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From: Secretary-General of the European Commission, signed by Ms Martine DEPREZ, Director

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To: Mr Jeppe TRANHOLM-MIKKELSEN, Secretary-General of the Council of the European Union

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Subject: COMMISSION STAFF WORKING DOCUMENT FITNESS CHECK of the 2012 State aid modernisation package, railways guidelines and short-term export credit insurance

Delegations will find attached document SWD(2020) 257 final PART 3/4.

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PART 3/4

COMMISSION STAFF WORKING DOCUMENT

FITNESS CHECK

**of the 2012 State aid modernisation package, railways guidelines and short-term export
credit insurance**

{SEC(2020) 372 final} - {SWD(2020) 258 final}

Annex 3

Overview of the State aid rules subject to the Fitness Check

State Aid rules under Fitness Check	Entry into force	Expiry/ Review clause	Part of SAM	OJ reference	Preceded by	Objective
General Block Exemption Regulation (No. 651/2014 as amended by the Commission Regulation No. 2017/1084)	14 June 2017	31 December 2023	Yes	OJ L 187 26.6.2014, p. 1 and OJ L 156, 20.6.2017, p. 1–18 Prolonged and targeted COVID adjustments by OJ L 215, 7.7.2020, p. 3–6	Regulation (EU) No 800/2008 (OJ L 214, 09.08.2008, p.8)	To declare specific categories of State aids (see Art. 1 GBER) compatible with the TFEU and exempt them from the requirement of prior notification and Commission approval.
de minimis Regulation (No. 1407/2013)	1 January 2014	31 December 2023	Yes	OJ L 352, 24.12.2013, p. 1–8 Prolonged and targeted COVID adjustments by OJ L 215, 7.7.2020, p. 3–6	Regulation (EC) No 1998/2006 (OJ L 379, 28.12.2006, p.5)	To provide a ceiling below which aid measures are deemed not to constitute State aid within the meaning of Article 107 TFEU, and are exempted from the notification procedure, because they are considered not to any effect on cross-border competition among Member States.
Regional aid Guidelines (2013/C 209/01)	1 July 2014	31 December 2021	Yes	OJ C 198 of 27.06.2014, p. 1 Prolonged and targeted COVID adjustments by OJ C 224, 8.7.2020, p. 2–4	Guidelines on national regional aid for 2007-2013 as prolonged until 30 June 2014, (OJ C 54, 04.03.2006, p.13)	To support regional economic development in disadvantaged areas within the EU while ensuring a level playing field between Member States and to limit the effects of regional aid on trade and competition to the minimum necessary.
Research Development and Innovation Framework (“RDI”) (2014/C 198/01)	1 July 2014	General review clause	Yes	OJ C 198 of 27.06.2014, p. 1 Targeted COVID adjustments by OJ C 224, 8.7.2020, p. 2–4	The 2006 Framework for State Aid for RDI (OJ C 323, 323, 30.12.2006)	To declare compatible with the internal market a series of RDI measures (see para. 12 of the RDI Framework).
Important Projects of Common European Interest Communication (“IPCEIs”) (2014/C 188/02)	1 July 2014	31 December 2021	Yes	OJ C 188, 20.06.2014, p. 4 Prolonged and targeted COVID adjustments by OJ C 224, 8.7.2020, p. 2–4	Ad hoc compatibility assessment under 2006 RDI Framework (OJ C 323, 323, 30.12.2006) and the 2008 Environmental Guidelines (OJ C 82, 01.04.2008, p. 1) to IPCEIs whose subject matter fell in their respective scope.	To provide for a simplified compatibility assessment whereby it is to be presumed that certain compatibility criteria are fulfilled for IPCEIs that fulfil the eligibility conditions. To create a clear framework consolidating the relevant assessment criteria in one single document, applicable to all sectors of the economy and across all policy objectives.

