

# Competition *policy brief*

Occasional papers by the Competition Directorate-General of the European Commission

## Supporting R&D and innovation in Europe: new State aid rules

### 1. State aid control 2.0

With its State Aid Modernisation (SAM) initiative, the Commission is overhauling its State aid rules. The new rules encourage Member States to put in place well-designed aid measures that promote economic growth and contribute to other objectives of common interest. They also give more flexibility to Member States by exempting more aid measures from prior notification to the Commission, reducing the administrative burden. In this way, the Member States and the Commission can promote good aid and focus attention on the cases that matter.

#### In a nutshell

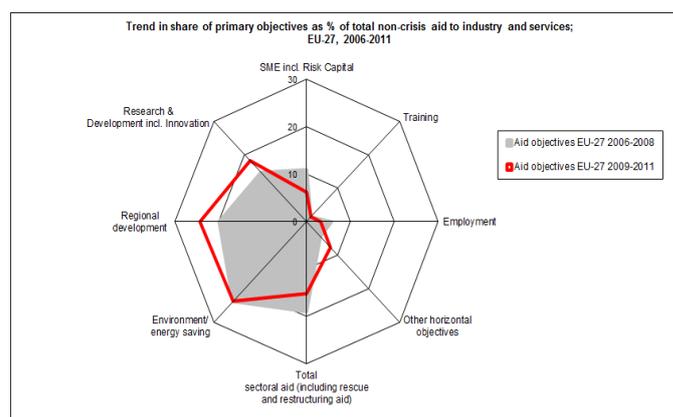
More scope for automatic approval of R&D&I aid, more flexible aid ceilings for large individual aid measures, greater legal certainty for public-private R&D-collaboration and for demand-side measures that foster innovation. The rules also promote value for money, thereby maximising the impact on R&D&I aid in a context of stretched budgets. Modernised State aid rules will thus activate the EU's potential to invest in more and better R&D&I.

The new rules for State aid for research, development and innovation will support the EU's Europe 2020 strategy and are an important building block of SAM.

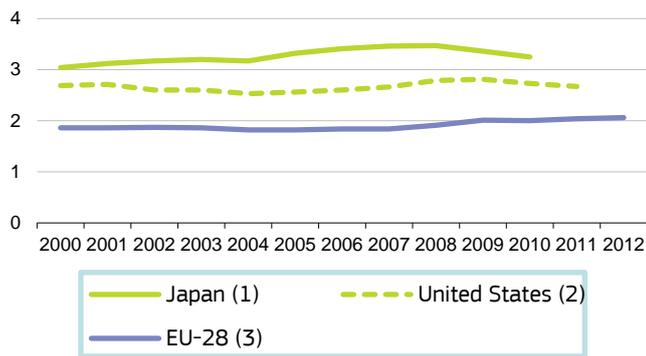
### 2. Research, development and innovation (R&D&I) – an important driver for smart, sustainable and inclusive growth

In its Europe 2020 strategy, the EU defined where it wants to be in 2020. One of the headline targets of this strategy is for R&D investments in the EU to reach 3% of GDP. Smart and sustainable growth also depends on the potential to innovate. R&D is the basis for innovation, and transforming innovative ideas into new products and services will strengthen European industry's competitiveness.

Since the previous set of R&D&I aid rules entered into force in 2007, the Commission has approved more than 250 aid schemes and around 55 large individual aid measures, the latter alone being worth about EUR 2.5 billion. Around 80% of the large aid projects involved key enabling technology (KET), such as micro and nanoelectronics, advanced materials, industrial biotechnologies, and advanced manufacturing systems. The capacity of the EU to develop and industrially deploy KET plays an important role in contributing to sustainable competitiveness and growth. Member States have also increasingly used the possibility to implement R&D&I aid without prior notification and approval by the Commission, under the General Block Exemption Regulation (GBER). In total, R&D&I State aid awarded under the previous rules amounts to an estimated EUR 62.4 billion. Together with the environment and regional development, R&D&I was an aid objective towards which a clear trend could be observed under the previous rules.



Nevertheless, R&D spending in Europe lags behind major global competitors, as it now stands a touch above 2% of GDP, compared to around 3% in the US and Japan. This is mainly the result of lower levels of private investment.



The new rules will ensure that R&D&I State aid enhances market efficiency and mobilises private investment in projects that would otherwise not be implemented. At the same time, they will ensure undistorted competition and well-functioning competitive markets, which are vital for innovation. Furthermore, the new rules will make clear the conditions for excluding State aid in public-private R&D interactions such as collaboration and knowledge transfer, or pre-commercial procurement. This will also facilitate the transition of knowledge and ideas to the market. As of 2014, and in order to achieve the Europe 2020 objectives, EU funding of R&D&I has been brought together under *Horizon 2020* (<http://ec.europa.eu/programmes/horizon2020/en/what-horizon-2020>). The new State aid rules will allow for the necessary national funding under Horizon 2020 and other EU policy initiatives to move forward quickly, given that such support is unlikely to distort competition unduly.

