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State aid Scoreboard

Report on State aid contribution to Europe 2020 Strategy

- Spring 2011 Update -

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1. EXECUTIVE SUMMARY

This Spring edition of the State aid Scoreboard provides an overview of State aid in the areas which are particularly relevant for the Europe 2020 Strategy[1]. These areas are research and development and innovation (R&D&I), environmental protection, regional development, broadband, SME's, employment and training. For each of these areas, the Scoreboard sets out the policy context, describes the legal framework under which aid can be granted, provides data on the number and type of measures decided in the period 2004-2010 and on actual expenditure (up to and including 2009). This Scoreboard is the first on State aid in the context of the Europe 2020 Strategy. It is intended to serve as a starting point for further analysis in the coming years, to be complemented, where possible, with a more qualitative analysis on the effectiveness of the aid measures.

1.1. Research & Development & Innovation

Research and development and innovation (R&D&I) are key elements in the effort to strengthen the competitiveness of the European economy and to ensure sustainable growth. Therefore, R&D&I have been placed at the heart of the Europe 2020 Strategy..

The main role of State aid for R&D&I is to provide funding, when markets themselves fail to deliver an optimal outcome due to imperfections in their functioning (as a result of e.g. externalities, public goods, imperfect and asymmetric information and coordination or network failures). State aid can contribute to generating more R&D&I only if it addresses well-identified market failures which prevent markets from reaching optimal R&D&I levels, and if it is well designed so that distortions of competition and trade are minimised and public spending efficiency maximised. However, it is important to bear in mind that State Aid is only one complementary element in the much larger tool-box needed to boost R&D&I, and that it cannot replace the reforms needed to tackle structural weaknesses in this specific area.

The EU still has to make significant improvements to achieve the Europe 2020 target of spending 3 % of EU GDP on R&D&I by 2020. In 2009, this figure stood at 2.01 % of GDP (around EUR 236.5 billion), the highest level ever, but still well below the 3 % target. There are also huge differences between Member States. The public sector was the source of funds for around one third of total R&D&I expenditure in the EU (0.65 % of GDP). State aid represented a relatively small share of this total (EUR 10.6 billion, equal to 0.09 % of GDP in 2009).

Between 2004 and 2010, the Commission took 426 final decisions on R&D&I measures, of which 413 measures were approved as compatible, an additional 12 measures were declared not to contain State aid and one measure was subject to a negative decision with recovery. Between the entry into force of the R&D&I Framework[2] on 1 January 2007 and the end of 2010, the Commission approved 195 aid schemes. During the same period, the Commission approved an additional 44 individual or *ad hoc* R&D&I aid measures, of which 39 were approved after a detailed assessment.

According to the annual reports submitted by Member States, more than half of the total EUR 46.5 billion granted in the period 2004-2009 for R&D&I was provided by two Member

1 "Europe 2020: a strategy for smart, sustainable and inclusive growth", COM (2010) 2020, p.21.
2 Framework for State aid for Research and Development and Innovation,OJ C 323 of 30.12.2006, p. 1.

States: Germany (29 %) and France (22 %). Five other Member States were responsible for a further third of the total: Italy (11 %), Spain (9 %), the United Kingdom (7 %), Belgium (5 %) and the Netherlands (4 %).

Member States which are considered to be innovation leaders are not necessarily those where most R&D&I State aid is granted. Indeed, evidence shows that a high level of performance in this area is not directly linked to the level of State aid granted but rather to the appropriate environment and general conditions for investment.

1.2. Environmental protection

The Europe 2020 Strategy has put forward sustainable growth, promoting a more resource efficient, greener and competitive economy, as one of the main priorities for the coming years. In particular, it defined the following targets: reduction by 20 % of CO_2 emissions, a 20 % share for renewable energy in EU energy consumption and a 20 % increase in energy efficiency.

The objective of State aid control in the field of environmental protection is to ensure that State aid measures result in a higher level of environmental protection than would occur without the aid and to ensure that the positive effects of the aid outweigh its negative effects, notably distortions of competition and effect on trade between Member States. State aid may be necessary to achieve the EU environmental objectives that cannot be achieved through market-based incentives or through regulation.

Aid granted by Member States falls under two categories: (i) direct aid for environmental measures and (ii) reductions or exemptions from environmental taxes. In the period 2004-2010, the Commission took 347 final decisions on the matter (approving 320 State aid measures) and the number of block exempted measures amounted to 219. The highest number of measures was related to the promotion of energy from renewable energy sources (120 block exempted measures).

In the period 2004-2009, State aid in the field of environmental protection amounted to EUR 79 billion in the EU. Germany and Sweden (through tax exemptions) accounted for respectively 51 % and 16 % of this total. In 2009, such state aid, granted in the EU, amounted to EUR 13.2 billion

1.3. Regional development

The Europe 2020 Strategy places economic, social and territorial cohesion at the heart of the Strategy. Currently, regional State aid is the horizontal objective representing the highest share of total aid to industry and services.

Effective control of regional State aid is a precondition for Member States to deliver efficient regional aid policies and to contribute to smart, sustainable and inclusive growth.

The objective of State aid control for regional aid is to allow national support to promote the development of disadvantaged areas within the EU in a way which is compatible with the internal market rules. Special attention is paid to the outermost regions, in recognition of the specific additional costs that result from the structural handicaps which may result from geographic remoteness and difficulties to integrate into the internal market.

Regional State aid control must be distinguished from EU Cohesion policy. National regional aid in fact focuses more on disadvantaged areas than EU regional policy, which has at present broader policy objectives and a wider spatial coverage. Only a fraction of Cohesion policy funding is covered by State aid rules as the majority of structural funds spending relates to activities which do not fall within the definition of State aid, for example general infrastructure.

In the period 2004-2010, the Commission adopted 570 final decisions on State aid measures for regional development. In the same period, Member States implemented 778 block exempted measures for regional development.

In the period 2004-2009, regional development State aid amounted to EUR 67 billion, of which EUR 13 billion was granted in 2009. Almost half (45 %) of the regional aid in 2009 was granted through only five measures in Germany and France.

1.4. Small and medium-sized enterprises (SMEs)

The Europe 2020 Strategy highlights the role of SME's in the European economy as engines of job creation and growth. The support to SME's constitutes an important element of the Europe 2020 Strategy. In particular, in addition to other weaknesses related to the business environment, Member States will have to tackle the special financing difficulties of such companies. Where market forces alone are insufficient, State aid measures may play a supplementary role by providing public funding.

However, State aid control is essential to maintain a level playing field for all companies active in the internal market, irrespective of the Member State in which they are established. The Commission has to be vigilant that the measures are well targeted; ensuring that the aid does not discourage investors, is not invested to keep inefficient firms afloat and does not create distortions of competition.

Between 2004 and 2010, the Commission took 139 final decisions on measures addressed exclusively to SMEs,of which 108 concerned risk capital. Three Member States were responsible for more than half of the approved risk capital measures: Germany, the United Kingdom and Italy. The other SME aid measures predominantly concerned Germany, Austria and Slovakia. Measures taken under the general block exemption regulation[3] (GBER) amounted to around 1 500 for the period 2004-2010. Of this total, risk capital aid (which can be granted as block exempted measures since the entry into force of the GBER), is the objective of only 28 measures.

The total State aid earmarked for SMEs amounted to approximately EUR 33 billion in the period 2004-2009 (EUR 4.6 billion in 2009), of which risk capital represents around EUR 2.3 billion. Four Member States were responsible for three quarters of the total SME aid in 2009: Italy (24 %), Germany (20 %), France (18 %) and the United Kingdom (14 %).

However, figures on State aid to SMEs do not fully reflect the total aid amount actually disbursed to these companies as they only take into account those measures for which the

3 Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Article 87 and 88 of the Treaty (General block exemption Regulation). OJ L 214, 9.8.2008, p. 3 (entry into force 29 August 2008).

primary objective is "SMEs" or "risk capital". Thus, any conclusions to be drawn from the downward trend observed as regards total SME aid must take into account that caveat.

As regards risk capital, it seems that most of the aid is concentrated in the United Kingdom; use of this option by the other Member States was almost negligeable.

1.5. The broadband sector

The Europe 2020 Strategy has underlined the importance of broadband deployment to promote social inclusion and competitiveness in the EU. It has also set ambitious targets for broadband development, as set up in the Digital Agenda, e.g. to bring basic broadband to all Europeans by 2013 and to ensure that, by 2020, all Europeans have access to a much faster internet service. The estimated costs of each of those objectives are up to EUR 60 billion for the first stage and EUR 270 billion for the second.

The objective of State aid control for broadband is to promote competition among service providers by enhancing infrastructure developments. This is intended to help to maximise consumer welfare in the form of lower prices and better services. Such investments will come primarily from commercial operators. However, the importance of public funding and State aid has increased significantly since 2008, when national State aid measures for broadband roll-out were designed as an integral part of comprehensive national broadband strategies. Therefore the amount of State aid dedicated to the broadband sector has risen sharply compared to the average in the period 2004-2008.

Between 2004 and 2010 the Commission approved 64 State aid measures relating to the broadband sector, most of which concerned the United Kingdom. According to the annual reports for the period 2004-2009, Member States have already implemented EUR 368 million of State aid for broadband networks.

The use of public funding can help to bring high-speed internet access to as many Europeans as possible to help them benefit from the advantages of a knowledge-based society. However, public funding has to be used carefully in the liberalised telecoms markets to avoid crowding out private investments.

1.6. Employment and training

The Europe 2020 Strategy aims to foster a high-employment economy with a 75 % employment rate.

The objective of State aid control in this field is to allow national support for training and job creation, in particular for disadvantaged and disabled workers. The role of State aid measures to promote job creation and training is quite limited because direct aid for employment targets only disabled and disadvantaged workers, whereas aid with other objectives also has employment effects, in particular regional aid. However, the Commission has traditionally adopted a positive approach towards employment aid, particularly where it is intended to be used to employ individuals who face particular difficulties in finding work. The Commission is also generally positively as regards training aid. Member States are therefore encouraged, where necessary, to complement their national plans for employment and training with well-targeted State aid measures.

The Commission approved a total of 51 State aid measures for employment and training in the period 2004-2010. The figure was low due to the fact that the majority of measures for training and employment were introduced by Member States under block exemption regulations. During the same period 1 005 measures were block-exempted. Nearly 70 % of all employment measures introduced under a block exemption regulation were set up by five Member States: Poland, Italy, Spain, Hungary and Germany. Around 74 % of training measures under block exemption regulations were implemented by Italy, Belgium, the United Kingdom, Germany and Spain.

State aid expenditure for training and employment amounted together to around EUR 22.3 billion in the period 2004-2009, of which employment aid stood at EUR 17.5 billion. Training and employment State aid amounted together to around EUR 3.4 billion in 2009. Denmark, Poland and Italy were responsible for 84 % of employment aid granted in 2009, while Italy, Germany and Spain granted half of total training aid.

2. INTRODUCTION

This Spring edition of the State aid Scoreboard aims to provide an overview of the situation as regards State aid in the Member States in the areas which are particularly relevant for the Europe 2020 Strategy[4], i.e. R&D&I, environmental protection, regional development, broadband, SMEs and employment and training[5]. For each of these areas the Scoreboard sets out the policy context, describes the legal framework under which aid can be granted and provides data on the number and type of measures decided in the period 2004-2010 and on actual expenditure(up to and including 2009).

Given that the Europe 2020 Strategy was only launched in 2010 and the latest available data on State aid expenditure relate to 2009, it is of course too early at this stage to draw conclusions as to how State aid control policy concretely contributed to the Europe 2020 objectives. However, this Scoreboard is envisaged as a first edition putting State aid in the context of the Europe 2020 Strategy, and could serve as a starting point for further analysis in the coming years, to be complemented where possible with a more qualitative analysis on the effectiveness of the aid measures.

When the European Council at the end of March 2010 endorsed the Commission's proposal, it concluded that innovation and competitiveness are fundamental to the Europe 2020 Strategy, alongside protection of the environment and social inclusion. Indeed, EU competition policy, and State aid control policy in particular, are key elements in the Europe 2020 Strategy. Competition is not an end in itself, but rather a means of increasing the competitiveness of European markets to the benefit of companies and consumers, resulting in more choice, better products at better prices. Competition boosts productivity, growth and job creation.

The objectives of State aid control are: i) to limit overall levels of State aid ("less aid"); ii) to ensure that where aid is granted it does not restrict competition but addresses market failures to the benefit of society as a whole ("better aid"); iii) to effectively prevent or recover incompatible aid; and iv) ensure a level playing field in the internal market (no trade distortions between Member States). State aid control has a particular significance in the context of the crisis and budgetary restrictions in the Member States. During the crisis, the

4 "Europe 2020: a strategy for smart, sustainable and inclusive growth", COM (2010) 2020, p.21.

5 This Spring edition of the Scoreboard does not aim to be exhaustive. It does not consider all areas which may be relevant to the Europe 2020 Strategy, such as culture and media, and which might be assessed in future editions of the Scoreboard.

Commission has demonstrated the adaptability of its State aid tools, notably by adopting various communications aimed at preserving financial stability and ensuring a level playing field, while providing legal certainty, as regards both financial institutions and the real economy[6].

Europe 2020 has identified three main themes:

– Smart growth: developing an economy based on knowledge and innovation.

– Sustainable growth: promoting a more resource efficient, greener and more competitive economy.

– Inclusive growth: fostering a high-employment economy delivering economic, social and territorial cohesion.

State aid control policy can contribute to the achievements of these three themes.The Europe 2020 Strategy lays down various priorities for which State aid instruments can be used in a policy mix to contribute to the following "flagship initiatives":

(1) Innovation Union;

(2) a digital agenda for Europe;

(3) a resource efficient Europe;

(4) an industrial policy to tackle globalisation[7]; and

(5) new skills and jobs.

State aid control aims at helping Member States to better target aid by directing it more closely to improving competitiveness and/or reducing regional and social disparities. In other words, it aims to ensure that aid addresses market failures and does not distort competition without an appropriate compensating benefit. Typically, such aid relates to horizontal objectives that are taken into account through specific regulatory frameworks and guidelines, including for R&D, innovation and risk capital, SMEs, environmental protection and training. Specific frameworks and guidelines in this regard helps to ensure that when Member States intervene in the market, the public funds are more likely to effectively address the identified market failures.

The current architecture of State aid control is based on a 'three-stream' system: block exemption, standard assessment and detailed assessment. Block exempted measures include those that are exempted from prior notification to the Commission and which can therefore be implemented without prior Commission authorisation. Notified measures are, in principle, subject to a standard assessment. Only in instances where doubts cannot be removed is a detailed assessment carried out. This two-tiered approach enables the Commission to focus its analysis on the most distortive aid measures.

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6 Information on State aid granted in response to the crisis can be found in chapter 3 of the Commission's State aid Scoreboard Report on State aid granted by the EU Member States - Autumn 2010 Update (COM(2010)701). The next Autumn State aid Scoreboard will update this information.

7 In line with the G20 commitments, the EU has continued resisting protectionism in all its forms and minimising any negative impact on trade and investment of the EU's domestic policy actions.

This Spring edition of the Scoreboard provides an overview of aid reported by Member States for each of the relevant categories of State aid, putting them in their legal and policy context. This includes aid for R&D&I (Section 3), environmental and energy saving aid (Section 4), regional and development aid (Section 5), SMEs (Section 6), broadband networks (Section 7) and employment and training aid (Section 8).

The figures in this report are based on the annual reports on existing schemes submitted by the Member States pursuant to Article 5 of Commission Regulation (EC) 794/2004[8] and Annex III A of that Regulation, which defines the scope and content of the data that Member States have to provide to the Commission[9]. The data are based on the information submitted by Member States in their notifications pursuant to Article 2 of Council Regulation (EC) 659/1999[10].

Figures on expenditure related to State aid do not include contributions from the Structural Funds and the Cohesion Fund. In the period 2007-2013, these funds will account for about 36 % of the EU budget. This represents spending of nearly EUR 347 billion over the period concerned, targeted at three objectives: Convergence; Regional Competitiveness and Employment, and Territorial Cooperation.

Only a fraction of Cohesion policy funding is covered by State aid rules as the majority of spending relates to general infrastructure or non-economic activities[11]. In any event, the respect of State aid rules is an explicit requirement for benefiting from the Structural Funds.

3. STATE AID FOR RESEARCH, DEVELOPMENT AND INNOVATION

3.1. Policy context

Research and development and innovation (R&D&I) is one of the key elements in the effort to strengthen the competitiveness of the EU economy and to ensure sustainable growth. Therefore, R&D&I has been placed at the heart of the Europe 2020 Strategy[12], as one of its flagship initiatives.

The Europe 2020 Strategy has set the target of spending 3 % of EU GDP on R&D by 2020. However, it also recognises that "*it is not only the absolute amounts spent on R&D that count – Europe needs to focus on the impact and composition of research spending and to improve*

[8] OJ L 140, 30.4.2004, p. 1.

[9] Data on State aid expenditure presented in this Scoreboard cover all State aid measures as defined under Article 107 TFEU (former Article 87(1) of the EC Treaty) that Member States have awarded to industry and services. Agriculture, Fisheries and the transport sector are excluded as well as State aid granted in response to the crisis (aid to the financial sector and to the real economy). To show the underlying trends, and in line with the Autumn 2010 Scoreboard, data covers the period 2004-2010 (number of decisions and approved amounts). For expenditure the latest available data relate to 2009.

[10] OJ L 83, 27.3.1999, p. 1.

[11] The bulk of regional spending is reserved for Convergence regions (essentially those regions with a GDP per capita below 75 % of the Union average) to help improve their infrastructures and to develop their economic and human potential. In addition, all Member States are eligible for funding to support innovation and research, sustainable development, and job training in their less advanced regions. A smaller amount goes to cross-border and inter-regional cooperation projects.

[12] "Europe 2020: a strategy for smart, sustainable and inclusive growth", COM (2010) 2020, p. 12.

the conditions for private sector R&D in the EU"[13]. It makes an explicit reference to the role of State aid control policy by considering that it can "*actively and positively contribute […] by prompting and supporting initiatives for more innovative, efficient and greener technologies, while facilitating access to public support for investment, risk capital and funding for research and development*"[14]. However, it is important to stress that State aid rules are only one element of R&D&I policies and that State aid concerns only a subset of overall R&D expenditure. For instance, while as pointed out by recent economic analysis "*an R&D tax treatment more oriented towards fiscal incentives rather than direct subsidies appears to have a positive effect on the efficiency level of R&D spending across EU Member States*"[15], fiscal incentives for R&D largely fall outside the scope of State aid rules since they constitute measures of general scope[16].