State Aid rules under Fitness Check	Entry into force	Expiry/ Review clause	Part of SAM	OJ reference	Preceded by	Objective
Risk finance Guidelines (2014/C 19/04)	1 July 2014	31 December 2021	Yes	OJ C 19, 22.01.2014, p. 4-34 Prolonged and targeted COVID adjustments by OJ C 224, 8.7.2020, p. 2-4	The Risk Capital Guidelines of 2006 (OJ C 194, 18.08.2006, p.2) and the 2008 GBER No.800/2008 (OJ L 214, 09.08.2008, p.3)	To facilitate the development of certain economic activities, where such aid does not adversely affect trading conditions to an extent contrary to the common interest. To encourage the development and expansion of new businesses, especially innovative and high-growth ones, that can have a great potential to create jobs.
Aviation Guidelines (2014/C 99/03)	4 April 2014	General review clause	Yes	OJ C 99, 4.4.2014, p. 3-34.	The 2005 aviation and airports Guidelines (OJ C 312, 09.12.2005, p.1)	To offer sector-specific guidance on the notion of aid in the aviation sector and to describe the compatibility conditions for State aid based on three different legal basis: public service compensation, assessed under Art 106(2) TFEU, aid to airports and airlines under 107(3)(c) TFEU and aid of a social character assessed under Art. 107(2) (a) TFEU.
Energy and Environmental Aid Guidelines (2014/C 200/01)	1 July 2014	31 December 2021	Yes	OJ C 200, 28.6.2014, p. 1-55. Prolonged and targeted COVID adjustments by OJ C 224, 8.7.2020, p. 2-4	Guidelines on State aid for environmental protection published on 1 April 2008 (OJ C 82, 01.04.2008, p.1)	To assist Member States in achieving the 2020 renewable energy targets while minimising the distortive effects of support schemes by promoting a gradual move to market-based support for renewable energy and providing criteria on how Member States can relieve energy intensive companies that are particularly exposed to international competition from charges levied for the support of renewables. To contribute to ensuring the required generation adequacy level and security of supply of the Union's energy system while minimising competition distortions by including new provisions on aid to energy infrastructure and generation capacity.
Rescue and restructuring Guidelines (2014/C 249/01)	1 August 2014	31 December 2023	Yes	OJ C 249, 31.07.2014, p. 1. Prolonged and targeted COVID adjustments by OJ C 224, 8.7.2020, p. 2-4	Community guidelines on State aid for rescuing and restructuring firms in difficulty of 1 October 2004 (OJ C 244, 1.10.2004, p. 2) as prolonged by the Commission communication concerning the prolongation of them (OJ C 296, 2.10.2012, p.3)	Rescue and restructuring aid are among the most distortive types of State aid. It is therefore important to ensure that aid is only allowed under conditions that mitigate its potential harmful effects and promote effectiveness in public spending.
Railway Guidelines (2008/C 184/07)	22 July 2008	General review clause	No	OJ C 184, 22.7.2008, p. 13-31	None, cases approved directly under the Treaty provisions.	To provide guidance on the compatibility with Art. 107 and Art. 93 TFEU of State aid to railway undertakings in accordance with Directive 91/440/EEC. To improve the transparency of public financing and legal certainty with regard to the Treaty rules in the context of the opening-up of the railway markets

State Aid rules under Fitness Check	Entry into force	Expiry/ Review clause	Part of SAM	OJ reference	Preceded by	Objective
Short-term export-credit insurance Communication (2012/C 392/01)	1 January 2013	31 December 2021	No	OJ C 392, 19.12.2012, p. 1-7 and OJ C 457, 19.12.2018, p. 9-11. Prolonged and targeted COVID adjustments by OJ C 224, 8.7.2020, p. 2-4	The 1997 short-term export- credit insurance Communication as last amended in 2010 (OJ C 329, 7.12.2010, p.6)	To ensure that State aid does not distort competition among private and public or publicly supported export-credit insurers and to create a level-playing field among exporters in different Member States.

State aid Rules in the Treaty

I. Article 107(1) TFEU: notion of aid and general prohibition

Article 107(1) TFEU states that: *“any aid granted by a Member state or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, insofar as it affects trade between Member States, be incompatible within the internal market”*.

Consequently, the **cumulative** requirements that have to be met in order for a measure to be considered as State aid and to fall under the State aid **general prohibition** are the following:

- a. the aid must be granted by a Member State or through State resources;
- b. there must be a selective advantage;
- c. there must be a -threat of- distortion of competition; and
- d. there must be affectation of trade between Member States.

II. Ex lege derogations provided by Article 107(2) TFEU

Once defined if the measure constitute State aid, Article 107(2) TFEU provides a list of State measures that are *ex lege* deemed to be **compatible** with the internal market:

- a. Aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned;
- b. Aid to make good the damage caused by natural disasters or exceptional occurrences;
- c. Aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, in so far as such aid is required in order to compensate for the economic disadvantages caused by that division.