### 3. Need for public funding

The figures quoted above indicate that the markets do not on their own deliver the targeted higher level of R&D&I. In many cases, the failure of the market to deliver R&D&I activity is due to one or a combination of factors:

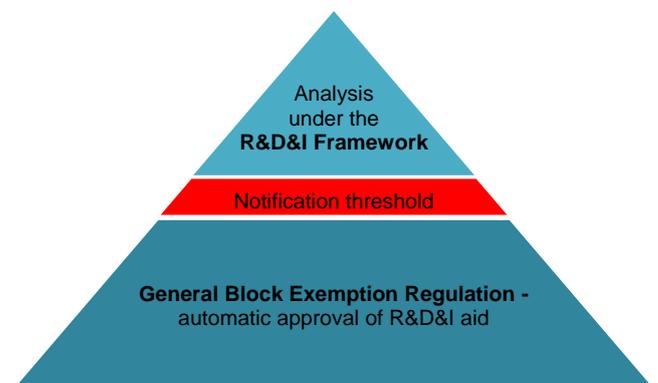
- R&D&I activities often generate benefits for society in the form of positive spill-over effects, e.g. the spill-over of knowledge to competitors. Hence, companies may find it unattractive to invest heavily in R&D&I when they aren't able to appropriate all benefits sufficiently.
- There may be situations where private investors are reluctant to finance R&D&I projects that are beneficial for society or the economy as a whole but where the successful outcome is highly uncertain. Imperfect information on the risks and benefits of R&D&I activities may lead to non-transparent markets and, as such, give rise to a mismatch between supply and demand.
- Successful R&D&I often involves multiple collaboration partners and suppliers, but coordination and network failures may impair their ability to interact. This can be due to a large number of collaboration partners with diverging interests, problems in designing contracts, and difficulties in knowledge sharing, for example.

### 4. A new set of rules

The Commission adopted new R&D&I State aid rules after extensive consultations with Member States and stakeholders, and building on its previous experience. With the new rules, the Commission is paving the way for Member States to support R&D&I more frequently and efficiently, to mobilise additional private investment, and to promote collaboration between academia and industry as well as carry out public procurement of R&D, including pre-commercial procurement, without uncertainty about the presence of any indirect aid to industry. The new rules are designed to go hand in hand with other EU initiatives aimed at promoting R&D&I activities, such as Horizon 2020.

In essence, the new R&D&I State aid rules consist of two complementary parts. The first part is covered by the new General Block Exemption Regulation (GBER), which includes many eligible aid objectives, including all R&D&I aid objectives for which State aid may be granted. If State aid is in line with the GBER's provisions, it doesn't need prior notification to, and approval by, the Commission, and can be implemented immediately by the Member States. The GBER is thus the cornerstone of the new State aid architecture.

The second part is the new R&D&I Framework, applicable to R&D&I aid that has a higher distortive potential, in particular because it exceeds the aid thresholds up to which aid can be implemented under the GBER.



Both sets of rules were adopted on 21 May 2014, and enter into force on 1 June 2014. The main new features are:

#### (i) Widening the scope of allowed R&D&I aid

The Commission is cutting red tape by allowing Member States more flexibility in implementing R&D&I aid. The scopes of the GBER and the R&D&I Framework have been enlarged as compared to the previous rules: a new category of aid for research infrastructure is included and the scope for aid for pilot projects and prototypes is expanded.

Moreover, aid for innovation clusters has been made more flexible, e.g. by covering also knowledge and dissemination and not-for-profit organisations, and by allowing support also to clusters that cut through several sectors and/or regions without a sectorial or regional specialisation.

**Example:** Under the previous R&D&I State aid rules, construction and upgrade of research infrastructure would only be eligible for aid if the construction or upgrade itself constituted an R&D&I activity, or if the infrastructure was an innovation cluster for which the previous rules allowed only very limited aid. Under the new rules, such investments – which may be massive – will be eligible for aid on a stand-alone basis, for up to 50% of eligible costs. Of course, this limitation applies only to public support that is attributable to the research infrastructure's economic activities.

In addition, notification thresholds have been doubled for aid for R&D projects, i.e. fundamental research, industrial research and experimental development. These thresholds are re-doubled for EUREKA projects, which are cross-border and collaborative, and projects carried out in the context of EU Joint Undertakings, which are public-private R&D partnerships of strategic importance. At EUR 20 million, the threshold for the new aid category of research infrastructure is set relatively high. Innovation clusters and innovation aid will also be easier for Member States to implement, with higher notification thresholds of EUR 7.5 million.

In summary, the scope of R&D&I aid that is eligible for block exemption will be significantly enlarged.