In its Communication on "Europe 2020 Flagship initiative Innovation Union"[17], the Commission describes what in its view needs to be done in order to boost innovation and to re-focus R&D&I policy on the challenges facing our society, such as climate change, energy and resource efficiency, health and demographic change. The European Council meeting of 4 February 2011 focused on energy and innovation and agreed on a number of priority actions whose implementation will contribute much to enhancing growth and job creation as well as promoting Europe's competitiveness[18].

The "Innovation Union" will be developed alongside the flagship initiative on "An Industrial Policy for the Globalisation Era", which sets out a strategic framework for supporting a strong, diversified and competitive industrial base in Europe. This initiative stresses the importance of competitive markets as drivers of innovation and efficiency gains and as incentive for firms to increase their productivity and underlines that the essential role of State aid control is "*to avoid distortion in the Single Market; moreover, the design of State aid rules contributes to promote the competitiveness of industry in Europe. State aid rules provide a framework that directs Member States' investments to address identified market failures.*" [19] The key issue is thus how Member States should intervene to reach this objective, and what should be the role of State aid rules in this respect.

Furthermore, under the pressure of budgetary restrictions, Member States have to maintain a difficult balance between adjusting government spending and protecting growth-friendly expenditure[20]. Although the most effective way of stimulating innovation is by fostering

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13 See page 10 of the Europe 2020 Flagship Initiative Innovation Union, COM(2010) 546 final . The Innovation Union Scoreboard 2010 identifies the largest gap with main competitors in the "firm activities" category which includes business R&D expenditure.

14 "Europe 2020: a strategy for smart, sustainable and inclusive growth", COM (2010) 2020, p. 21.

15 Conte, Dierx, Ilzkovitz and Schweizer, 'An analysis of the efficiency of public spending and national policies in the area of R&D', Occasional papers, DG ECFIN, September 2009.

16 See as examples of general fiscal measures the Spanish scheme "Reduction of tax from intangible assets" (case N 480/2007) and the Italian measure "R&D tax credit" (case N 507/2007). As examples of other general measures see the Danish case "Technology transfer institutes" (case N 617/2008) and the Irish measure "National development plan 2007-2013" (case N 374/2009).

17 Communication on "Europe 2020 Flagship Initiative Innovation Union", COM(2010) 546 final.

18 See Council conclusions of the meeting of 4 February 2011.

19 Communication on "An Integrated Industrial Policy for the Globalisation Era" COM(2010) 614, p. 10.

20 Expenditure on innovation is explicitly cited as one of the categories of growth-friendly expenditure in the Annual growth survey, Annex 2: Macro-Economic Report. At the European Council of 4 February 2011, it was agreed that "in conducting fiscal consolidation, Member States should give priority to sustainable growth-friendly expenditure in areas such as research and innovation, education and energy".

competition and general measures creating the right conditions, State aid may in certain circumstances be the appropriate option to provide incentives for additional private R&D&I investment and to address identified market failures.

The most relevant market failures for R&D&I are positive externalities (where the benefits for society far exceed the private benefits for a particular enterprise investing in R&D&I), public goods (when the result of a particular activity cannot be protected such that it can be used by competitors of the enterprise which originally invested in the R&D&I), imperfect and asymmetric information and coordination and network failures. State aid can help change the incentives of private firms and make them invest in R&D&I.

However, if State aid were to be used to protect national enterprises, keep inefficient firms afloat, distort competition and artificially maintain fragmented markets this could lead to a reduction in the overall level of R&D&I and economic growth. Indeed, when an undertaking receives aid, its position in the market is generally strengthened and the returns on investment for competitors might be reduced. Furthermore, a reduction in the incentive for innovation at beneficiary level can take place when the aid results in a soft budget constraint for the beneficiary. The aid could also lead to supporting inefficient undertakings or enabling the beneficiary to enhance exclusionary practices or market power.

Therefore, State aid can contribute to generate more R&D&I only if it addresses well identified market failures which prevent markets from reaching optimal R&D&I levels, and if it is well designed, ensuring that distortions of competition and trade are minimised and public spending efficiency maximised (this is illustrated by the example of the Gaya Project, as described in the box in paragraph 3.3.).

Nevertheless, as mentioned above, it should be born in mind that State aid is only one element in the much larger tool-box needed to boost R&D&I. State aid can not replace the reforms needed to tackle the structural weaknesses in this specific area.

3.2. State aid rules for R&D&I

The rules governing State aid for R&D&I were reviewed in the context of the Lisbon Strategy, it having been acknowledged that the level of R&D&I was not optimal for the economy. The aim of State aid for R&D&I is to contribute towards increasing the level of private investments in this field that would lead, ultimately, to higher growth in the Union**.**

The Framework on R&D&I[21] of 2006 and the General Block Exemption Regulation[22] of 2008 form the legal basis for the assessment of R&D&I State aid measures. This year the Commission will conduct a mid-term review of the Framework, taking stock of recent case experience and provisionally identifying practical adjustments to be considered for the revision of the Framework in 2013.

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21 Framework for State aid for Research and Development and Innovation, OJ C 323 of 30.12.2006, p. 1. (entry into force 1 January 2007).

22 Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Article 87 and 88 of the Treaty (General block exemption Regulation). OJ L 214, 9.8.2008, p. 3 (entry into force 29 August 2008).

General Block Exemption Regulation

The General Block Exemption Regulation (GBER), in line with the Framework, includes R&D and innovation measures.

The following measures are included in the GBER: aid for R&D projects, aid for technical feasibility studies, aid to cover industrial property rights costs for SMEs, aid for young innovative small enterprises, aid for innovation advisory services and for innovation support services, aid for the loan of highly qualified personnel and aid for R&D in the agriculture and fisheries sectors.

Framework for State aid for R&D&I

The Framework for State aid for R&D&I set out the conditions Member States should respect when granting aid to promote R&D&I, allowing nevertheless the Member States to tailor their support to R&D&I according to their national specificities. The aim of the 2006 Framework is to make it easier for Member States to better target the aid to the relevant market failures. It pays great attention to the needs of SMEs, which are most affected by market failures, but also offers many possibilities for large enterprises to receive support, when duly justified. State aid must lead the aid recipient to change its behaviour so that it increases its level of R&D&I activities.

The Framework icovers State aid measures for a variety of R&D&I activities: aid for R&D projects, aid for technical feasibility studies, aid for industrial property rights costs for SMEs, aid for young innovative enterprises, aid for process and organisational innovation in services, aid for innovation advisory services and for innovation support services, aid for the loan of highly qualified personnel, and aid for innovation clusters. It also contains specific rules for agriculture and fisheries.

The application of the rules is based on a refined economic analysis. Measures including high aid amounts, which have the greatest potential to distort competition and trade, are subject to a detailed assessment while measures involving lower aid amounts are subject to a lighter assessment on the basis of per se rules and may even be exempted from prior notification obligation under the GBER.

For R&D projects, the Framework distinguishes three categories of aid, depending on whether the type of research is more or less remote from the market: fundamental research, industrial research and experimental development, along the same line provided in the Frascati Manual on the Measurement of Scientific and Technological Activities[23]. This allows different aid intensities according to the importance of the market failures research projects face.

Furthermore, guidance is provided as regards whether State aid is involved in R&D&I projects carried out by both undertakings and publicly-funded research organisations. This has increased legal certainty for research organisations and their contractual or collaborative research activities which should enhance the role of public research entities, and facilitate public-private collaboration.

Compatibility of aid subject to a detailed assessment

Due to the higher risk of distortion of competition, when aid granted to a single beneficiary exceeds specific thresholds set by the Framework, an individual notification is required. The assessment of the aid is conducted under the Framework and aims at analysing the effects on competition and the contribution of the R&D project to objectives of common interest.

[23] Organisation for Economic Co-operation and Development, 2002.

3.3. State aid decisions on R&D&I and case studies

Between 2004 and 2010, the European Commission took 426 final decisions on R&D&I measures, including 12 no aid decisions and 413 compatibility decisions. The Commission took one partly negative decision with recovery (case C31/2004 Schiefergruben Magog (Germany)). In 2004, the number of approved State aid measures stood at 38. It increased to around 70 per year in the next two years mainly due to the fact of including new Member States in the total and the increase in the number of German cases.

Since the entry into force of the R&D&I Framework on 1 January 2007 and until the end of 2010, the Commission has approved 195 State aid schemes, of which 143 pure R&D schemes, 14 innovation-oriented schemes and 38 mixed measures, pursuing both R&D and innovation objectives. At the same time, the Commission has approved an additional 44 individual applications of a scheme or *ad hoc* R&D aid measures, of which 39 after detailed assessment (including two measures for which formal investigation procedures were conducted)[24]. Moreover, it has monitored a total of 192 individual measures granted on the basis of approved aid schemes whichexceed EUR 3 million but are not individually notifiable.

The number of measures approved under the R&D&I Framework initially amounted to 64 in 2007, a level similar to the one observed in previous years, but it increased to around 110 in 2008, largely due to the significant number of German (26) and Spanish (24) measures. In the last two years, a significant decrease was observed. Around 40 measures were approved in 2009 and about 30 in 2010. This phenomenon can also be explained by the introduction of the GBER in the second half of 2008, which allowed R&D&I aid to be granted without ex ante Commission scrutiny[25].

The number of R&D&I block exempted measures introduced by Member States during the same period (2004-2010) amounted to 559[26]. Almost 60 % of all such measures were introduced by four Member States: Italy (109), Poland (79), Spain (73) and Germany (67).

The trend of R&D&I measures in the period 2004-2010 is shown in the figure below:

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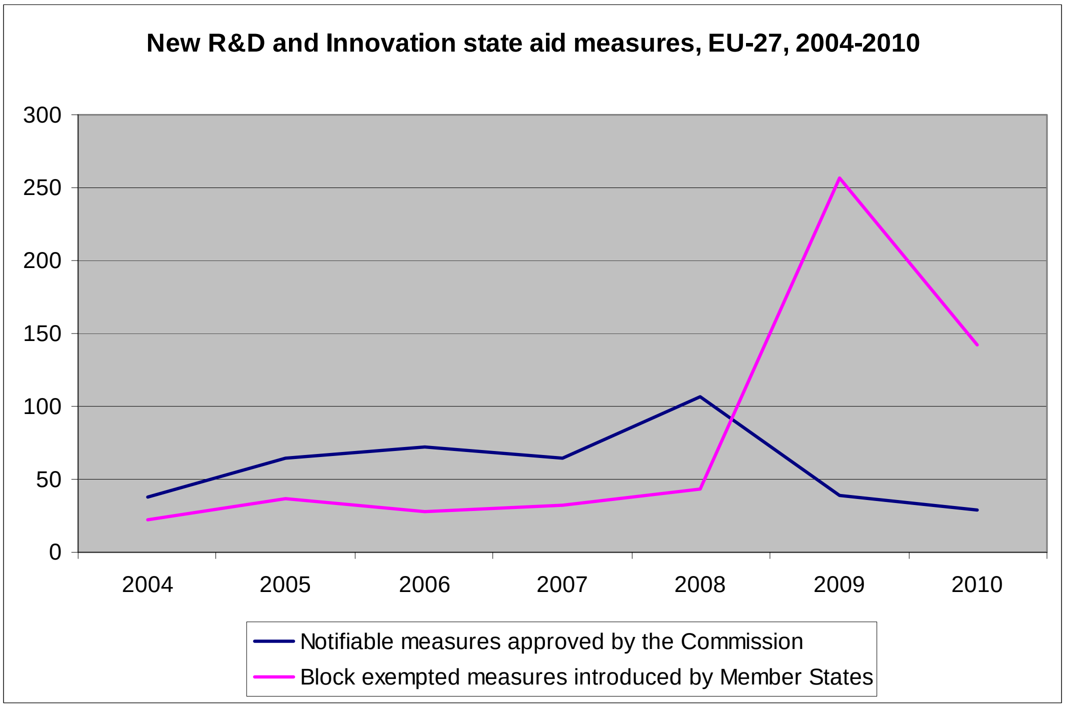
24 Two further measures were withdrawn, one during the preliminary examination and another after the opening of the formal investigation procedure. The 39 cases subject to detailed assessment (of which 24 were notified by France) involve a total of more than EUR 2 billion of State aid and refer to domains as diverse as advanced nanosubstrates, engine components and new composite materials for aeroplane structures, intelligent energy management, automatic processing of multimedia data, high fields magnetic resonance imaging, CMOS derivative processes for system-on-chip technologies, fuel cell power modules, new methods for the production of biofuels, and artificial hearts.

25 Prior to this, R&D aid was exempted from the obligation of prior notification only if it was directed at SMEs.

26 Of which 256 were introduced in 2009 and 142 in 2010.



As regards the type of supported activities, out of the R&D&I block-exempted measures put into force under the GBER, 100 provided aid for fundamental research, 299 for industrial research and 290 for experimental development. As regards the GBER objectives, 109 measures referred to industrial property rights for SMEs, 54 to young innovative enterprises, 115 to technical feasibility studies, 79 to innovation advisory and support services, 54 to R&D in the agricultural and fisheries sectors and 39 to the loan of highly qualified personnel.

The box below provides examples of measures implemented in two Member States to boost R&D&I investments. The first one is a block exempted measure implemented by Spain addressed to the automotive sector and the second one is a French individual aid concerning technologies for motor biofuels which includes certain compensatory measures to outweigh the distortion of competition.

Competiveness plan of the automotive sector (X 59/2009, Spain)

In 2009, Spain communicated to the Commission a block exempted measure aiming to improve the competitiveness of the automotive sector. It covered aid for environmental purposes, for R&D and innovation activities and for training. The overall budget was EUR 800 million for the financing of investments realised in 2009.

As regards R&D&I, aid could be granted for experimental development and for technical feasibility studies. Beneficiaries could be SMEs and large enterprises. In line with the provisions of the GBER, SMEs benefited from an aid intensity bonus. Aid was granted in the form of grants and soft loans.

In 2009, aid under this scheme (EUR 194 million) represented more than two-thirds of State aid for R&D&I granted in Spain under block exempted measures and around 20 % of total R&D&I aid granted in the EU under block exempted measures.

Gaya Project (N 493/2009, France)

In 2009, France notified to the Commission its intention to implement the Gaya research programme which aimed to develop technologies for the production of second-generation motor biofuels. The GDF SUEZ group, the project leader, and its partners planned to develop a pre-industrial R&D

demonstration plant to test biomass gasification processes throughout the production chain. This plant is intended to be used as part of a collaborative R&D programme for use in a subsesquent industrial stage. The expected total budget was EUR 46.5 million for the seven-year duration of the project.

Following an in-depth examination, in 2010 the Commission authorised aid of EUR 18.9 million for the programme. It found that the R&D project would generate substantial benefits in terms of dissemination of scientific knowledge and environmental protection, land use planning, and reduction of Europe's energy dependency. However, because the potential commercial benefits of the GAYA project were not expected before 2020-2030, the project required public funding. The Commission was particularly concerned that the allocation of future intellectual property rights among GDF Suez and its partner research bodies would not distort competitive conditions in the biomethane market in the future. GDF Suez undertook to forego the exclusive rights that could be granted to it by its partners over their technologies. The distortions of competition caused by the aid would therefore remain limited, in particular because the future demonstration plant will be open to other stakeholders in the sector. Finally, the presence of major European competitors and the fact that the project was different from other expected technologies made it possible to maintain competitive pressure in energy markets. The aid was granted under an aid scheme of the French Environment and Energy Management Agency which was authorised by the Commission in March 2010.

3.4. Expenditure on R&D&I

As mentioned above, the Innovation Union flagship initiative foresees a EU-wide target of 3 % of the EU's GDP (public and private expenditure, combined) being invested in R&D&I.

In 2009, R&D expenditure in the EU stood at a record 2.01 % of GDP (around EUR 236.5 billion)[27], slightly higher than in 2008 (1.92 %) but still far from the target set by theEurope 2020 Strategy[28].

There were also vast differences between Member States. While three Member States exceeded the 3 % target[29], only three other Member States exceeded the EU-average[30] and nine Member States[31] did not even reach 1 % of GDP with their combined public and private R&D expenditure.

The government sector was the source of funds for around one third of total R&D expenditure in the EU (0.65 % of GDP). State aid represented a relatively small share of this total (13 %), equal to EUR 10.6 billion or 0.09 % of GDP in 2009 (EU average). Nine Member States awarded R&D&I State aid above the EU average: Belgium (0.22 %), Slovenia (0.19 %), the Czech Republic (0.18 %), Luxembourg (0.16 %), Finland (0.14 %), Spain (0.13 %), France (0.11 %), Austria (0.11 %) and Hungary (0.10 %). On the other hand, six Member States (Cyprus, Slovakia, Greece, Latvia, Poland and Estonia) granted only 0.01 % or less of their GDP as State aid to R&D&I.

