considered state aid (i.e. general measures or measures granted directly to the unemployed individuals themselves).
Aid for job creation	• For SMEs in non-assisted areas: 15% (small enterprises) or 7.5% (medium enterprises) • In Art. 87(3)(a) areas: regional aid ceiling + 15% (maximum 75%) • In Art. 87(3)(c) areas: regional aid ceiling + 10% (maximum 30%) The above ceilings apply under the following conditions: • Employment must represent a net increase in the number of employees • Employment must be maintained for at least 3 years (2 years for SMEs) • New employees must have never had a job or must have lost their previous job • The higher regional ceilings apply only if the beneficiary's contribution to financing new employment is at least 25% and if the employment is maintained in the qualifying region.
Aid for recruitment of disadvantaged and disabled people	For disadvantaged people, percentage of wage costs over a period of one year following recruitment: 50% Disadvantaged people include: young persons below 25 years or within 2 years from completing full-time education; migrant workers moving within the EU; members of ethnic minorities and requiring development of linguistic, vocational training or working experience; persons absent from working life and education for 2 years due to family reasons; single adults looking after children; unemployed persons without secondary qualification; unemployed persons above 50 years; long-term unemployed persons; people convicted and imprisoned for criminal charges. For disabled people, percentage of wage costs over a period of one year following recruitment: 60% Disabled people include: handicapped due to serious physical, mental, or psychological impediment. The BER allows aid for additional costs linked to the employment of disabled people, including costs of adapting premises, of employing staff to assist the disabled worker(s),

	and of adapting or acquiring equipment for disabled worker(s).
Necessity of aid	Application to the Member State has to be submitted before the employment is created.

FICHE VII – Training Aid	
Legal basis	Commission Regulation (EC) No 68/2001 of 12.01.2001 on the application of Articles 87 and 88 of the EC Treaty to training aid (OJ L 10, 13.1.2001, p.20) and Commission Regulation (EC) No 363/2004 of 25 February 2004 amending Regulation (EC) No 68/2001 on the application of Articles 87 and 88 of the EC Treaty to training aid (OJ L 63, 28.2.2004, p. 20)
Concepts	Specific training: Training involving tuition directly and principally applicable to the employees present or future position in the assisted firm and providing qualifications which are not or only to a limited extent transferable to other firms or fields of work. General training: Training involving tuition which is not applicable only or principally to the employees present or future position in the assisted firm, but which provides qualifications which are largely transferable to other firms or fields of work and thereby substantially improve the employability of the employee. Training is considered general if, e.g. it is jointly organised by different independent enterprises, or if employees of different enterprises may avail themselves of the training. It is also considered general if it is recognised, certified or validated by public authorities or bodies on which the Member State or the Community conferred the necessary powers.
Eligible cost	Trainers personnel costs; Trainers and trainees travel expenses; Other current expenses (materials, supplies, etc.); Depreciation of tools and equipment, to the extent that they are used exclusively for the Training scheme in question; Cost of guidance and counselling services with regard to the training project; Trainees' personnel costs up to the amount of the total of the above eligible costs.
Aid intensities	Maximum aid (gross percentages)

	Specific training	General training
Standard rate (large firms outside assisted areas)	25%	50%
Top-ups on standard rate:		
• SMEs	+10%	+20%
• Art. 87(3)(a) region	+10%	+10%
• Art. 87(3)(c) region	+ 5%	+ 5%
• Beneficiaries: categories of disadvantaged workers	+10%	+10%

Fiche VIII – Aid for environmental protection measures	
Legal basis	Community Guidelines on State aid for environmental protection (OJ C 37, 3.2.2001, p. 3)
Scope	The Guidelines cover aid for actions designed to remedy or prevent damage to our physical surroundings or natural resources or to encourage the efficient use of these resources. The Guidelines do not apply to: - Aid for R&D and training in the environmental field (R&D framework and training aid regulation apply). - The production, processing and marketing of agricultural products listed in Annex I of the Treaty (Community guidelines for State aid in the agricultural sector apply). - Sectors for which special rules apply: steel.
Eligible activities and costs	<u>**Investment aid & aid for advisory services**</u> *1) Aid for investment to adapt to new compulsory EU environmental standards or to improve on such standards* • Eligible costs: limited to extra costs of investments in land, buildings, equipment and intangible assets necessary to achieve compulsory standards and/or meet the environmental objectives. • Aid for investment to adapt to new compulsory EU standards: to SMEs only for a period of three years from the adoption of these new standards. *2) Aid for investment in energy saving, in renewable sources of energy and in combined heat and power installations (CHP)* • Eligible costs: limited to the extra costs of the investments in land, buildings, equipment and intangible assets necessary for environmental objectives. • In case of renewables or CHP, the extra costs are defined as the extra costs compared to the costs of a comparable conventional power plant. *3) Aid for the rehabilitation of polluted industrial sites* • Eligible costs are the cost of the work to repair the environmental damage less the increase in the value of the land. • If the person responsible for the pollution is not identified or cannot be made to bear the cost, the person responsible for the rehabilitation of the land may receive aid. *4) Aid for the relocation of firms* • Aid for the relocation of companies can be granted only if the change of location is dictated on environmental protection grounds and if it is ordered by administrative or judicial decision, and the strictest standards are complied with. • The eligible costs should be limited to the net costs of the relocation. *5) Aid for advisory services* • Conditions of the SME Regulation apply. Operating aid is allowed in cases where it contributes significantly to the protection of the environment. The following types of operating aid may be authorized: • Operating aid to promote environmentally-friendly forms of waste management and to promote energy saving • Operating aid in the form of reductions of or exemptions from taxes levied on certain activities for reasons of environmental protection (e.g. CO_2 levy) • Operating aid to promote renewable energy sources

	• Operating aid for the combined production of electric power and heat Specific conditions to be respected when granting operating aid in the environmental field are set out in detail in points 42 to 67 of the Guidelines. The eligible costs are strictly limited to the extra production costs by comparison with the market prices of the relevant products or services.
Operating aid	Operating aid is in principle limited to a duration of 5 years. Where the aid is digressive, its intensity may amount to 100% of the eligible costs. Where the aid is non-digressive, the intensity must be limited to 50% of the eligible costs. For operating aid in the form of tax reductions or exemptions and for operating aid for renewable energy sources and Combined Heat and Power, specific criteria apply.

Maximum aid for investment aid	Maximum aid intensities as a percentage of eligible costs	Outside assisted areas (GGE)	In assisted areas (GGE)
	(a) Investment to adapt to compulsory EU standards (SMEs only)	15%	15%
	(b) Investment to improve on compulsory EU standards and relocation of firms	30%	40% or Regional aid ceiling + 10%
	(c) Investment in energy saving and in CHP	40%	40% or Regional aid ceiling + 10%
	(d) Investment in renewable sources of energy (°) 40% 40% or Regional aid ceiling + 10%	40%	40% or Regional aid ceiling + 10%
	(e) Rehabilitation of polluted industrial sites	100% of eligible costs + 15% of the cost of the work	