III. Discretionary derogations provided by Article 107(3) TFEU

Once defined if the measure constitute State aid, Article 107(3) TFEU provides a list of State measures that **may discretionary** be considered **compatible** with the internal market. The measures are the following:

- a. aid to the economic development of most disadvantaged regions within the European Union;
- b. aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;
- c. aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;
- d. other categories as may be specified by a decision of the Council.

IV. Transport sector (relevant for the Railway Guidelines)

Article 93 TFEU relates to transport and provides that *“aids shall **be compatible** with the Treaty if they meet the needs of coordination of transport or if they represent reimbursement for the discharge of certain obligations inherent in the concept of a public service”*.

V. Article 108 TFEU

1. The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development or by the functioning of the internal market.

2. If, after giving notice to the parties concerned to submit their comments, the Commission finds that aid granted by a State or through State resources is not compatible with the internal market having regard to Article 107, or that such aid is being misused, it shall decide that the State concerned shall abolish or alter such aid within a period of time to be determined by the Commission.

If the State concerned does not comply with this decision within the prescribed time, the Commission or any other interested State may, in derogation from the provisions of Articles 258 and 259, refer the matter to the Court of Justice of the European Union direct.

On application by a Member State, the Council may, acting unanimously, decide that aid which that State is granting or intends to grant shall be considered to be compatible with the internal market, in derogation from the provisions of Article 107 or from the regulations provided for in Article 109, if such a decision is justified by exceptional circumstances. If, as regards the aid in question, the Commission has already initiated the procedure provided for in the first subparagraph of this paragraph, the fact that the State concerned has made its application to the Council shall have the effect of suspending that procedure until the Council has made its attitude known.

If, however, the Council has not made its attitude known within three months of the said application being made, the Commission shall give its decision on the case.

3. The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the internal market having regard to Article 107, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision.

4. The Commission may adopt regulations relating to the categories of State aid that the Council has, pursuant to Article 109, determined may be exempted from the procedure provided for by paragraph 3 of this Article.

VI. Article 109 TFEU

The Council, on a proposal from the Commission and after consulting the European Parliament, may make any appropriate regulations for the application of Articles 107 and 108 and may in particular determine the conditions in which Article 108(3) shall apply and the categories of aid exempted from this procedure.

Annex 5

Overview of the rules subject to the Fitness Check by objective of common interest

I. Access to finance for SMEs

Risk Finance Guidelines / Relevant GBER provisions

Context

The legal framework with regard to State aid for access to finance for SMEs applicable in 2014-2020 comprises the Risk Finance Guidelines and the provisions applicable to Aid for access to finance for SMEs of the GBER, specifically Article 21 thereof.

Better access to finance is a core element of the new SME Strategy for a sustainable and digital Europe. Access to finance for SMEs is also an objective of common interest underpinning the Europe 2020 strategy. In particular, the ‘Innovation Union’ flagship initiative aims to improve framework conditions and access to finance for research and innovation so as to ensure that innovative ideas can be turned into products and services that create growth and jobs. It is also one of the core objectives of the Capital Markets Union.

The supply of risk capital to SMEs in the EU is constrained by certain structural weaknesses affecting all main segments of this market. SMEs, particularly in their early stages, face important difficulties in gaining access to finance, either for investment purposes or for working capital to maintain their potential growth. At the heart of these difficulties lies a problem of asymmetric information: SMEs, especially when they are young, are often unable to demonstrate their credit-worthiness or the soundness of their business plans to investors. Such failure in business finance markets translate into a “funding gap” which affects SMEs not only at their seed/start up and early expansion phases but also at later expansion/growth phases.

Purpose of the rules

The Risk Finance Guidelines and Section 3 GBER were set up to promote a more efficient and effective provision of various forms of risk finance to a larger category of eligible undertakings.

Member States can decide to set up schemes to facilitate SME's access to finance. For block exempted measures (under GBER), no notification is required. For measures beyond GBER, the Commission has set up the Risk Finance Guidelines to provide Member States with the necessary orientation under which conditions Risk Finance measures would be compatible with the internal market. While for measures that fall within the thresholds as defined in Article 21 GBER, a market failure (as described above) is presumed and measures are deemed not to distort competition, wider or larger schemes beyond the thresholds as defined in GBER are possible following a formal notification.