27 Source: Eurostat.

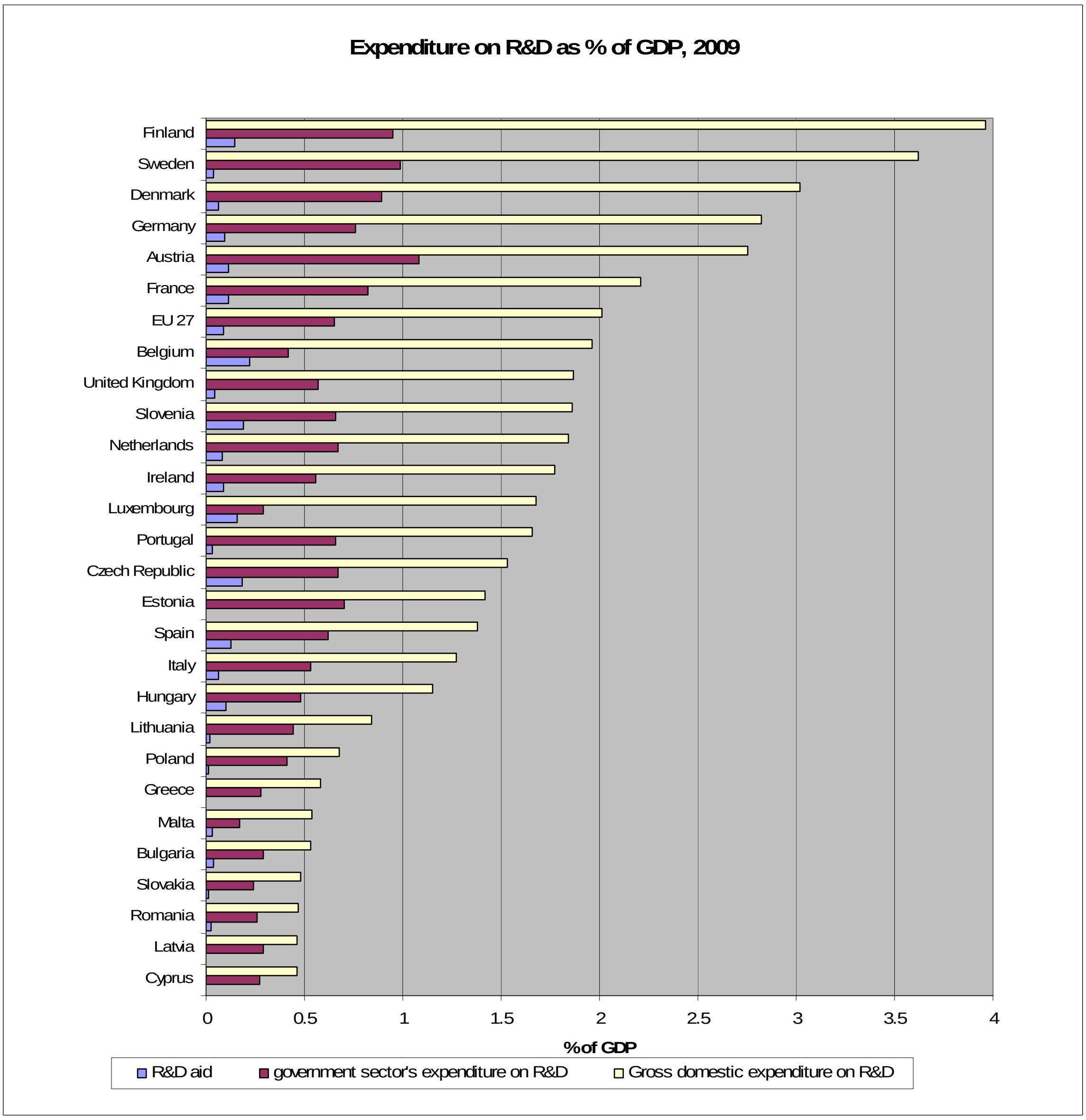
28 The US spend 2.6 % and Japan 3.4 %. In comparison to some emerging economies, the EU has a strong lead but countries like China and Brazil are closing the gap with the EU. See chapter 4 of the Innovation Union Scoreboard 2010.

29 Finland, Sweden and Denmark exceeded the EU goal of channelling 3 % of GDP into R&D, with 3.96 %, 3.6 % and 3.02 % respectively. Data for 2009; source: Eurostat.

30 Germany (2.82 %), Austria (2.75 %) and France (2.21 %).

31 Lithuania (0.84 %), Poland (0.68 %), Greece (0.58 %), Malta (0.54 %), Bulgaria (0.53 %), Slovakia (0.48 %), Romania (0.47 %), Latvia (0.46 %) and Cyprus (0.46 %).

Almost 60 % of total R&D&I State aid in 2009 was granted by three Member States: Germany (EUR 2.5 billion, 24 % of the EU total), France (EUR 2.2 billion, 20 %) and Spain (EUR 1.4 billion, 13 %).



Block exempted aid reported as R&D&I aid amounted to around EUR 1 billion in 2009. This represented 9 % of total aid granted to the same objective. Spain (EUR 282 million), Italy (EUR 267 million) and Belgium (almost EUR 130 million) made the most use of this instrument. Member States generally used four (out of nine) GBER objectives in this area: experimental development (Art. 31.2.c GBER, EUR 428 million), industrial research (Art. 31.2.b GBER, EUR 312 million), technical feasibility studies (Art. 32 GBER, EUR 65 million) and aid for industrial property rights costs for SMEs (Art. 33 GBER, EUR 53 million).

In 2009, State aid for R&D&I was granted under approximately 420 measures (of which 137 were block exempted) but the six largest schemes (all approved by the Commission) accounted for a quarter of total expenditure. These measures together with 13 other schemes (two of them block exempted) accounted for almost half of total R&D&I State aid granted in the EU. Among these top 19 measures, there were 5 French, 3 German, 3 Spanish, 3 Italian, 2 British, 1 Belgian, 1 Finnish and 1 Austrian scheme.

Over the long-term, the trend shows a steady increase of R&D&I aid both in relative and in nominal terms. It increased between 2004 and 2009 from 0.05 % (EUR 5.7 billion) of EU GDP to 0.09 % in 2009. In this period, more than half of the total EUR 46.5 billion of R&D&I aid granted was spent by two Member States: Germany (29 %) and France (22 %) while five Member States accounted for another third of the total: Italy (11 %), Spain (9 %), the United Kingdom (7 %), Belgium (5 %) and the Netherlands (4 %).

Member States predominantly granted State aid for R&D&I under schemes rather than through *ad hoc* individual measures. In 2009, State aid granted under schemes accounted for 98 % of the total while *ad hoc* measures were responsible for the remaining 2 %. These proportions have remained stable over the last six years.

As regards aid instruments, the most frequently used in 2009 was direct grants (roughly 80 % of the total) followed by soft loans[32] (11 %) and tax exemptions (9 %). Other instruments, like equity participations, tax deferrals or guarantees do not play any important role. Spain and France were responsible for more than 70 % of aid in the form of soft loans while Belgium and the United Kingdom accounted together for almost 85 % of tax exemptions for R&D&I.

3.5. State aid and innovation performance

Comparing the levels of State aid granted by Member States[33] with their performance in innovation[34], it is observed that there is no direct link between the two variables. The innovation performance indicator comprises many dimensions which include, in addition to the level of expenditure on R&D (public and private), for example youth education attainment level, broadband access by firms, community trademarks per million population. All these dimensions contribute to the innovation performance of a country. This shows the different options that Member States have to trigger R&D&I; State aid is only one of the available tools.

Member States like Sweden, Germany or Denmark, which are in the group of innovation leaders, granted State aid (in relative terms, as percentage of GDP) equal to or below the EU average. However, Finland – also an innovation leader – granted State aid above the EU average. In all these cases, government expenditure in R&D&I was higher than the EU average[35].

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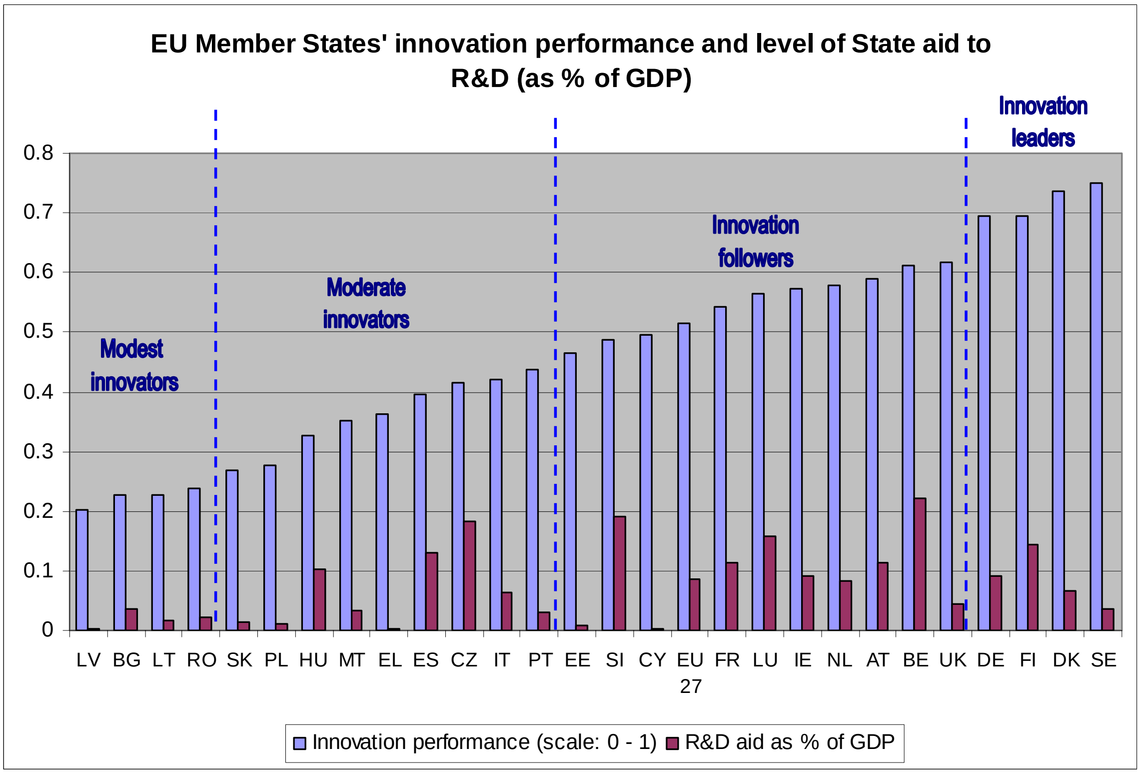
32 For the purposes of annual reporting for State aid, soft loans also includesrepayable advances.

33 The comparison is static and takes into account only the levels of State aid granted in 2009.

34 The Innovation Union's performance scoreboard for Research and Innovation (1 February 2011) classifies Member States in four categories: Innovation leaders (Denmark, Finland, Germany, Sweden), innovation followers (Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, the Netherlands, Slovenia and the United Kingdom), moderate innovators (the Czech Republic, Greece, Hungary, Italy, Malta, Poland, Portugal, Slovakia and Spain), and modest innovators (Bulgaria, Latvia, Lithuania and Romania).

35 As a percentage of GDP



Of the group of innovation follower countries, in most of the Member States, the level of State aid is above or close to the EU average (0.09 % of GDP in 2009). Only the United Kingdom, Estonia and Cyprus show a low share of State aid to R&D&I (below half of the EU average). Apart from Hungary, Spain and the Czech Republic which granted aid above the EU average, the rest of the countries in the moderate or modest innovator groups granted low levels of State aid to R&D&I (below the EU average).

3.6. Conclusion on State aid for R&D&I

Europe still has to make important progress to achieve the European target of spending 3 % of EU GDP on R&D&I by 2020. The quantitative target has also to be accompanied by structural reforms to improve the environment and general conditions for private sector research and development. In the "Europe 2020 Flagship initiative Innovation Union", the Commission describes what in its view Europe has to do to improve conditions and access to finance for R&D&I, to face new challenges of our society and to ensure that innovative ideas are turned into products and services that create growth and jobs. State aid rules provide a set of additional tools to address these challenges.

The main role of State aid for R&D&I is to provide funding when markets themselves do not reach optimal R&D&I levels due to imperfections in their functioning. Member States which are considered to be innovation leaders are not necessarily those where most R&D&I State aid is granted.

4. STATE AID FOR ENVIRONMENTAL PROTECTION

4.1. Policy context

Natural resources underpin the functioning of the European and global economy and our quality of life. Intensive use of the world's resources puts pressure on our planet and threatens the security of supply of those resources. Therefore, there is a need to change the current use of resources in favour of a resource-efficient, low-carbon economy to achieve sustainable growth.

Against this background, the Europe 2020 Strategy has highlighted "sustainable growth"[36] as one of the main priorities for the coming years: concrete targets[37] have been set and a long-term framework for actions is provided in the flagship initiative for "A resource-efficient Europe".

The long-term framework foresees a mix of coordinated actions in a number of areas[38], supporting policy agendas for climate change, energy[39], transport, industry, raw materials, agriculture, fisheries, biodiversity and regional development which will contribute to:

– Boosting economic performance while reducing resource use;

– identifying and creating new opportunities for economic growth and greater innovation and boosting the EU's competitiveness;

– ensuring security of supply of essential resources;

– fighting against climate change and limiting the environmental impacts of resource use.

Many of these objectives are targeted through regulatory or general measures which do not entail State aid. Furthermore, according to the provisions of Article 191 TFEU [40], the environmental actions of the EU shall be based on the precautionary principle that environmental damages should as a priority be rectified at source and that the polluter should pay, whichimplies the full internalisation of environmental costs by the polluters and hence does not entail State aid.

Indeed, as the "A resource-efficient Europe" initiative states, "*resources are often used inefficiently because the information about the true costs to society of consuming them is not available with the result that businesses and individuals cannot adapt their behaviour accordingly*". In certain cases, in the absence of government intervention, undertakings can avoid bearing the full cost of the environmental harm arising from their activities and as a result, the market fails to allocate resources in an efficient manner, which results in companies

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36 Communication on "A resource-efficient Europe – Flagship initiative under the Europe 2020 Strategy", COM(2011) 21 final.

37 Reduce greenhouse gas emissions by at least 20 % compared to 1990 levels or by 30 % if certain conditions are met (notably an international agreement on binding emission reduction targets); increase the share of renewable energy sources in our final energy consumption to 20 %; and a 20 % increase in energy efficiency.

38 The development of coordinated roadmaps is foreseen in the flagship initiative "A resource-efficient Europe".

39 See conclusions on energy of the European Council meeting on 4/2/2011.

40 Art. 191 of the Treaty on the functioning of the European Union, OJ C 83 of 30.03.2010.

not changing their behaviour towards more environmental protection. In such situations, State aid can serve to respond to the market failure linked to negative environmental externalities.

Incentives for companies to increase environmental protection and internalise their costs can be introduced for instance through market-based instruments[41] (hereinafter, MBI e.g. taxation) and/or regulation (e.g. mandatory EU standards). Public support, including State aid, may also play a role when market failures prevent companies from achieving more environmental protection and when other market based instruments cannot be used[42].

The primary objective of State aid control in the field of environmental protection[43] is to ensure that State aid measures will result in a higher level of environmental protection than would occur without the aid and to ensure that the positive effects of the aid outweigh its negative effects, notably distortions of competition and affectation of trade between Member States.

4.2. State aid rules for environmental protection

The current Guidelines[44] governing State aid for environmental protection were part of the 2008 Climate Change Package. They were drafted to ensure the implemention of State aid control in the context of the environmental and energy policies of the EU. These have been complemented by the GBER which included for the first time in a block exemption regulation, specific provisions for environmental protection.

Guidelines on State aid for environmental protection

Under the current Environmental Aid Guidelines , which entered into force in April 2008, the Commission elaborates on compatibility rules by considering some usual aid measures for environmental protection. Other types of aid measures may also be declared compatible but will be assessed directly on the basis ofArticle 107 TFEU (balancing test between positive and negative effects).

For instance, the guidelines encourage Member States to support the production of renewable energy and energy efficient cogeneration by allowing them to grant operating aid to renewable energy or CHP (cogeneration of heat and electricity) producing companies, covering the full difference between production costs and market price. In addition, there are provisions for aid for early adaptation to EU standards, aid for environmental studies, aid for district heating, aid for waste management and aid involved in tradable permit schemes.

As regards tax reductions, the guidelines declare energy tax reductions compatible as long as after reduction, the companies concerned pay at least the EU minimum tax level (and such tax reductions are block exempted, see below). Where the companies do not pay at least the EU minimum, tax exemptions may still be declared compatible with the internal market but the Member State must demonstrate that it does not undermine the general environmental protection objective of the tax and that these derogations are necessary and proportionate.

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41 Such as tradable permit schemes etc. The Commission announced in the Europe 2020 Strategy its commitment to enhance the use of MBI.

42 Such as certain exemptions to the Energy Tax Directive.

43 It is important to note that the Europe 2020 Strategy includes, within its "Resource efficient Europe" flagship initiative, a call on Member States "to phase out environmentally harmful subsidies, limiting exceptions to people with social needs". Environmentally harmful subsidies also concern measures that do not constitute State aid, and the ongoing discussion on the phasing out of such subsidies is not limited to State aid issues.

44 Guidelines on state aid for environmental protection OJ C 82 of 01.04.2008, p. 1.

The guidelines foresee a standard assessment and a detailed assessment. Measures including investment aid amounts in excess of EUR 7.5 million per beneficiary, and operating aid measures with a specific threshold, which have the greatest potential to distort competition and trade, are subject to a detailed assessment.

General Block Exemption Regulation (GBER)

The GBER includes for the first time in a block exemption regulation provisions concerning aid for environmental protection and energy saving. Rules are aligned with the guidelines on State aid for environmental protection. A notable difference between the guidelines and the GBER is however that the GBER generally foresees a simplified cost calculation methodology.

The Regulation allows authorities to grant a number of aid measures favouring environmental protection or tackling climate change under certain conditions. Such measures include, amongst others, investments in energy savings, investments in renewable energy sources and aid in the form of environmental tax reductions from the harmonised energy taxation without the obligation of prior notification to the Commission.

When certain individual notification thresholds are exceeded or the conditions of the GBER are not fulfilled, aid still needs to be notified to the Commission individually in order for the Commission to analyse the effects on competition and contribution to the common interest.

4.3. State aid decisions on environmental protection and case studies

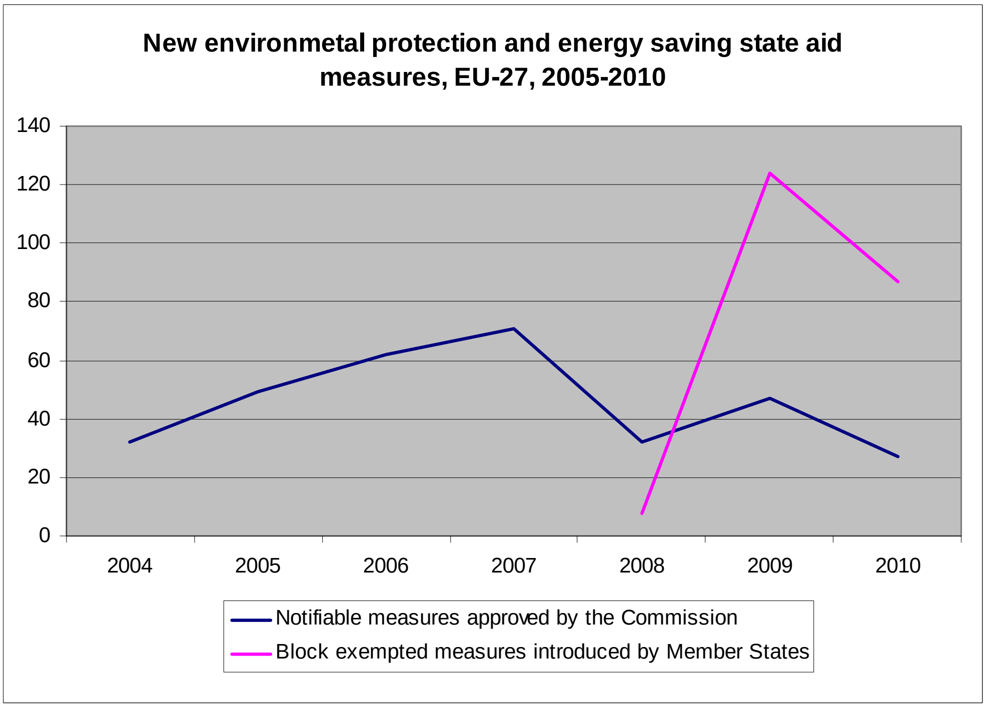
In the period 2004-2010, the Commission took 347 final decisions on State aid for environmental protection i.e. energy saving or other environmental protection objectives. This included 320 compatible aid decisions, 21 no aid decisions and 6 negative decisions.