### **(ii) Increased legal certainty in R&D&I-specific situations**

The new R&D&I Framework provides further guidance regarding the presence of State aid in certain typical R&D&I situations. For instance, the general non-economic activities of research organisations will be explained in more detail. This will give greater legal certainty in particular for publicly funded institutes that are dedicated not only to education and independent research, but also to industry-oriented research and to knowledge transfer. Another area where legal certainty is established is the limits of certain ancillary economic activities for which public funding falls outside State-aid rules altogether. This concept is explained for the first time in the area of R&D&I. This will be particularly useful in situations where public financing is needed for e.g. large research infrastructure that is predominantly used for open-access non-economic research for the public good but that still may commit to limited economic activities that are inseparable from its predominant area of activity. Another important field where State aid issues arise is the pre-commercial public procurement of R&D services. In particular, an advantage could be present when the supplier of an R&D service is automatically in the position of preferred supplier of the final product, and is able to lock a future technology market. For the

first time in this area, comprehensive guidance is given on how to avoid State aid to suppliers of R&D services to public purchasers.

### **Examples of activities that can be funded without being subject to State aid rules:**

- **Typical non-economic activities are:** education organised within the national educational system and to a large extent funded and supervised by the State; independent R&D for more knowledge and better understanding, including collaborative R&D; wide knowledge dissemination on a non-exclusive and non-discriminatory basis.
- **Purely ancillary economic activities** must be directly related to and necessary for the operation of the research organisation or research infrastructure, or intrinsically linked to its main non-economic use, and must not use more than 20% of the relevant entity's overall annual capacity.

### **(iii) More flexibility and less red tape**

To help industry overcome financing gaps, the new rules on R&D&I aid establish more flexible and simpler criteria under which the aid is more likely to be found compatible with the internal market. Under the new R&D&I Framework, the allowed aid intensities have been increased in particular for close-to-the-market aid categories (applied research, including demonstrators and pilots, ranging from 60-90%, and innovation aid in general set at 50%, including for innovation clusters). Also, in particular for less distortive aid, which is covered by the GBER, the rules on aid for experimental development and innovation will be less restrictive with respect to a number of criteria, including eligible costs.

**Example:** Under the previous rules, a large company could receive aid up to 25% of the eligible costs for **demonstration of a new green technology**. If the project, after the R&D phase, was expected to result in commercial revenue, this aid intensity had to be decreased.

In the future, commercial revenue won't have to be taken into account for less distortive and block-exempted aid. This will simplify the granting of more limited aid amounts significantly. For large aid amounts, on the other hand, commercial revenue would be considered in the analysis, ensuring that aid is limited to the minimum necessary to trigger the project's implementation. On the basis of such an analysis, a higher aid level of 60% would be allowed. This will give Member States more flexibility in granting higher aid levels where necessary, while at the same time limiting potential distortions.

#### **(iv) Clearer criteria for aid with high distortive potential**

The structure and compatibility criteria of the R&D&I Framework, which apply only to large amounts of aid, follow the common approach developed in the context of SAM.

- *First*, the aid must demonstrably promote an objective of common interest, and address a market failure. The extent of a market failure can be confirmed on the basis of comparing the situations of specific sectors or lines of business, for example.
- *Second*, the appropriateness of aid compared to alternative (aid and non-aid) measures must be shown. Guidance is provided on the appropriateness of the main aid instruments in addressing a specific market failure (e.g. a repayable advance for close-to-market activities).
- *Third*, Member States must demonstrate that the aid actually changes the behaviour of the beneficiary (i.e. that it has an incentive effect). In this context, the counterfactual analysis may be supported by company-specific as well as industry-specific elements.
- *Fourth*, it will be verified that the aid amount does not exceed the minimum necessary for the aided project to be sufficiently profitable. In cases where the aid beneficiary would, in the absence of aid, carry out an alternative project, the net extra costs approach (difference between the net present value of the aided project and of the counterfactual) will be applied.
- *Finally*, the Framework identifies cases of manifest negative effects that can never be found compatible (e.g. where an aid measure is contrary to internal market rules on the free movement of goods and services), whilst providing criteria to determine whether competition distortions are limited or not.

When State aid is granted for projects that are also funded by the EU, there will be a presumption of a contribution to the objective of common interest, the presence of a market failure and appropriateness of aid, thereby greatly facilitating and speeding up the assessment of such cases.

## **5. Block exemptions based on experience**

Over the years, the Commission has gathered valuable experience through individual assessment of notified R&D&I cases, as well as through many consultations with Member States and other stakeholders on the operation of the current rules.

The new rules for R&D&I State aid build directly on this experience: the envisaged wider range of block-exempted measures covers measures where the Commission is confident that they target commonly accepted objectives, address a well-defined market failure, are appropriate, proportionate, and limit distortion of competition to the minimum. The scope of the block exemption rules is also widened through increased notification thresholds. These take into account the Commission's experience with such cases, as well as the fact that R&D costs have increased significantly over the past five years.