The large majority of the decisions taken (slightly above 82%) concerned schemes, 6% concerned the individual application of a scheme and 11% related to *ad hoc* measures. Five Member States accounted for a half of the decisions taken: Italy (44), Germany (38), the Netherlands (36), the United Kingdom (33) and the Czech Republic (26).

Almost 140 decisions were taken in years 2006-2007, prior to the entry into force of the environmental aid guidelines and the GBER. The detailed economic assessment was introduced in April 2008 in the environmental aid guidelines, and 10 positive detailed assessment decisions have been taken by the Commission in the period until the end of 2010.

Member States introduced 219 block exempted measures of which 194 were schemes. The highest numbers of schemes were introduced by Germany (40), Italy (39), Spain (38) and the United Kingdom (21). As to the detailed objectives pursued by these aids, the most popular one was the promotion of energy from renewable energy sources (Art. 21 of the General Block Exemption Regulation), that existed (as a single objective or one of the objectives) in 120 block exempted measures. It was followed by investments in energy saving measures (Art. 21 GBER, 101 measures), investment aid enabling undertakings to go beyond EU standards for environmental protection (Art. 18 GBER, 71 measures), aid for environmental studies (Art. 24, 61 measures) and investment aid for high efficiency cogeneration (Art. 22 GBER, 58 measures). The other GBER objectives played less important roles[45].

[45] Art. 19 – 42 measures, Art. 20 – 25 measures, Art. 25 – 7 measures.



The box below shows examples of particular measures implemented in two Member States with the objective to improve environmental protection. The first one is a German measure to support a project for the separation and recycling of CO_2 emissions in the steel production process. The second example relates to a tax measure for the cement industry implemented in Denmark.

Top Gas Recycling (TGR) Project - Aid to ArcelorMittal Eisenhüttenstadt GmbH (Germany, N 450/2009)

In 2009, Germany notified to the Commission its intention to grant aid to ArcelorMittal Eisenhuettenstadt GmbH (hereafter AMEH), to support the deployment of the Top Gas Recycling (TGR) demonstration project. TGR is an innovative and environmentally-friendly process that enables the separation of CO_2 from other emission gases as they come out of the furnace and recycles the CO_2-free emissions for the production of steel, resulting in energy savings. TGR is a technology which had not yet been implemented in practice on an industrial scale. As the aid amount of EUR 30.18 million exceeds the threshold of EUR 7.5 million for one undertaking foreseen for investment aid, a detailed assessment was conducted on the basis of the positive and negative elements of the aid in questions.

The Commission considered that the aided project had environmental benefits, hence contributing to achieving Climate Change targets. The project was not expected to lead to significant distortion of competition and the aid had an incentive effect. Furthermore, the measure met the formal criteria of proportionality. The aid intensity of 55 % was below the maximum allowable aid intensityof 60 % of eligible costs (with CO_2 costs savings not being accounted for in line with the EAG). The Commission noted that given the risks related to the TGR project, and the impact of the aid on the markets the Commission could in this case accept the proposed aid amount. The Commission approved the measure on 9 March 2010.

Tax exemptions for cement producers (Denmark, N 327/2008 and C 30/2009)

In June 2008, Denmark notified to the Commission two environmental tax reliefs from environmental taxes for the cement industry: one from the newly introduced tax on nitrogen oxide (NOx) and a full exemption from the existing waste tax on certain waste from cement production.

According to the environmental guidelines, aid in the form of reductions of or exemptions from environmental taxes will be considered compatible with the internal market provided that it contributes at least indirectly to an improvement in the level of environmental protection and that the tax reductions and exemptions do not undermine the general objective pursued. As regards the NOX tax reduction, there is an indirect environmental benefit stemming from the fact that the general tax level can be higher than it would be without the reduction. As regards the risk of undermining the general objective pursued, Denmark tried to keep the reduction to a minimum by limiting the number of beneficiaries and requiring that the beneficiary still pays 53 % of the full tax. The Commission considered that the measure was necessary and proportionate and approved the proposed NOx tax reduction on 28 October 2009.

However, with respect to the full exemption from the waste tax, the Commission had doubts about the necessity and proportionality of the tax exemption, in particular since the full exemption would leave the company with no incentive to contribute to the environmental objective of the waste tax. The Commission opened a formal investigation procedure on 28 October 2009 (now case C 30/2009) and invited third parties to provide comments. A final decision has not yet been adopted.

4.4. State aid expenditure on environmental protection

The Europe 2020 Strategy includes the so called '20/20/20' environmental protection targets concerning: reduction by 20 % of CO_2 emissions, a 20 % share for renewable energy in EU energy consumption and a 20 % increase in energy efficiency. State aid can directly or indirectly contribute to these objectives, in particular when it tackles market failures or complements insufficient incentives towards more environmental protection (e.g. general regulatory measures).

As explained above, not all public support measures constitute State aid, for instance the general taxation measures do not as they are not selective. The figures below only concern support measures that do constitute State aid.

In 2009, state aid relating to environmental protection amounted to EUR 13.2 billion (of which, 93 % or EUR 12.2 billion corresponds to environmental protection other than energy saving and only 7 % or EUR 0.97 billion to energy saving). In relative terms, environmental aid represented 22.6 % of total aid for industry and services or 0.11 % of EU-27 GDP.

Only six Member States granted more than the EU average: Sweden (0.66 % GDP), Germany (0.23 %), Denmark (0.19 %), Finland (0.19 %), the Netherlands (0.19 %) and Austria (0.13 %). In nominal terms, the largest grantors were Germany (EUR 5.7 billion, 43 % of the EU total), Sweden (EUR 1.9 billion, 14 %), the United Kingdom (EUR 1.2 billion, 9 %) and the Netherlands (EUR 1.1 billion, 8 %).

Environmental aid covers a wide range of objectives, including support measures for renewable energy, energy-saving, waste management and remediation of contaminated sites and improvement of production processes. For these types of measures, aid granted by Member States pursues a direct benefit to the environment. State aid expenditure can therefore be taken as a proxy to indicate the intended environmental benefit. This represented 35.5 % of environmental aid in 2009, equal to around EUR 4.7 billion. The largest contributors to this amount were: Spain (EUR 828 million), the United Kingdom (EUR 746 million), Austria (EUR 358 million) and two Scandinavian Member States: Denmark (EUR 362 million) and Sweden (EUR 343 million).

A second category of State aid measures covered under the environmental aid guidelines are reductions or exemptions from environmental taxes. Expenditure under this category of aid scheme indicates the amount of tax revenue foregone and can therefore not serve as a proxy measure of the environmental benefit which the taxes themselves have brought. In 2009, 56.1 % of environmental aid, equal to around EUR 7.4 billion, fell under this category. Within this total, Germany granted the most (around EUR 5 billion), followed by Sweden (EUR 1.6 billion), the United Kingdom (EUR 0.4 billion), Finland (EUR 0.2 billion), Denmark (EUR 58 million) and Slovakia (EUR 31 million).

Since the environmental guidelines introduced new elements to the necessity and proportionality test for tax exemptions below EU minimum tax levels (harmonised taxes), the Commission has approved only one such tax exemption case concerning Denmark (N 327/2008, see description above)[46]. Member States have however to adopt appropriate measures to bring existing tax reductions in line with the environmental guidelines before 31 December 2012, including when taxes are below EU minimum levels. Therefore the Commission may receive notifications of further cases by the end of 2012.

Block exempted aid for environmental protection that can collectively be classified as having a direct benefit to the environment amounted to EUR 732 million in 2009, corresponding to around 6 % of total aid for environmental objectives (which is relatively low, in comparison to the share for the other horizontal objectives). Member States generally used three (out of eight) GBER objectives in this area: the promotion of energy from renewable energy sources (Art. 23 GBER, EUR 341 million), investments enabling an undertaking to go beyond EU

[46] In addition, there was one negative decision without recovery concerning a Dutch case: Exemption from environmental taxes for ceramic producers (C 5/2009).

standards for environmental protection (Art 18 GBER, EUR 188 million) and investments in energy saving measures (Art. 21 GBER, EUR 116 million).

The share of block exempted aid in the field of environment is particularly low mainly as a result of a small number of tax exeption schemes approved in the past which are so significant in terms of monetary value that they continue to account for most of the State aid granted in this field. Almost half (47 %) of the block exempted aid granted in this field was granted by Germany, with Spain and Belgium together accounting for a further 44 %.

Looking into the trend for State aid expenditure for environmental protection comparing two consecutive periods 2004-2006 and 2007-2009 we can notice that it decreased both in relative terms (as a percentage of GDP - from 0.12 % GDP to 0.11 % GDP) and in nominal terms by EUR 0.6 billion per year, on average. Also its share in the total State aid to industry and services decreased from 25.5 % to 23.3 %.

Several reasons can justify the decrease. The first one is the effect of the market based incentives already implemented through which operators internalise their environmental costs and no State aid is needed. Another element which contributes to the reduction of State aid is the higher EU environmental standards: adaptation to EU standards is compulsory for operators and they have the obligation to respect them without any public support. Finally, budgetary constrains due to the crisis might also have had an impact on the public expenditure earmarked for environmental protection, at least in the second period identified above.

Over the period 2004-2009, when EUR 79 billion was granted as environmental aid in the EU, Germany and Sweden (and their tax exemptions) accounted for respectively 51 % and 16 % of the total. A tax exemption from the energy tax on electricity for the manufacturing sector has been the most significant aid expenditure for Sweden from 2005 onwards and represents more than half of the environmental aid in Sweden[47]. In Germany, expenditure rose steadily up to 2006 following the approval in 2002 of measures that prolonged several tax exemptions from the German energy taxation on electricity and mineral oils. Following modifications to these tax exemptions in Germany, aid granted under environmental tax exemption schemes fell significantly, by EUR 3.2 billion between 2006 and 2009. In 2009, one third of all environmental aid in Germany was granted under a tax measure addressed to energy intensive users in the manufacturing sector.

Almost all aid for environmental protection is granted under schemes. Between 2004 and 2009, individual *ad hoc* aid for thatobjective accounted for less than 0.5 % of the total. As to the preferred aid instruments, tax exemptions were chosen first, accounting for 77 % of total State aid granted for environmental protection between 2004 and 2009, followed by direct grants (23 %).

4.5. Conclusion on State aid for environmental protection and energy saving

In light of the Europe 2020 Strategy, State aid may be necessary to achieve the EU environmental objectives that cannot be achieved through market-based incentives or through regulation. The role of State aid control is to ensure that aid for an environmental objective does not unduly distort competition.

[47] "Energy tax for the manufacturing sector" (cases, N 156/2004 and N 596/2005).

State aid control can also accompany further the harmonisation of support schemes across Member States towards a European internal market for energy. State aid control may play a role in particular to increase harmonisation of support to renewables to limit competition distortions between renewables produced in different Member States and avoid overcompensation in the coming years.

5. STATE AID FOR REGIONAL DEVELOPMENT

5.1. Policy context

By addressing the handicaps of the disadvantaged regions, regional State aid promotes the economic, social and territorial cohesion of Member States and the Union as a whole, contributing in this way towards the Europe 2020 goals. In this sense, regional aid is different to other types of aid, as it is mainly intended to address a cohesion disequilibrium rather than market failures only.

Regional State aid control must be differentiated from EU Cohesion policy. Regional State aid in fact focuses more on disadvantaged areas than EU regional policy, which has at present broader policy objectives and a wider spatial coverage. The main objective of regional State aid is to address territorial imbalances in terms of wealth and employment (concentration effect) by acting as an incentive to locate economic activities in assisted areas (mitigated against other factors such as labour costs, access to markets, tax, productivity, etc.). Regional aid allows a Member State to support new investments which contribute to local job creation and spinoffs through the indirect stimulation of economic activity (leverage effect).

EU Cohesion policy aims at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions. . It finances a wide range of actions, from infrastructure (transport, telecom, energy, social) to human capital. The expenditure category "Support to enterprise and innovation", which is the most directly related to direct business support and therefore includes State aid, represents 20 % of total Cohesion policy spending. Only a fraction of Cohesion policy funding is covered by State aid rules as the majority of structural funds spending relates to activities which do not fall within the definition of State aid, for example general infrastructure. Furthermore, direct financial support to enterprises can cover various forms (e.g. grants, risk capital, loans) and purposes (e.g. innovation, environment, training, etc.). A significant share of the State aid granted in the context of Cohesion policy is therefore not directly related to regional investment aid within the meaning of the RAG, but falls under other State aid rules (e.g. R&D&I, environment, risk capital, etc.).

Regional State aid has a wide spectrum of application which ranges from measures benefitting the whole of the regional economy such as general support measures for undertakings in assisted areas (e.g. start-up aid, investment aid) to individualised State aid for large investment projects (LIP), which is potentially more distortive and for which aid intensities are automatically scaled down.

However, regional aid can only play an effective role if it leads to sustainable activities and is concentrated on the most disadvantaged regions of the Union. Furthermore, the advantages of the aid in terms of regional development of a less favoured region must outweigh the resulting distortions of competition, i.e. the level of risk of a crowding out effect of competitors from the market caused by the aid granted to a particular beneficiary or a limited group of beneficiaries.

As part of the EU State aid rules, the Commission has the sole authority to decide on regional development aid, based on its assessment of the compatibility with the internal market. In contrast to this, the structural funds must be used in line with Operational Programmes which are proposed by each Member State in cooperation with the Commission. Their implementation is ensured by the national managing authorities which, in accordance with the General Structural Funds Regulation[48] are responsible for ensuring compliance with all Union policies including State aid rules. Non-respect of the State aid rules constitutes an irregularity under that Regulation which can lead to a recovery of the EU co-financing. Major projects, which concern projects with eligible costs exceeding EUR 50 million, have to be submitted formally to the Commission[49]. Subsequently, the Commission decides on co-financing taking into account all Union policies.

5.2. Rules on State aid for regional development

The Regional Aid Guidelines (RAG) lay down the criteria applied by the Commission when examining the compatibility of regional State aid with the internal market. The RAG take into account the relative seriousness of the problems affecting the development of the regions concerned by introducing specific regional aid ceilings which reflect, in essence, the balancing exercise which the Commission must perform between the positive and negative effects of the aid.

As announced in the RAG, the Commission adopted in 2009 a communication setting out criteria for the in-depth assessment of regional aid to large investment projects (LIP)[50], i.e. projects with eligible investment costs of at least EUR 50 million in present value. Regional aid to LIPs in excess of certain thresholds needs to be individually notified to the Commission because it may carry a greater risk of distorting competition. In certain circumstances, the Commission opens a formal investigation procedure and carries out an in-depth assessment[51].

Guidelines on regional aid for 2007-2013

The RAG specify the rules for granting State aid which promotes the development of the EU's disadvantaged regions, e.g. by supporting investment and job creation.

To take into account the relative seriousness of the problems affecting the development of the regions concerned, two categories of regions are distinguished:

– Regions with less than 75 % of the EU average GDP per capita and outermost regions (Article 107(3)(a) of the TFEU) qualify for the highest rates of aid, as well as for operating aid (regional aid aimed at reducing a firm's current expenses). Aid rates vary from 30 to 50 % of the eligible costs.

– Regions which Member States define themselves in line with a national regional development policy on the basis of certain parameters linked mainly to low population density and/or particularly low GDP per capita or high unemployment (Article 107(3)(c) of

48 Council Regulation (EC) No 1083/2006 of 11 July 2006 *laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Regulation (EC) No 1260/1999* (OJ L 210, 31.7.2006, p. 1). See Arts 9 and 60.

49 Art. 41 ibid.

50 Communication from the Commission concerning the criteria for an in-depth assessment of Regional aid to large investment projects OJ C 223, 16.9.2009, p.3.

51 The Dell Poland case (C 46/2008) was the first case where the Commission conducted the type of assessment detailed in the guidance paper.

the TFEU). For these regions, Member States can allocate regional aid at lower rates (in principle, between 10 and 15 % of eligible costs).

Rates can be increased in all assisted regions by 20 percentage points where the aid is given to small enterprises and by 10 percentage points where it is given to medium-sized enterprises.

Although operating aid is normally prohibited, it may be granted under certain conditions. In order to encourage start-up and early development, aid can be granted to the establishment and expansion phases of small enterprises during the first five years. Operating aid is allowed to counter de-population in the least populated areas and in the outermost regions, in order to offset the additional costs arising in the pursuit of economic activity due to the handicaps faced in those regions such as remoteness, insularity, small size, difficult topography and climate, and economic dependence on a few products.

Finally, the RAG define the rules on "large investment projects", including a 'transparency mechanism' for certain types of aids.

Guidance on in-depth assessment of regional aid to LIP

The RAG foresee that in certain cases LIPs need to be individually notified to the Commission because they may carry a greater risk of distorting competition. An-depth assessment of these measures is necessary where the aid beneficiary has a market share of more than 25 % or the production capacity created by the project exceeds 5 % of the market (while the growth rate of the product market concerned is below the EEA GDP growth rate).

The guidance paper sets out the methodology for the detailed compatibility assessment of regional aid to LIPs. It is based on the balancing test that weighs the positive effects brought about by the aid against the negative impact of a potential distortion of competition which the aid might entail. Member States have therefore to provide information on the positive effect of the aid as well as its appropriateness, proportionality and incentive effect.

General Block Exemption Regulation

The GBER exempts from notification to the Commission transparent regional investment and employment aid schemes which respect the rules on eligible expenses and the maximum aid intensities defined in the regional aid map for the Member State concerned. The material rules for investment aid are equivalent in the GBER and in the RAG, so that there is no advantage to be gained in notifying an aid measure which is exempted. The GBER also exempts regional aid to newly created small enterprises, which represents a new form of regional aid introduced by the RAG.

In line with the provisions of the RAG, the GBER foresees increased aid rates for small and medium-sized enterprises.

Ad hoc aid granted to large enterprises is not covered by the GBER with the exception of transparent aid provided it is used to top-up aid granted under schemes and the *ad hoc* component does not exceed 50 % of the total amount of aid.

Individual notification of LIPs is required if certain conditions are met.

If the conditions of the GBER are not fulfilled, aid needs to be notified and will be assessed on the basis of the RAG.

5.3. State aid decisions on regional aid and case studies

In the period 2004-2010, the Commission adopted 570 final decisions on measures for regional development. This included 523 compatible aid decisions, 14 no aid decisions and 33 negative decisions. Only slightly more than a half of the decisions taken concerned schemes (52 %); the rest concerned *ad hoc* individual measures (almost 29 %) and individual aid under schemes (19 %). Six out of ten decisions concerned five Member States: Poland (96 decisions), Germany (91), Italy (60), the Czech Republic (46) and France (18).

In the same period, the Commission completed 59 detailed assessments of LIPs and one in-depth assessment based on the guidance paper[52]. The relatively high share of *ad hoc* measures is explained by the number of Polish *ad-hoc* cases.

The number of regional State aid measures approved per year fluctuated between 60 and 100 in the period 2004-2009, with three peaks: in 2004 (92 measures), 2006 (96) and 2009 (86). In 2010, there was a sharp decrease to around 50 approved measures.

The total number of block exempted measures for regional development set up by Member States amounted to 778, 97 % of which were schemes. The highest numbers of schemes were introduced by two Member States with decentralised competences for State aid at the level of the regional administrations: Italy (120) and Spain (112), followed by the Czech Republic (76), Poland (68) and Austria (57). After a peak level in 2009 when a total of 266 block exempted measures were introduced, the figure dropped to 145 in 2010. This can be explained by the introduction of the new GBER in 2008 and by the fact that a significant part of regional aid relates to Structural Funds operations for which the Operational Programmes for the period 2007-2013 had been approved in the preceding years.

Around 60 % of all block exempted measures for regional development were established under the GBER (which entered into force in 2008). In this group, schemes accounted for 96 %. As regards the detailed objectives of the GBER, 87 % of the approved measures were defined as regional aid schemes. (Art 13 of the GBER). The remaining part was shared by aid measures for newly created small enterprises (10 %, Art 14 of the GBER) and regional *ad hoc* aid measures (less than 4 %, Art 13.1 of the GBER).

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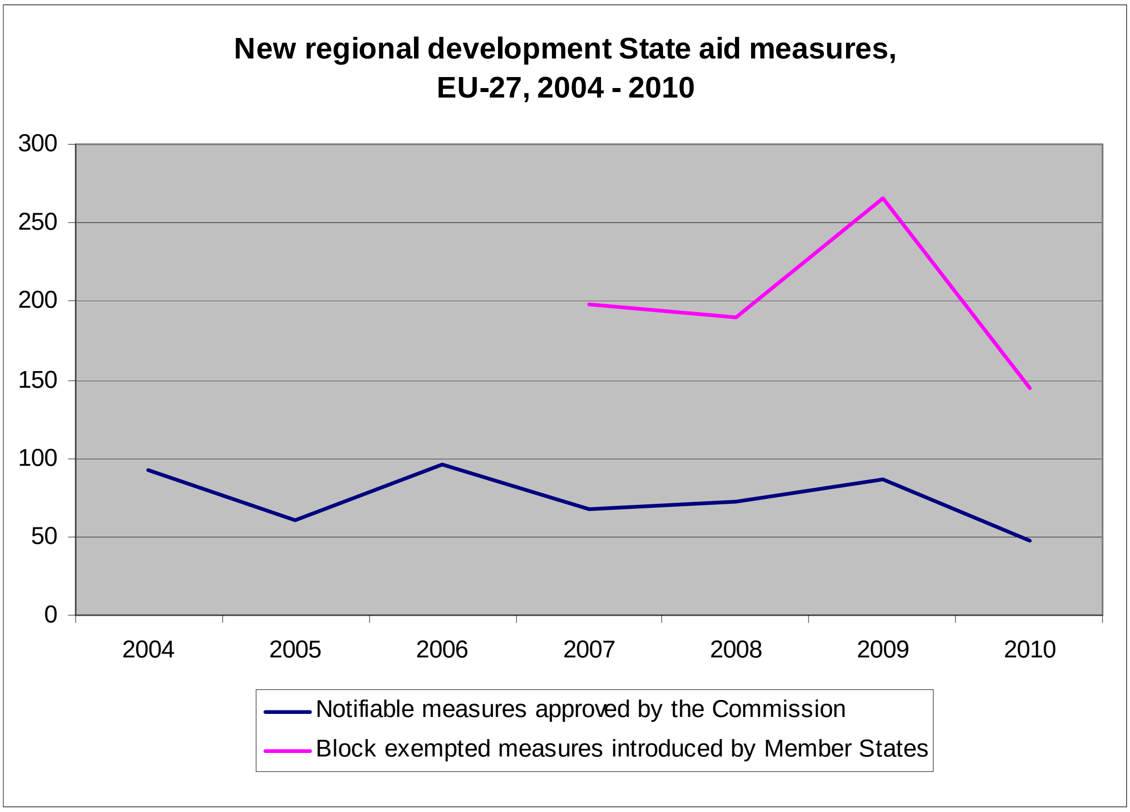
52 LIP Poland - Aid to Dell Poland (C 46/2008).



The box below shows examples of regional aid measures implemented in four Member States. The first one is a German measure to support investments in certain assisted regions. The second example shows a Maltese measure aimed to promote the creation of new enterprises, a possibility which was first introduced with the 2007-2013 RAG. The third example describes French measures to offset the specific handicaps facing the outermost regions. The last one is a large investment project implemented in Hungary.

'Investitionszulagengesetz 2007' (Germany, N 357a/2006 and XR 6/2007)

In June 2006, Germany notified to the Commission a successor scheme to the aid measures foreseen under the investment premium law, which provided for fiscal support to investment projects in the new German Länder and in Berlin. The initial notification concerned the application of the scheme for projects started both before and after 31 December 2006.

In agreement with the German authorities, the measure was split into two parts:

(a) aid N 357a/2006 related to initial investment projects started before 1 January 2007;

(b) Block exempted scheme XR 6/2006 concerning projects started after 31 December 2006. This measure was exempted from notification and did not need to be approved by the Commission.

The total budget foreseen for both measures is around EUR 1.74 billion.

In 2009, 20 % of total State aid earmarked for regional aid in the EU was granted under these two measures: around 11 % under the scheme N 357a/2006 and the rest under the block exempted measure. It represents around three-quarters of total regional aid in Germany.

Aid scheme for newly created small enterprises (Malta, N 622/2007)

In October 2007, Malta notified to the Commission its intention to apply a scheme aimed at supporting the creation of new, high value-adding enterprises that demonstrate a potential to contribute to regional economic development, in line with the provision for “Aid for newly created small enterprises” objective of the RAG. This is a new form of aid included for the first time in the regional aid guidelines for the period 2007-2013.

The scheme applies to the entire territory of Malta, which is designated under the Maltese regional aid map for 2007-2013 as an assisted area eligible for national regional State aid under the derogation of Article 107(3)(a) TFEU.

Aid can be granted to small enterprises created less than three years before the date of application under the scheme and with at least three full-time equivalent employees. The Member State introduced a mechanism to avoid a possible misuse of aid.

The measure is only applicable to certain economic sectors. Aid is awarded in the form of a direct grant. The total grant value per beneficiary is limited to EUR 2 million and the annual amount of the aid can not exceed 33 % of EUR 2 million per enterprise.

After assessment, the Commission concluded that the scheme fulfilled the requirements of the Guidelines on regional aid and considered it compatible with the internal market.

Aid schemes for the French overseas departments (France, N 542/2006 and others)

In 2007, the Commission approved ten aid schemes for the French overseas departments. The ten aid schemes concern exemptions from tax and social security contributions to offset the specific handicaps facing the outermost regions These outermost regions are eligible under the derogation of Article 107(3)(a) TFEU for the period 2007-2013. The ten aid schemes had previously been approved by the Commission under the regional aid guidelines for 2000-2006.

Under certain conditions, companies can also benefit from investments aid of up to 60 % for large enterprises in French Guyana, and up to 50 % for large enterprises in Martinique, Guadeloupe and La Réunion(plus SME bonus as applicable).

According to the RAG, operating aid can be also granted but it needs to be justified by its contribution to regional development and its level has to be proportionate to the additional costs resulting from the factors set out in Article 349 TFEU . After assessment, the Commission concluded that the total aid notified is equivalent to around 6.5 % of the GDP of the regions concerned, and that this level is proportionate to the overall additional costs borne by companies in those regions.

In 2009, 22.7 % of total regional aid granted in Europe was granted under these 10 schemes which represented around 77 % of total regional aid in France.

N 671/2008 – HU – LIP – Regional investment aid to Mercedes-Benz Manufacturing Hungary

In December 2008, the Hungarian authorities notified under the RAG their intention to grant regional aid for a large investment project in favour of Mercedes-Benz Manufacturing Hungary . Hungary intended to promote regional development by providing regional aid to Mercedes-Benz for setting up a new plant for production of 180 000 passenger cars. The region is a disadvantaged area eligible for aid under Article 107(3)(a) of the TFEU as a region with an abnormally low standard of living and high unemployment.

The investment project involved eligible costs of EUR 548.4 million. Some EUR 400 million of the total project costs would be financed through a loan by the EIB without any State guarantee, State aid accounts for EUR 111.5 million. The investment will create 2 500 direct jobs as well as 10 000 to 14 000 indirect jobs. According to the Hungarian authorities, the project would help to decrease the regional unemployment rate by 0.5 %.

The Commission's assessment of regional aid to LIPs aims to verify whether the market share of the beneficiary and the production capacity created by the investment remain below the thresholds set in the RAG. In case the thresholds are not exceeded, the effect of the aid on competition is deemed to be outweighed by its positive contribution to regional development.

The Commission found that market shares of the Daimler group , to which the plant belong would remain significantly below the 25 % threshold on the relevant markets, both before and after the planned investment, andconcluded that the additional production capacity created through the project would remain below 5 % of the apparent consumption of the product concerned in the EEA. In November 2009 the Commission approved the State aid measure.

5.4. State aid expenditure on regional aid

In 2009, regional State aid amounted to EUR 13.9 billion. This amount represented approximately 24 % of total State aid for industry and services or 0.12 % of the EU-27 GDP. Around EUR 4.9 billion (35 %) was granted using block exempted measures.

In relative terms, as a percentage of GDP, 12 Member States granted more than the EU average: Greece (0.57 %), Hungary (0.28 %), Slovenia (0.27 %), Malta (0.25 %), the Czech Republic (0.23 %), France (0.22 %), Ireland (0.18 %), Slovakia (0.17 %), Poland (0.17 %), Germany (0.15 %), Lithuania (0.14 %), and Spain (0.12 %).

In relation to total aid to industry and services, regional development aid was particularly important in the EU-12 countries where it represented around 30 % of the total, a higher level than that observed for EU-15 (23 %). This is explained by the fact that these Member States have a higher number of eligible regions and therefore the possibility to grant higher aid intensities.

The highest share of regional development aid in proportion to total aid to industry and services was found in Greece (76 %), Bulgaria (59 %), Lithuania (51 %), Slovakia (47 %) and the Czech Republic (46 %) while in four Member States (Denmark, the Netherlands, Cyprus and Finland) it stood below 2 %.

In nominal terms, the largest grantors were France (EUR 4.1 billion, 30 % of the EU total), Germany (EUR 3.7 billion, 27 %), Greece (EUR 1.4 billion, 10 %), Spain (EUR 1.2 billion, 9 %) and Italy (EUR 1 billion, 7 %).

In 2009, almost half (45 %) of total aid for regional development in the EU was granted under only five measures. These are three German schemes (two of which are block-exempted) which focus on supporting investments in the poorest regions (mainly in Eastern Germany) and two French schemes which provide operating aid in the French overseas departments.

By comparing the two consecutive periods 2004-2006 and 2007-2009, it appears that regional development aid increased both in nominal terms (by EUR 2.7 billion) and in relative terms as a percentage of GDP from 0.08 % to 0.1 % of GDP. Also, its share in total aid to industry and services increased from 19 % to 23 %.

Regional aid was included in a block exemption regulation for the first time in 2007. The regulation was adopted in 2006 and entered into force in 2007. Since then, a total of EUR 11.4 billion of State aid has been granted without prior notification to the Commission. The share of regional aid granted under block exempted measures has progressively increased to reach 35 % of total regional aid awarded in 2009. The GBER measures accounted for only 15 % of total block exempted expenditure for regional development.

In the period 2004-2010, EUR 67 billion was granted as aid in the EU. Almost all this aid was granted under schemes (96 %) while *ad hoc* individual aid accounted for only 4 % of the total. As regards aid instruments, tax exemptions were used for 55 % of total aid granted (with an increasing trend over the period), followed by direct grants (42 %).

5.5. Conclusion on State aid for regional development

Regional State aid will continue to contribute to economic, social and territorial cohesion in the European Union. The importance of this objective has increased in recent years, in particular since the 2004 and 2007 accessions. Currently, regional State aid is the horizontal objective with the highest share of total aid to industry and services.

Special attention is paid to the outermost regions, due to the specific additional costs that result from the structural handicaps imposed by geographic remoteness and specific constraints in integrating into the internal market.

6. STATE AID FOR SMES

6.1. Policy context

The flagship initiative "An industrial policy for the globalisation era"[53]of the Europe 2020 Strategy highlights the important role of small and medium-sized enterprises (SMEs) in the EU economy as engines of job creation and growth: "*SMEs make up some 2/3 of industry's employment and a large share of EU industry's growth and jobs potential is to be found in its lively and dynamic SMEs. Promoting the creation, growth and internationalisation of SMEs thus has to be at the core of the new EU integrated industrial policy*".

It also stresses that despite substantial progress in recent years[54], there are still serious and identifiable challenges regarding smart regulation and the business environment, especially for SMEs. In particular, "*access to finance has been identified by most Member States as an important bottleneck especially for SME and innovation financing*"[55]. Indeed, in the current context of economic slowdown and financial crisis, SMEs often have difficulties in obtaining capital, risk capital or loans, given the risk-averse nature of certain financial markets and the limited collateral that they may be able to offer. Additionally, their limited resources may also restrict their access to information, notably regarding new technology and potential markets. To alleviate these difficulties, Member States must increase their efforts to apply the "think small first" principle and to simplify support schemes.

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53 Communication from the Commission "An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage", COM(2010)614.

54 The Commission has already taken action aimed at mitigating the specific difficulties faced by SMEs. See Communication from the Commission: "Think Small First" A "Small Business Act" for Europe, COM(2008) 394 final,. The European Economy Recovery Plan, together with the European Investment Bank and the European Investment Fund, aims to enhance access to financing for SMEs. It also recalls that the Member States should, where appropriate, make full use of the recently reformed rules for granting state aid to SMEs.

55 See section 3.2 of the flagship initiative "An industrial policy for the globalisation era".

To support SMEs, governments can intervene in a number of ways which are not considered to constitute State aid, such as general support measures, which may include a general reduction in the taxation of labour and social costs, reducing payment delays to improve SME cash-flow, simplifying rules to reduce administrative burden, etc. Where market forces alone are insufficient, State aid measures may play a complementary role by providing public funding. Indeed, the flagship initiative "An industrial policy for the globalisation era" recognises this by stating that "*the design of State aid rules contributes to promote the competitiveness of industry in Europe. State aid rules provide a framework that directs Member States' investments to address identified market failures*".

However, State aid control is essential to maintain a level playing field for all companies active in the internal market, irrespective of the Member State in which they are established. The Commission has to be vigilant that the measures are well targeted; ensuring that the aid does not discourage investors, is not invested to keep inefficient firms afloat and does not create distortions of competition.

6.2. State aid rules for SMEs

In the context of the Lisbon Strategy for growth, jobs and competitiveness, the Commission modernised the State aid rules and reinforced measures specifically addressed to SMEs. Currently, SMEs are eligible for all aid categories allowed under EU State aid rules and SMEs can benefit from higher aid intensities for certain measures[56].

In addition, the State aid rules have been significantly simplified and streamlined in the GBER and now offer Member States the possibility to introduce a wide panoply of aid measures for SMEs with minimal administrative burden. The Commission encourages Member States to make use of these possibilities to shift existing aid budgets towards "better targeted" aid.

However, due to the higher risk of distortion of competition, large amounts of aid are assessed by the Commission on an individual basis to analyse their effects on competition and contribution to the common interest. The GBER therefore sets different notification ceilings based on the category of aid and its likely effects on competition.

In 2006, the Commission adopted the Risk Capital Guidelines (RCG)[57] which constitutes an important instrument for the financing of SMEs. A Risk Capital Action Plan was already approved in 1998, and risk capital has featured as an important element in the Lisbon Strategy and remains a key aspect of the Europe 2020 Strategy. The RCG are applicable until 31 December 2013, but they foresaw a mid-term review. In this respect, the Commission announced in the Innovation Union communication that it would "*assess the effectiveness of the temporary State aid measures […], including the increased 'safe harbour' for venture capital investments, and on this basis make the necessary proposals*". That mid-term review was conducted in 2010[58] and led to the transformationof the provisional increase of the safe harbour threshold introduced by the Temporary Framework into a permanent provision for the remaining duration of the RCG (i.e. until the end of 2013).

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56 See Sections 3, 4, 5 and 8.

57 Guidelines on State aid to promote risk capital investments in small and medium-sized enterprises, OJ C 194, 18.8.2006, pages 2-22.

58 Communication from the Commission amending the Guidelines on State aid to promote risk capital investments in small and medium-sized enterprises OJ C 329, 7.12.2010, p.4.

The box below summarises the main features of the rules in the GBER for SMEs and the Risk Capital Guidelines.

General Block Exemption Regulation (GBER)

The GBER sets out a framework to allow Member States to grant aid targeted at creating jobs, boosting competitiveness and improving the environment without the Commission having to get involved at all. Measures which are listed in the GBER and comply with the conditions and criteria set forth therein benefit from an exemption to the notification requirement.

The GBER is particularly relevant for SMEs since all 26 measures covered by it can be granted for SMEs (with special top-ups to the permissible aid intensities), and some are designed to overcome the specific market failures they face. SMEs can receive aid throughout their different development stages. The following categories of aid are specially and exclusively designed for SMEs: SME investment and employment aid; consultancy aid in favour of SMEs; aid for SME participation in fairs; aid in the form of risk capital; aid contributing to intellectual property rights costs; aid for adapting to new EU environmental standards or aid for environmental studies; innovation aid; aid for newly created small enterprises in assisted regions and aid for promoting female entrepreneurship.

Aid measures exceeding the ceilings for individual notification still have to be notified to the Commission individually in order for the Commission to analyse their effects on competition and contribution to the common interest.

Risk Capital Guidelines

The RCG pursue a double objective: setting the conditions for Member States to bring additional risk capital to SMEs in early development stages where an equity gap can be identified, and promoting the development of a venture capital industry in a way that preserves fair competition.

Aid in risk capital measures can be present at various levels: at the level of private co-investors, if they benefit from more favourable conditions than the State; at the level of the investment fund and/or its manager if for instance management fees are above market levels; and at the level of the enterprises invested in, whenever aid is present at the other levels or when the beneficiary SMEs receive capital injections that the market would not provide otherwise.

The RCG cover various types of measures (constitution of investment funds and/or alternative stock markets, guarantees and other financial instruments to risk capital investors or funds, scouting costs) as well as fiscal incentives to funds and/or to their managers, or to investors to undertake risk capital investment. However, individual capital injections by the State fall outside the scope of the RCG, which applies only to schemes.

Contrary to other State aid rules, the Risk Capital Guidelines do not include any list of eligible costs or calculation of aid intensities but rather consider that the entire amount of an equity contribution, including participation from private investors, is to be assessed for compatibility.

The RCG set out compatibility conditions regarding the level of investment tranches, restriction to seed, start-up and expansion phases, prevalence of equity and quasi-equity, participation by private investors, profit-driven character of investment decisions and commercial management. When the measure takes the form of participation in a private equity investment fund and all the above-mentioned conditions are met, Member States can use the GBER to grant aid.

The RCG foresee a two-level analysis where the focus of control is put on the most distortive schemes. If risk capital schemes respect the basic compatibility conditions (safe-harbour), the assessment is lighter and may even be block exempted.

6.3. State aid decisions on SMEs and case studies

Between 2004 and 2010, the Commission took 139 final decisions on measures exclusively addressed to SMEs (of which, 108 concerned risk capital). These decisions declared 99 risk capital measures (all schemes) and 30 other SME aid measures (23 schemes, 4 *ad hoc* individual aids and 3 individual applications of schemes) compatible with the internal market. The Commission also took 7 no aid decisions relating to risk capital measures and 3 negative decisions (2 on risk capital measures and 1 concerning SME aid).

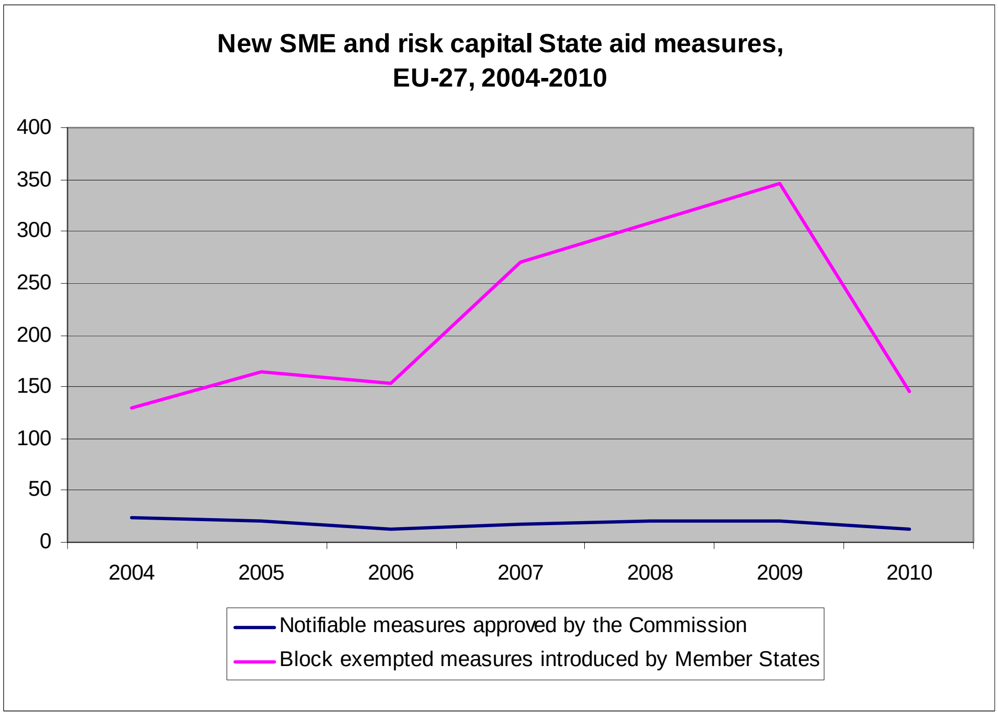
More than half of the approved risk capital measures concerned three Member States: Germany (28), the United Kingdom (16) and Italy (12), while SME aid measures predominantly concerned: Germany (7), Austria (5) and Slovakia (6 – all in 2004).

The number of approved risk capital measures fluctuated between 10 and 19 per year in the period 2004 to 2009 but dropped to 7 in 2010. 10 SME aid measures were approved in 2004 and then the figure dropped to between 2 and 5 approvals per year.

Block exempted measures for risk capital and SME aid amounted to around 1 500 for the period 2004-2010. From this total, risk capital aid (which can be granted under block exempted measures since the entry into force of the GBER) concerned only 28 measures.

Six Member States accounted together for over three quarters of block exempted measures: Italy (322), Spain (220), Germany (186), the United Kingdom (184), Poland (121) and Austria (113).

Between 130 to160 block exempted measures were introduced in the period 2004-2006. With the entry into force of the GBER, this figure rose to 269 in 2007, 303 in 2008 and 346 in 2009. In 2010, a significant decrease to only 144 measures was observed, which can be explained by the fact that the measures introduced in the previous years are generally still used by Member States. As regards the categories of aid, the highest number ofnew measures (360) focused on SME investment and employment aid (Art. 15 GBER) followed by aid for consultancy in favour of SMEs (Art. 26; 308 measures), aid for SME participations in fairs (Art. 27; 99 measures), aid in the form of risk capital (Art. 28 – 29; 28 measures) and aid for small enterprises newly created by female entrepreneurs (Art. 18; 18 measures).



The box below shows examples of particular measures implemented in two Member States addressed to SMEs. The first one is a measure implemented in the United Kingdom based on the Risk Capital Guidelines which tackled certain identified market gaps for investments. The second is a block exempted measure based on specific rules for SMEs contained in the GBER.

Enterprise Investment Scheme and Corporate Venturing Scheme (United Kingdom, NN42a/2007)

In 2007 the United Kingdom notified to the Commission a measure designed to encourage private individuals and companies to invest in smaller, unquoted, high growth-potential companies in the UK in order to grow their businesses into sustainable, profitable enterprises. The measure comprised three different schemes: the Enterprise Investment Scheme (EIS), Venture Capital Trusts (VCTs) and the Corporate Venturing Scheme (CVS).

Under the Enterprise Investment Scheme (EIS), private individuals receive tax incentives for making direct investments in qualifying SMEs. The Venture Capital Trust (VCT) scheme offers tax incentives to private individuals for collective investments through VCTs managed by professional fund management companies. The Corporate Venturing Scheme (CVS) provides tax relief to companies making direct investments in qualifying SMEs. The maximum annual investment limit per qualifying company raising money under the three schemes is GBP 2 million.

As the measure exceeded the maximum levels of investment tranches foreseen in the RCG, it was subjected to a detailed assessment where the Commission required additional evidence of the market failure being tackled at each level where the aid may be present. As the result of a detailed assessment, the Commission concluded that the measure fulfilled the conditions set out in the RCG and that the overall balance of the measure was positive.

More than 50 % of risk capital aid in the United Kingdom during the last three years was granted under these schemes, which represents around 30 % of totalrisk capital aid in the EU.

SME investment and employment aid (France, X 65/2008)

In 2008, France implemented a block exempted measure specially designed to overcome the difficulties in access to finance faced by SMEs. According to Article 15 of the GBER, aid could be granted for "SME investment and employment". The measure was addressed to all sectors and the aid could take the form of loan, interest rate subsidy, guarantee, grant or repayable advances. The total annual budget was around EUR 160 million.

6.4. State aid expenditure for SMEs

As noted above, Europe 2020, via its flagship initiative ‘An industrial policy for the globalisation era’, highlights the potential of SMEs as engines of job creation and growth. State aid is seen in this context as an important tool to provide funding for SMEs when this can not be made available by the market alone. The extent to which Member States use this possibility varies and depends on the combination of different policies chosen by the goverments.

Total State aid earmarked for SMEs (which is different from total State aid actually disbursed to SMEs) amounted to approximately EUR 4.6 billion[59] in 2009 (0.04 % of EU-27 GDP), of which risk capital represents around EUR 0.6 billion. In relative terms, roughly 7 % of aid to industry and services was exclusively earmarked for SMEs. Risk capital accounted for an additional 1 % of total aid. 70 % of risk capital aid was granted by the United Kingdom (around EUR 0.4 billion).

The highest share of SME aid (including risk capital) relative to total aid to industry and services was observed in: Estonia (30 %), Italy (24 %) and the United Kingdom (20 %). Five Member States (Sweden, Poland, Malta, Denmark and Bulgaria) granted less than 1 % of total aid as SME aid.

Only four Member States accounted for three quarters of all SME aid: Italy (24 %), Germany (20 %), France (18 %) and the United Kingdom (14 %).

In 2009, for the first time over half of SME aid (53 %; EUR 2.4 billion) was granted under block exempted measures. From this total, GBER measures accounted for approximately EUR 1.5 billion, including aid for consultancy in favour of SMEs (EUR 714 million; Art. 26 GBER), SME investment and employment aid (EUR 710 million; Art. 15 GBER), risk capital aid (EUR 39 million; Art. 23-24 GBER) and aid for SME participation in fairs (EUR 25 million; Art. 27 GBER).

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59 In this regard it is important to note that the current reporting provisions, as laid down in the Commission Regulation (EC) No 794/2004 of 21 April 2004 implementing Council Regulation (EC) No 659/1999 laying down detailed rules for the application of Article 93 of the EC Treaty, do not enable the Commission services to obtain information on the type of beneficiary (SME or large enterprises) of aid across all objectives. The Commission services can only produce information on how much aid is exclusively earmarked for SMEs under dedicated SME schemes. State aid measures are classified according to their primary objective at the time the aid was approved and not according to the final recipients of the aid. This means that a measure which is, for example, aimed at innovation projects for all size of enterprises, will be classified as a research, development and innovation measure and expenditure will be counted in relation to that objective, even if the majority of aid was given to SMEs. Therefore, SME aid presented here is underestimated and represents only aid granted under measures directed exclusively at SMEs (with SME aid as the primary objective). In addition, the figures include risk capital aid, which under State aid rules can only be granted to SMEs.

Half of total State aid for SMEs in 2009 was granted under only 11 schemes (four French, three British, two German, one Italian and one Belgian). Among them, three measures, (one in Italy and two in France) were to support SME investment in assisted areas, two British schemes provided tax incentives for risk capital investments, one German scheme supported SMEs in the food processing sector while a second one helped SMEs in Bavaria, two French and one Belgian schemes offered general support to SMEs while the third British measure enabled tax-advantaged share options for the recruitment and retaining of qualified employees by smaller, higher-risk growth companies.

By comparing the consecutive periods 2004-2006 and 2007-2009, a downward trend in SME aid is observed, both in relative terms (as a percentage of GDP - from 0.05 % of the GDP to 0.04 %) and in nominal terms by EUR 0.6 billion per year. Also its share in total State aid to industry and services decreased from 11.4 % to 7.8 %.

Almost all aid for SMEs granted in the EU is done through schemes. Between 2004 and 2009 (when a total of EUR 33.1 billion was granted as risk capital aid and SME aid), *ad hoc* individual aid accounted for less than 0.5 % of the total. As regards aid instruments, Member States mainly used: direct grants (64 % of total aid), tax exemptions (24 %) and soft loans (8 %). If risk capital aid is taken separately, tax exemptions and equity participations were the preferred instruments.

6.5. Conclusion on State aid for SME's

As part of the Europe 2020 Strategy, support to SMEs constitutes an important challenge. In particular, Member State will have to tackle, in addition to other weaknesses related to the business environment, the specific financing difficulties of these companies.

State aid rules currently offer Member States a wide range of options designed to support the development of SMEs. In particular, the GBER constitutes an appropriated framework for granting aid with a minimum of administrative cost and without prior notification to the Commission while at the same time guaranteeing that measures are well targeted and do not create major distortions of competition. In the context of market failures affecting SMEs, Member States are encouraged to make full use of this instrument.

As explained above, figures on State aid to SMEs do not fully reflect the total aid amount actually disbursed to these companies as they only take into account those measures for which the primary objective is "SMEs" or "risk capital". Thus, any conclusions to be drawn from the downward trend observed as regards total SME aid must take into account that caveat.. In any event, the importance of the block exempted measures for SMEs is evident, as more than half of total aid for SMEs granted in 2009 was done so under such measures.

As regards risk capital, it seems that most of the aid is concentrated in the United Kingdom; use of this option by the other Member States was almost negligeable. The recent reform of the RCG, to adapt them to current market conditions, allows a lower participation by private investors and higher investment tranches. These changes should promote risk capital investments in SMEs.

7. STATE AID TO THE BROADBAND SECTOR

7.1. Policy context

The European Commission has set highly ambitious objectives for broadband development, because smart investments into high and very high speed broadband infrastructures are crucial to create jobs, increase economic performance and to unlock the competitive potential of the EU in the long term.

The Europe 2020 Strategy underlined the importance of broadband deployment to promote social inclusion and competitiveness in the EU and has also set ambitious targets for broadband development. In 2010, the European Commission launched one of the flagship initiatives of the Europe 2020 Strategy, the "Digital Agenda"[60], which restated the objective of bringing basic broadband to all Europeans by 2013 and sought to ensure that, by 2020, all Europeans have access to internet speeds of above 30 Mbps and 50 % or more of European households subscribe to internet connections above 100 Mbps.

It is estimated that investments of up to EUR 60 billion will be necessary to achieve the first objective while the second will require a further EUR 270 billion[61]. Such investments will primarily come from commercial operators. However, these ambitious objectives cannot be reached without the smart use of public funds. Member States are called upon "*to use public financing in line with EU competition and State aid rules*"[62] in order to meet the coverage, speed and take-up targets defined in the Europe 2020 Strategy.

The European Commission plans to focus several of its financial instruments, such as the European Regional Develoment Fund, the European Agricultural Fund for Rural Development, the Trans-European Networks and the Competitiveness and Innovation Programme, to help achieve the goals of the Digital Agendapossibly including credit enhancement (backed by the EIB and EU funds).

Public funding and State aid will play an important role in complementing private investments and in extending broadband and very high speed, next generation access (NGA) network coverage to areas where market operators are unlikely to invest on commercial terms in the near future. However, public funding has to be used carefully in the liberalised telecoms markets to avoid a crowding out of private investments.

7.2. State aid rules for broadband

The Broadband Guidelines[63] of 2009 lay down the conditions under which public funding can be granted to broadband development in line with the EU State aid rules: they codify the well established case practice of the Commission (developed since 2003) concerning basic broadband networks, extrapolate the fundamental tenets and apply them to the new area of very high speed, fibre based NGAnetworks.

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60 A Digital Agenda for Europe. COM/2010/0245.

61 See Broadband Communication, available at: http://ec.europa.eu/information_society/activities/broadband/docs/bb_communication.pdf.

62 See Key action 8.

63 Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks OJ C 235, 30.9.2009, p.7.

The Guidelines help public authorities to design aid measures to target public investment in geographical areas where commercial investments are unlikely to take place. Furthermore, private operators gain additional certainty and clarity about the role and scope of public intervention in this sector and are better able to plan their own investments in new and upgraded networks.

The box below summarises the main features of the Broadband Guidelines.

Guidelines on broadband networks

The Guidelines offer a comprehensive and transparent tool to ensure that any public funding of broadband complies with the EU's State aid rules, in order to facilitate the widespread deployment of high-speed and very high speed broadband networks to enhance European competitiveness and help foster a knowledge-based society in Europe.

In particular, the Guidelines explain how public funds can be channelled for the deployment of basic broadband networks as well as NGA networks to areas where private operators would not invest.

To identify the areas eligible for public intervention, the Guidelines distinguish between "white", "grey" and "black" areas, depending on whether there are already adequate broadband infrastructures in place. Public funding to roll-out broadband networks in (mostly rural) white areas, where no adequate infrastructure exists is generally regarded as unproblematic. Conversely, State aid in (densely populated) areas where competing broadband infrastructures already exist (black areas) is prohibited, while a State aid project for grey areas requires a more in-depth analysis. A similar approch is applied for aid to NGA networks, distinguishing between "white NGA", "grey NGA", and "black NGA" areas.

A number of crucial safeguards (such as detailed mapping, open tenders, wholesale access obligations or technological neutrality and claw-back mechanisms) are laid down in the Guidelines in order to promote competition and avoid the crowding out of private investment.

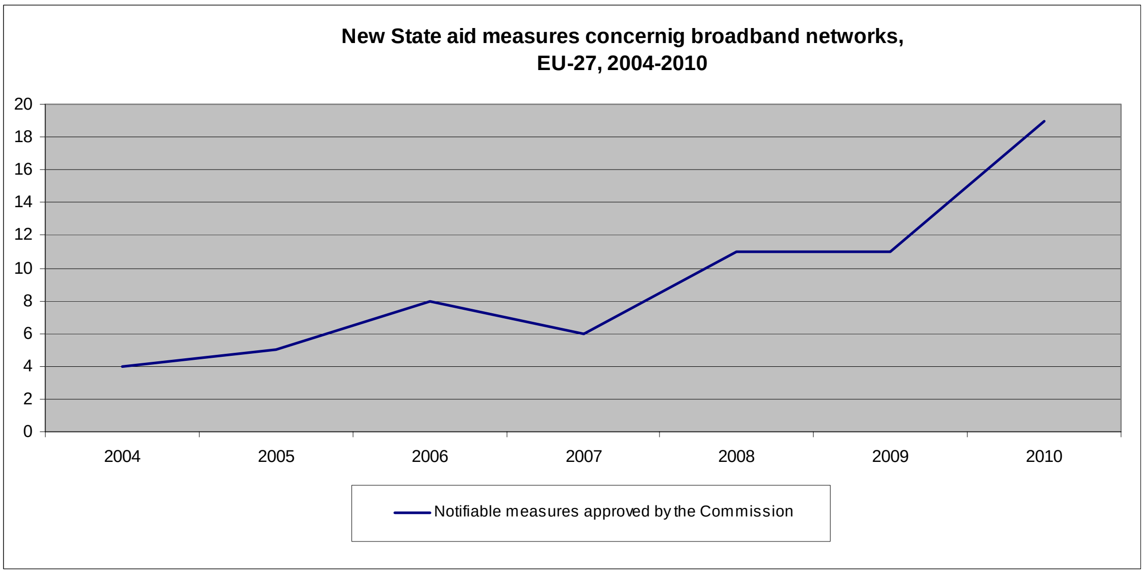
In the case of aid to NGA networks, since the risk of distorting competition could be higher (because, for instance, basic broadband infrastructures may already be in place in the targeted areas), there are additional compatibility conditions to be met.

In some instances, Member States may consider that the provision of a broadband network should be regarded as a service of a general economic interest (SGEI). According to the case-law of the Court, provided that the *Altmark* criteria are met, State funding for the provision of broadband services as an SGEI may fall outside the scope of the State aid rules. The Guidelines also provide detailed description on the conditions if public authorities decide to invest in a broadband network on the same conditions as a market economy private investor (in line with the Market Economy Investment Principle).

7.3. State aid decisions on broadband and case study

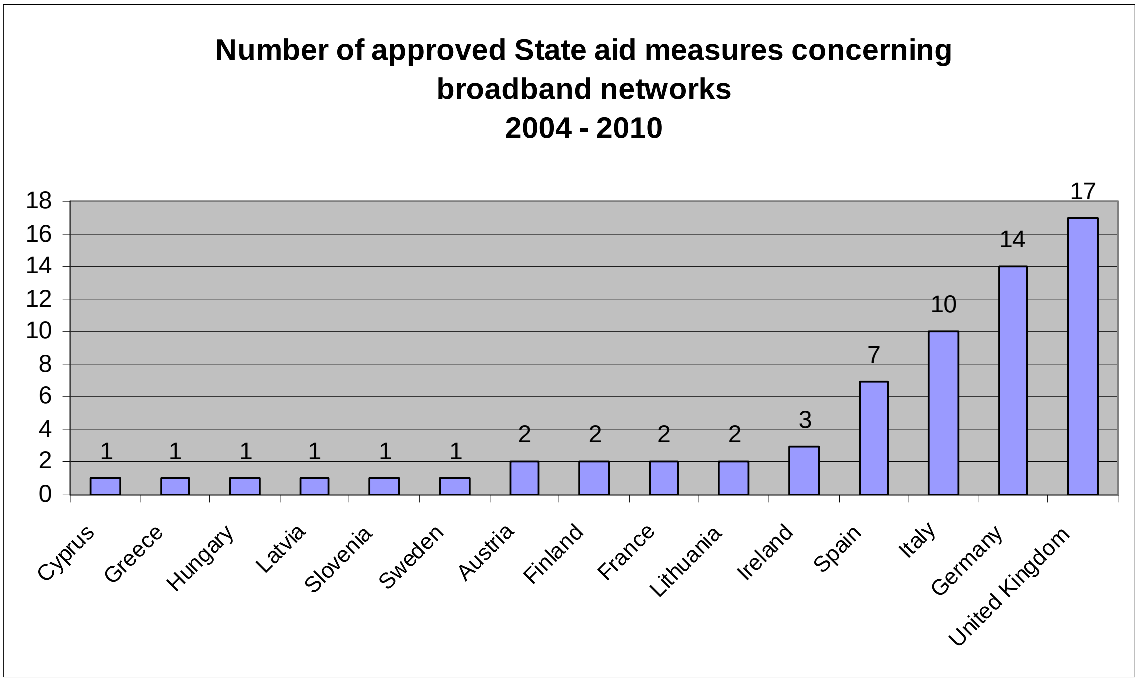
Between 2004 and 2010 the Commission adopted 72 final decisions on measures concerning broadband networks including 65 compatible aid decisions, six no aid decisions and one negative decision. As shown in the graph below, since the entry into force of the Broadband Guidelines in September 2009, there has been a sharp increase in the number of compatible aiddecisions.[64] The adoption of the Broadband Guidelines has led to better-designed aid measures and to an accelerated treatment of broadband cases.

[64] See communications of the Commission in MEMO/10/31 and IP/11/54.



Decisions under the Broadband Guidelines primarily concerned "white" or "NGA white areas" where no adequate broadband or NGA infrastructures were available (56 of the approved measures and 6 no aid decisions), but also concerned "grey areas" where the existing operator did not have sufficient market incentives to upgrade its network and no effective competition took place (8 of the approved measures). Concerning "black areas" where at least two or more broadband network providers are present, the Commission has never approved any aid measure.

In the period 2004-2010, most of the approved aid measures concerned the United Kingdom, but several (regional) initiatives were approved for Germany and Italy. These are the largest Member States that had to face the risk of a "digital divide" in their countries.



Around 80 % of decisions were decisions not to raise objections. However, it should be noted that in several cases this result was achieved following exchanges with the Commission, with

Member States making alterations to the notifications in order to ensure that their schemes were in line with the State aid rules.

The box below shows an example of a Finnish measure addressed to support the broadband development in sparsely populated areas:

High-speed Broadband Construction Aid in Sparsely Populated Areas of Finland (Finland, N 62/2010)

In 2010 Finland notified to the Commission a measure aimed at supporting the development of electronic communication networks offering very high speed broadband services (NGA) in sparsely populated areas of Finland which were not served and where there were no plans for such coverage in the near future.

According to the Finnish national action plan for improving information society infrastructure, by the end of 2015, nearly all Finnish citizens, businesses and public administrations shall have access to NGA services with a minimum downstream rate of 100 Mbps. Due to the economics of broadband networks, commercial operators are not willing to invest in sparsely populated areas, though broadband network coverage could bring proportionally higher benefits for citizens and businesses than in urban areas.

Finland therefore designed a State aid scheme to extend NGA coverage to such sparsely populated rural areas as well. The project is financed by private and public funds, European funds included. The aid takes the form of direct grants and aid intensities (capped at 66 %) will depend of the outcome of a tender procedure.

As a result ofthis project Finland will be one of the first Member States to reach almost 100 % NGA coverage in Europe by 2015 – out of which 95 % will be commercial deployment, 5 % with the help of State aid – thus fulfilling the EU objective for broadband deployment.

After the analysis of the measure in the light of the BroadbandGuidelines, the Commission concluded that the aid was compatible with the internal market.

7.4. State aid expenditure on broadband sector

In the past, State aid measures to support the broadband sector were typically small, localised projects from only a few Member States (e.g. the United Kingdom or Italy).

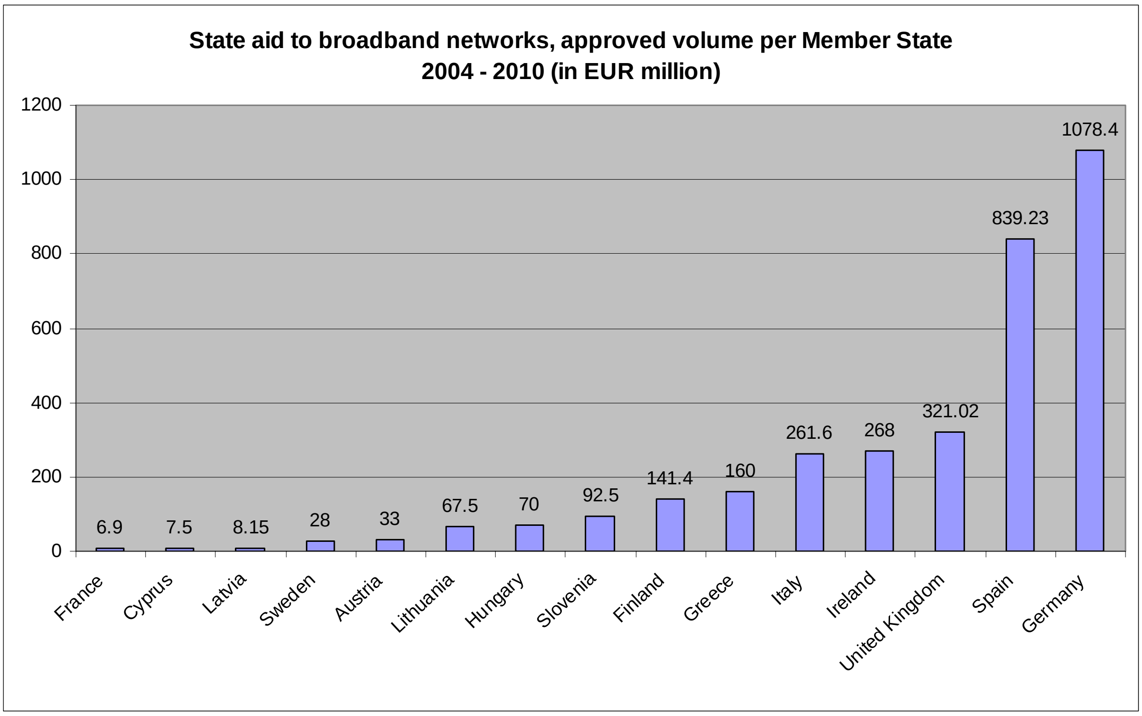
Since 2008, there has been a constant increase in the importance of public funding , and national State aid measures for broadband roll-out are now designed to form an integral part of the comprehensive national broadband strategies. In line with these developments, the amount of State aid channelled to broadband development has risen sharply compared to the average in the period 2004-2008. The amount of public funding earmarked for broadband development is expected to increase further[65].

There are two main reasons for the continuously growing importance of State aid and public funds in the broadband sector. *Firstly*, more and more Member States recognise the importance of widespread broadband availability for their socio-economic development. *Secondly*, a technological shift is under way due to the deployment of NGA networks. Such

65 For instance, according to the announcements of the Member States, at the end of 2010, France will spend EUR 2 billion, Germany at least EUR 1 billion, Italy EUR 1,5 billion and the UK around EUR 1 billion, etc of public funds to foster broadband development in their countries.

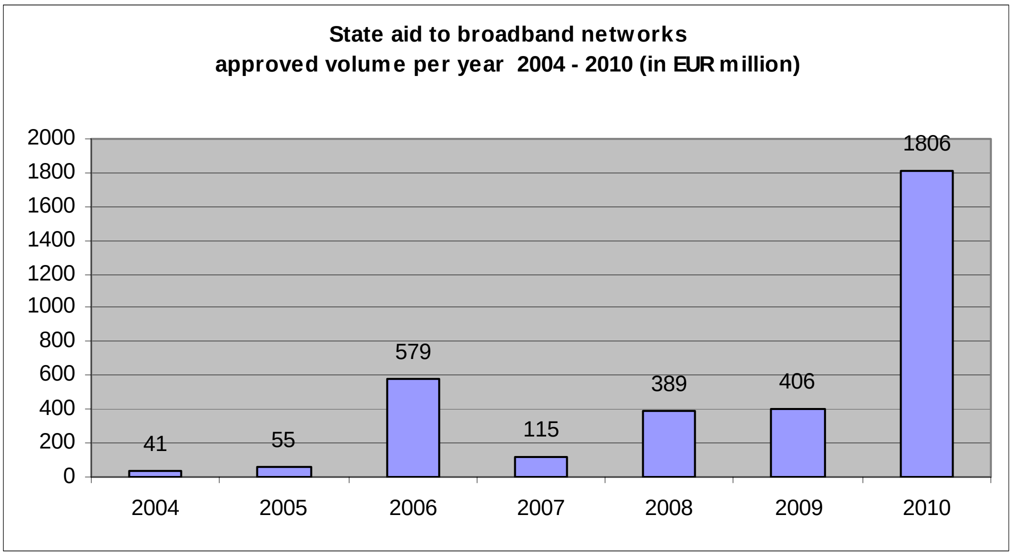
networks require heavy investments from operators, hence the number of areas where such investments will not take place on commercial terms is higher than was the case for basic broadband. Therefore, the areas where public intervention would be needed will be larger and the amount of financing necessary to cover an area with an NGA network is expected to be significantly higher compared to basic broadband.

In the period 2004-2010, Germany and Spain had the largest volume of authorised State aid for broadband development[66].



The Commission has approved more than EUR 4 billion of aid under the State aid rules, primarily to extend broadband coverage in white or NGA white areas (around 69 %), where no operator had sufficient market incentive to undertake such investments. Given that aid intensities are typically around 50 %, it is reasonable to assume that the approved aid has generated total investments of around EUR 8 billion in broadband networks.

66 France supports broadband development as SGEI measures, which do not qualify as State aid and are therefore not counted in the above statistics. In the EU12 Member States, State aid is typically granted under the Regional aid Guidelines, those amounts are also not reflected in the chart.



More than half of the approved schemes involved aid of less then EUR 20 million. However, with the implementation of national framework schemes and the shift to NGA development, more and more State aid schemes have a budget over EUR 100 million[67]. The Commission encourages Member States to design and notify national framework schemes in order to speed up the implementation of broadband projects.

According to the annual reports for the period 2004-2009, Member States have already implemented EUR 368 million out of the approved State aid volume for broadband networks. Around 60 % of this amount (EUR 226 million) was granted in 2008 and 2009. Three quarters of total aid was granted by the United Kingdom (EUR 159 million) and Ireland (EUR 125 million). The large difference between the approved volume (EUR 4 billion) and aid reported by Member States is due to the fact that the majority of State aid was foreseen for 2010 and the following years.

Besides State aid and private investments, the development of broadband networks is also supported through other instruments. For example, for the 2007-2013 financing period of the Structural Funds, a total of EUR 2.3 billion was allocated to broadband infrastructure investments and EUR 12.9 billion to information society services. A further EUR 360 million was used for broadband funding through the European Agricultural Fund for Rural Development while the EIB invested EUR 2.4 billon in broadband infrastructures in 2009 and a total of EUR 12 billion since 2000.

67 See for instance N 284/2005 - Metropolitan Area Network Broadband Program, Ireland: EUR 170 million; N 201/2006 - Broadband access development in underserved territories, Greece: EUR 160 million; N 157/2006 - South Yorkshire Digital Region Broadband Project, United Kingdom: EUR 120 million; N 73/2008 - Public support to broadband, digital TV, mobile and infrastructures in rural areas, Spain: EUR 180 million; N 115/2008 - Broadband in rural areas of Germany, Germany: EUR 141 million; N 646/2009 - National broadband plan for rural areas in Italy, Italy: EUR 155 million; N 62/2010 - High speed broadband in Finland, Finland: EUR 131 million; N 53/2010 - Federal framework programme on duct support, Germany: EUR 600 million; N 407/2009 - Optical fibre Catalonia (Xarxa Oberta), Spain: EUR 354 million; and N 304/2010 - Programa Avanza Nuevas Infraestructuras de Telecomunicaciones, Spain: EUR 150 million.

7.5. Conclusion on State aid to broadband sector

The Europe 2020 Strategy has underlined the importance of broadband deployment to promote social inclusion and competitiveness in the EU. Member States are currently in the process of defining their plans to achieve the goals set in the Digital Agenda. The effective use of public funding seems to be necessary to bring high-speed and very high-speed internet access to as many citizens of the EU as possible to help them benefit from the advantages of a knowledge-based society. On the other hand, public funding has to be used carefully in the liberalised telecoms markets to avoid a 'crowding out' of private investments.

The Broadband Guidelines have provided a clear and predictable framework for State aid in this sector. Since the adoption of these guidelines the Commission has approved a significant number of decisions that allow Member States to support investments in areas where market operators are unlikely to invest on commercial terms (e.g. rural or remote areas).

In addition to setting up the legal framework for granting State aid, the Guidelines aim not only to promote investments in broadband infrastructure but also to ensure that effective competition takes place, thereby helping to maximise consumer welfare, in the form of lower prices and better and more services.

8. STATE AID FOR EMPLOYMENT AND TRAINING

8.1. Policy context

A high level of employment is identified as key to the sustainability of Europe's social model andwelfare systems and to preserve public finances while maintaining economic growth. That is the reason why the European Union put forward as one of the Europe 2020 priorities *fostering a high-employment economy* and set an ambitious target of 75 % employment for the 20-64 years age group by 2020. The flagship initiative "An agenda for new skills and jobs"[68] identifies four main priorities to meet this challenge: better functioning labour markets; a more skilled workforce, capable of contributing and adjusting to technological change with new patterns of work organisation; better job quality and working conditions; and stronger policies to promote job creation and demand for labour. Although Member States are the main actors, pooling all efforts and instruments is essential to achieve this objective. The initiative proposes 13 concrete actions, with accompanying and preparatory measures, to coordinate policies focused on those four priorities.

As a *skilled workforce is an essential asset to develop a competitive, sustainable and innovative economy in line with Europe 2020 goals*[69], the Europe 2020 Strategy pays special attention to the integration of young people into the labour market[70]. The flagship initiative "Youth on the Move" seeks to improve young people's education, mobility and employment prospects. The initiative includes actions to support Member States in modernising their education and training systems to provide young people with the skills they need to succeed

[68] Communication from the Commission "An Agenda for new skills and jobs", COM(2010)682 final.

[69] See page 2 of the "An Agenda for new skills and jobs" initiative.

[70] The Europe 2020 Strategy has set a target on educational attainment which aims to tackle the problem of early school leavers by reducing the drop out rate to 10 % from the current 15 %, whilst increasing the share of the population aged 30-34 having completed tertiary education from 31 % to at least 40 % by 2020.

in today's labour markets and makes provision for a European policy framework for youth employment.

The design and implementation of policies for achieving the targets of the Europe 2020 Strategy is the responsibility of Member States, on the basis of the employment guidelines adopted by the Council[71]. One component in their strategies is public support in its different formats. Total public expenditure on labour market policy measures amounted to around EUR 57 billion in 2008[72]. Of this total, around EUR 22 billion served to support training measures. Another EUR 24 billion were spent on labour market services[73], to finance systems and structures which offer services to the unemployed.

Most of those public measures are addressed to individuals or apply to all workers, e.g., general reduction in the taxation of labour and social costs[74], measures to provide guidance and counselling, general assistance and training for the unemployed or training programmes that apply without distinction to all employers in a particular Member State. Those types of measures do not give an advantage to certain undertakings and thus do not constitute State aid.

However, due to the imperfect functioning of labour markets, State aid can, in certain cases, constitute an appropriate instrument, for example, to support the recruitment of workers with disabilities or other categories of workers which face barriers to their employment at the going wage rates. Employers tend to *perceive* certain characteristics such as disability, long-term unemployment or lack of basic education as *signals* for lower productivity. State aid in form of wage subsidies might help such workers to enter the labour market or to remain in their post by covering extra costs induced by their perceived or real lower productivity.

Despite its positive effects, employment aid bears a risk of distorting competition. Without rigorous controls and appropriate aid limits, employment aid can have harmful effects which cancel out its immediate effects on job creation. If the aid is used to protect firms exposed to cross-border competition, it could have the effect of delaying the adjustments needed to ensure the competitiveness of European industry.

As regards training, without public action, far less education and training would be provided than is socially desirable. Underinvestment in training may occur for a number of reasons: a risk averse approch by firms, financial constraints, fear that employees will leave before the firm has recouped its investment, etc. Enhanced knowledge and skills generate benefits to society beyond those captured as higher earnings by better-trained individuals (or by employers); the total social benefit exceeds the private returns. Training also contributes to social cohesion by reducing ex-ante inequality and the social distance between individuals,

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71 Council Decision of 21 October 2010 on guidelines for the employment policies of the Member States, OJ L 308, 24.11.2010, p. 46–51.

72 Source: Eurostat. Labour market policy measures cover activation measures for the unemployed and other target groups including the categories of training, job rotation and job sharing, employment incentives, supported employment and rehabilitation, direct job creation, and start-up incentives. The amount remained stable during recent years.

73 Labour market policies services cover all services and activities of the public employment service together with any other publicly funded services for jobseekers.

74 See as examples the French "Aid to support the employment of youth in the enterprises" (N 454/2002) on grants to partially cover the cost of employment or the Spanish measure "Incentives for engaging redundant workers from the toy sector" (N 53/2009) on reductions to the social security costs.

with a favourable impact on economic performance. Tackling the market failures related to training will require financial support, alongside other public efforts.

By granting training aid to certain firms, public authorities are taking over part of those firms' training costs and conferring a financial advantage that improves their competitive position. State aid training measures must, therefore, be well designed in order to address market failures that arise from an underinvestment in training and to guarantee that, within those limits, distortions of competitions are minimised.

8.2. Rules of State aid for employment and training

Most of the State aid rules on employment and training are contained in the GBER. For individual aid measures involving large aid amounts, prior notification remains necessary. In 2009, the Commission issued two guidance papers[75] which set out the criteria that it will follow to assess the compatibility of notified aid measures for disadvantaged and disabled workers and for training aid.

The box below summarises the main possibilities of granting employment and training aid under the current State aid provisions.

EU State aid rules for Employment

The EU State aid rules for employment provide a package of measures which can be used to support job creation and recruitment of disadvantaged or disabled employees.

The GBER covers aid granted for the recruitment of disadvantaged workers in the form of wage subsidies; aid for the employment of disabled people in the form of wage subsidies; and aid to cover the additional cost of employing disabled people. However, individual aid measures above the notification threshold require individual notification. This threshold is set at EUR 5 million per undertaking per year for the employment of disadvantaged workers and at EUR 10 million per undertaking per year for the employment of disabled workers.

Other types of employment aid are not prohibited, but they must be notified to the Commission in advance.

EU rules for State aid for training

The EU rules cover all public support for training which favours one or more firms or sectors of industry by reducing costs they should normally have to bear when they want their employees to acquire new skills. It applies to training aid whether the training is provided by companies themselves or by public or private training centres.

Training considered by the GBER may be one of two kinds: specific training isapplicable principally to the employee's present or future position and general training provides qualifications that are largely transferable to other firms or fields of work. The risks of distortive effects on competition are higher in the first case than in the second.

In view of the particular handicaps and the higher relative costs that SMEs have to bear when they invest in training, the aid intensities allowed under the GBER are higher for that type of enterprise.

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75 Communication from the Commission - Criteria for the compatibility analysis of state aid to disadvantaged and disabled workers subject to individual notification, OJ C 188, 11.8.2009, p.6 and Communication from the Commission - Criteria for the compatibility analysis of training state aid cases subject to individual notification, OJ C 188, 11.8.2009, p.1.

However, individual aid measures involving large aid amounts can entail a higher risk of distorting competition. Such measures are subject to prior notification in order to assess whether the positive effects outweigh the negative effects. The GBER sets the notification threshold at EUR 2 million for training aid projects.

8.3. State aid decisions on employment and training and case studies

In the period 2004-2010, the Commission took 32 final decisions on employment measures declaring that 25 measures were compatible with State aid rules and five measures did not contain State aid[76]. A large majority of the decisions (94 %) related to schemes. Almost two thirds of all State aid measures were implemented by France (5), Germany (4), Denmark (3), Italy (3), Spain (3) and Sweden (2).

During the same period the number of decisions on training measures amounted to 34 (26 State aid measures approved, four no aid decisions and four negative decisions). Of the approved State aid measures, six relate to schemes, 12 to *ad hoc* cases and eight to individual applications of schemes.

The number of measures approved by the Commission for training and employmentwas very low due to the fact that the large majority of measures introduced by Member States were done so under block exemption regulations[77].

The number of block exempted measures introduced by Member States during the period 2004-2010 was 1 005[78]. Of this total, 147 correspond to measures put in place under the block exemption regulation on employment[79], 420 to measures established under the block exemption regulation on training[80] and 438 to measures set up under the GBER.

Almost 70 % of all measures introduced under the block exemption regulation on employment were set up by five Member States: Poland (31), Italy and Spain (20 measures each), Hungary (19) and Germany (13). Concerning training measures, Italy (96), Belgium (69), the United Kingdom (62), Germany (56) and Spain (29) implemented around 74 % of the measures adopted under the block exemption regulation on training. Finally, almost a half of the measures adopted under the GBER were introduced by Italy (120) and Germany (105).

Among the GBER objectives, the highest number of measures focused on specific training (art. 38(1) GBER; 342 measures) and/or on general training (Art. 38(2); 229). With regard to employment aid, the distribution of measures was as follows: aid for the recruitment of disadvantaged workers in the form of wage subsidies (Art. 40 GBER; 75) aid for the employment of disabled workers in the form of wage subsidies (Art. 41 GBER; 66) and aid for compensating the additional costs of employing disabled workers (Art. 42 GBER; 50).

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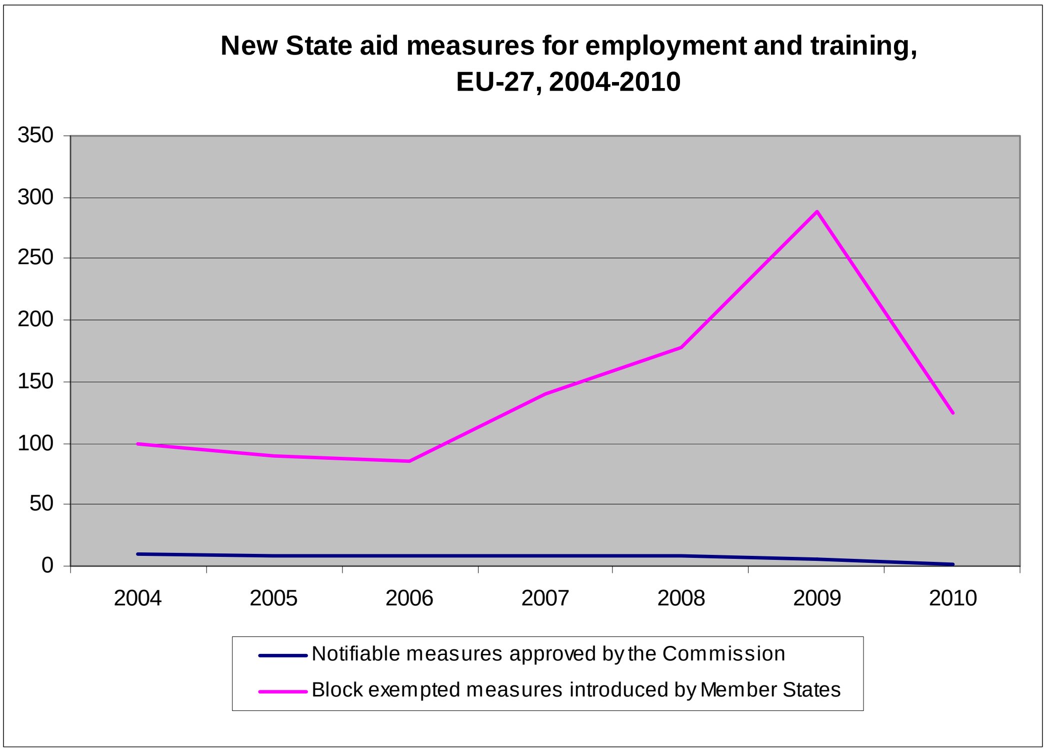
76 In addition, there were two negative decisions.

77 GBER and the previous block exemption regulations for employment and training.

78 Of which, 288 were introduced in 2009 and 124 in 2010.

79 Commission Regulation 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 L 337, 13.12.2002, pages 3-14 (in force before the introduction of the GBER).

80 Commission Regulation No 68/2001 of 12 January 2001 on the application of Articles 87 and 88 of the EC Treaty to training aid, OJ L 10, 13.01.2001, pages 20-29 (in force before the introduction of the GBER).



The below box shows two examples of State aid measures implemented in Belgium and France which aim to support employment and training. In both cases, measures were designed according to the provisions of the GBER and therefore did not require prior notification to the Commission before implementation.

Block exempted aid for professional integration of persons with disabilities (Belgium, X 29/2008)

In 2008, the Flemish regional government implemented a measure aimed at promoting the employment of disabled workers according to Articles 41 and 42 of the GBER. Under the scheme, aid is granted to employers who recruit disabled persons as well as to the disabled who are self-employed.

The aid takes the form of direct subsidies aimed at compensating the salary cost of the disabled employees (including social contributions). The aid starts from 40 % of the total salary cost and is reduced over the time to reach 20 % from the fifth year from recruitment. In addition, the scheme allows the Member State to compensate for the extra costs generated by the employment of disabled persons such as additional transport costs, adaptation of the workplace, purchase of tools and work clothes, special training needs. Specific provisions are foreseen for the employment of persons with visual and/or hearing impairments.

According to the Flemish authorities, the annual budget of the scheme is set at EUR 59.3 million.

Aid scheme on training aid (France, X 64/2008)

In 2008, France implemented a training scheme that follows the provisions of the GBER. The measure aims to provide general and specific training to employees of all sectors. According to the rules established in the GBER, the maximum aid intensity for general training is 60 % of eligible costs and 25 % for specific training. To compensate for the greater financial difficulties faced by SMEs, the GBER foresees higher aid intensities for these enterprises (20 % increase for both types of training).

The aid can be granted through grants, loans, guarantees, subsidy interests or reimbursable advances. The annual budget is around EUR 60 million and EUR 3 million for guarantees. Additional funding (around EUR 25 million) is provided by the Structural Funds for the period 2007-2013.

In 2009, more than 40 % of total training aid in France was granted under this scheme.

8.4. State aid expenditure for training and employment

As noted above, the Europe 2020 Strategy aims at fostering a high-employment economy with a 75 % employment rate. State aid is one of the tools available to achieve this objective. Generally, it is used where other measures can not fully correct imperfect functioning of the labour market. In practice, it plays a particularly important role in facilitationg the integration into the labour market of supposedly less-productive workers (the young and the un-skilled, people with a disability etc.).

Training and employment State aid amounted together to around EUR 3.4 billion in 2009 (0.03 % of EU-27 GDP) of which employment aid stood at EUR 2.4 billion (0.02 % of GDP). In relative terms, roughly 6 % of aid to industry and services was granted for employment and training.

The highest share of training and employment aid in relative to total aid to industry and services was observed in Denmark and Poland. Six Member States (Bulgaria, Germany, Greece, the Netherlands, Romania and Sweden) granted less than 1 % to these objectives while Luxembourg did not use State aid at all for training and employment.

Three Member States accounted for 84 % of employment aid granted in 2009: Denmark (EUR 1.2 billion, 51 %), Poland (EUR 0.6 billion, 26 %) and Italy (EUR 0.2 billion, 8.7 %). Italy was one of three Member States who together granted half of all training aid (Italy: 21 %, Germany: 16 % and Spain: 13 %).

More than half of all aid for training and employment (55 %, EUR 1.8 billion) was granted under block-exempted measures. The share of block exempted measures was significantly higher for training aid (88 %) than for employment aid (41 %). GBER measures amounted to around EUR 1.2 billion, of which aid for the employment of disabled workers in the form of wage subsidies amounted to EUR 625 million (Art. 41 GBER), aid for compensating the additional costs of employing disabled workers to EUR 28 million (Art. 42 GBER), and aid for the recruitment of disadvantaged workers in the form of wage subsidies to EUR 52 million (Art. 40 GBER). As regards training aid, the amounts were as follows: EUR 438 million for aid for general training (Art. 38(2) GBER) and EUR 99 million for aid for specific training (Art. 38(1) GBER).

When analysing figures for employment aid, it must be observed that around 80 % of the total was granted under only three schemes: aDanish scheme supporting integration into the labour market of people suffering from severe physical and mental problems[81] and Polish and Italian schemes providing employment aid for people with a disability[82]. Training aid was less concentrated. The three largest schemes (one Polish, one Italian and a French one) accounted for around 20 % of total training aid[83]. Comparing the two consecutive periods 2004-2006 and 2007-2009, it can be observed that training aid generally stood at the same levels both in

81 Mesures sociales dans le secteur du travail (NN 10/2002).

82 "Miesięczne dofinansowanie do wynagrodzeń pracowników niepełnosprawnych" (X 306/2009) and "Credito d'imposta per le nuove assunzioni nelle aree svantaggiate" (XE 12/2008).

83 "Refundacja wynagrodzeń młodocianych pracowników" (X 134/2010), "Aide aux entreprises pour la réalisation d'un programme de formation" (XT 1/2002) and "Engagements de développement de la Formation (EDDF)" (N 753/1999).

nominal terms (around EUR 0.8 billion per year) and relative terms (1.5 % of total aid to industry and services). On the other hand, State aid for employment decreased from EUR 3.1 billion per year in the first period to EUR 2.7 billion in the second one. The share of employment aid in total aid to industry and services also decreased by 0.9 % (from 5.9 % to 5.0 %).

Almost all aid for employment and training is granted in Europe under aid schemes. Between 2004 and 2009 (when EUR 17.5 billion was granted as training aid and EUR 4.8 billion as employment aid), *ad hoc* individual aid accounted for around 1 % of the total. As regards aid instruments, Member States used direct grants (83 % of total aid) and tax exemptions (17 %).

8.5. Conclusion on State aid for employment and training

The role of State aid measures to promote job creation and skilled workers is quite limited. Most public support measures do not fall within the scope of the State aid rules, but constitute general measures as they are open to all enterprises in all sectors and are without discretionary power for the authorities applying the measure. However, when market failures are being addressed, the Commission recognises the justification for State aid interventions.

Most rules governing State aid to employment and training are contained in the GBER, facilitating a speedy and low administrative cost implementation of the measures. Indeed, more than half of all aid to these objectives was granted under block exempted measures. However, there are important differences: while a large majority of training aid was granted under block-exempted measures (88 %), for employment it represented less that half of total aid (41 %).

Most employment aid is concentrated in three Member States and it is mainly addressed to disabled workers. Training aid is more dispersed and mainlyconcerns general training.

Despite its limited scope under current State aid rules, the Commission has traditionally adopted a rather favourable approach towards employment aid, particularly where it is intended to help disadvantaged and disabled workers to enter or stay in the labour market by covering the extra costs resulting from their perceived or real lower productivity. The Commission has also generally given sympathetic consideration to training aid. When market failures lead to a less than optimal level of training, Member States are therefore encouraged to complement their national plans for employment and training with well-targeted State aid measures. State aid control will continue to ensure that the distortive effects on competition of such intervention are minimised.

9. CONCLUSION

State aid control policy is an important tool which can contribute to achieving the Europe 2020 objectives by supporting smart, sustainable and inclusive initiatives of general common interest. State aid measures can correct market failures, thereby improving the functioning of markets and enhancing European competitiveness. State aid control has become an essential pillar of the internal market which ensures that companies are able to compete on equal terms and provides safeguards against Member States engaging in subsidy races.

Member States are called upon to use a wide range of measures to achieve the Europe 2020 targets, including regulatory frameworks and general measures, for instance those relating to tax. State aid is only a complementary tool and, curcially, must be well targeted to specific needs or priorities., Consequently, the Commission aims at ensuring that State aid fulfils clearly defined objectives of common interest and does not distort competition or affect trade between Member States to an extent contrary to the common interest.

Furthermore, it is important to emphasise that the amount of aid is not a measure of its efficiency. In the context of the crisis and taking into account budgetary constraints in the Member States, the objective of having less but better targeted aid remains of primary importance. Also, in order to promote competiveness, the aim is to address market failures and not to substitute public expenditure for market forces.

In particular, State aid targeted at R&D&I can be effective to provide incentives for additional private R&D&I investments with the aim of achieving the EU target of spending 3 % of EU GDP on R&D&I by 2020.

State aid rules for the protection of the environment can also give Member States extensive possibilities for encouraging clean industries and environmentally-friendly economies contributing to *"a resource-efficient Europe*".

Moreover, well targeted State aid measures can help to mitigate the special financing difficulties faced by SMEs, by contributing to their creation, growth and development. In this sense, Member States can make full use of the possibilities offered under the GBER for SMEs, which allows them to speed up the implementation of State aid measures and to reduce administrative costs.

Equally, a range of options to increase the employability of certain categories of workers by granting training aid, encouraging job creations and/or promoting the access of disadvantaged and disabled workers to the labour market. Although State aid is relatively limited in this area, its use , where market failures are identified, can help to contribute to the objectives of "An agenda for new skills and jobs".

State aid also plays a key role in the development of the broadband sector. The efficient use of public funding can help to bring high speed internet access to as many citizens of the EU as possible allowing them to benefit from the advantages of a knowledge-based society. However, aid has to be used carefully in the liberalised telecoms markets to avoid a 'crowding out' of private investment.

Finally, by promoting economic, social and territorial cohesion within the Union, regional State aid contributes to the Europe 2020 goals. In this sense, regional State aid differs from other types of aid, as it is mainly intended to address the cohesion disequilibrium rather than market failures only. The importance of this objective is evident, as reflected by the volumes of aid spent on regional development, which accounts for the highest share of total aid to industry and services.

As most of the State aid rules were reviewed in the context of the Lisbon Strategy for growth and jobs, they are generally adapted and oriented to serve the new challenges under the Europe 2020 Strategy. In the forthcoming revisions of certain guidelines and frameworks, further adjustments might be necessary. In the case of the risk capital guidelines, some changes have already been implemented.

Large disparities between Member States demonstrate different policy approaches, however the objective of "less and better targeted aid" is still valid for all countries. In the context of the current crisis and budgetary restrictions there is a need to keep public expenditure under control, while ensuring the effectiveness of the measures and a level playing field for enterprises.