The 2014 Impact assessment has defined the following overall objective: "The general objective of the present review is to make European SMEs more competitive in a global marketplace by ensuring that public intervention in the field of risk finance corrects market

failures in the most efficient and effective way while maintaining a level playing field among Member States." This was broken down into three more specific objectives:

1. Addressing the market failure affecting SMEs' access to finance by providing straightforward and operational eligibility and compatibility criteria that would adequately capture companies facing a funding gap, while maintaining the necessary safeguards to ensure that competition in the internal market is not distorted;
2. Enabling the efficient functioning of the EU venture capital markets by better reflecting market practices and encouraging the flexible use of other forms of financing, such as debt;
3. Ensure better regulation by providing simpler and clearer rules, minimising administrative burden and compliance costs on companies and national administrations and simplifying and rationalising the transparency and reporting requirements for Member States.

Baseline scenario

The baseline scenario, as opposed to the adoption of the 2014 Risk Finance Guidelines and relevant GBER provisions, would have been prolonging the previous 2006 Risk Capital Guidelines and keeping the corresponding GBER articles unchanged. No changes would have been undertaken in the eligibility criteria for the undertakings and the support would remain focused on the SMEs in early development stages. The mechanism of annual tranches capped at 1.5 million EUR with no limitations on the number of years for the intervention would have been kept (in opposition to the 15 million EUR included in the current rules). The focus of the rules on equity and on the classic forms of investment funds would have remained unchanged, and other instruments such as tax exemptions, loans and guarantees would have remained subject to notification and assessment on a case-by-case basis.

As described above, the former Risk Capital rulebook (comprising both the guidelines and the GBER) relied more on a direct control by the Commission of aid granted by Member States and allowed less flexibility concerning instruments. This approach entailed red tape, unnecessary in light of the Commission's past experience with risk finance measures implemented by Member States. Keeping the former rules would not have permitted the current degree of alignment to actual market practices, nor to the EU initiatives aimed at enhancing SMEs' access to finance (such as COSME and Horizon 2020) and the leverage effect towards private investors would have been lower.

II. Connectivity by air transport

Aviation Guidelines / Relevant GBER provisions

Context

The legal framework with regard to connectivity by air transport under evaluation comprises the Aviation Guidelines for airports and airlines and the relevant provisions of the GBER.

Air transport plays a fundamental role in the European economy both for EU citizens and industry. Air transport is not only key to regional and social cohesion but also plays an important role in regional development by improving connectivity. The air transport market has changed rapidly in the past years and is constantly growing and evolving. On the other hand, air transport is one of the fastest-growing sources of greenhouse gas emissions and it faces increasing pressure to reduce its carbon footprint. Therefore, the question of environmentally sustainable investments has become more prominent in the past years, and airports and airlines are facing increasing pressure to lower their carbon footprint.

Purpose of the rules

The Aviation Guidelines were aimed to address the following problems/needs:

- General problems: (i) Effectiveness of State aid to airports and airlines at promoting regional economic development and accessibility of regions; (ii) Effectiveness of State aid rules to airports and airlines for avoiding undue distortions of competition and trade.
- Problems related to investment aid to airports: (i) Creation of overcapacity and duplication of airport infrastructure; (ii) No existing limits to permissible aid amount other than the funding gap.
- Problems related to operating aid for airports: (i) Regional airports are being continuously subsidised with operating aid absent of any legal basis; (ii) Duplication of unprofitable airports within the same catchment area and lack of permissible aid amount for operating aid.
- Needs related to start-up aid to airlines: While the airline market is fully liberalised, there continues to exist a need to attract airlines for new routes in order to improve connectivity between regions.

The Aviation Guidelines tried to tackle those problems/needs with the following types of aid:

- **Operating aid:** Under the 2005 Aviation Guidelines, operating aid to airports was in general prohibited. In practice however, the Commission did not enforce this prohibition and Member States used to grant incompatible operating aid. Thus, there was a wide discrepancy between the rules in place and the application of the rules. The 2014 Aviation Guidelines introduced a transitional period and gradual phasing out of operating aid by 2024 as well as aid thresholds and limits to the maximum aid amount based on the annual passenger numbers of an airport. The Member States were expected to notify operating aid schemes, whereas airports were expected to adapt their business models to the changing

market conditions in order to become operating cost covering by 2024. Furthermore, the 2014 Aviation Guidelines introduced the criterion of the so-called “catchment area” according to which an airport which is situated within a distance of approximately 100 km or 60 minutes travelling time from another airport, can only receive aid if it can show that this aid will not lead to the duplication of unprofitable airports in the same catchment area.

- The **baseline scenario** would imply continuation of the policy of allowing operating aid as it had been de facto the case until 2014. Under this option, all airports would have been eligible for operating aid and the compatible aid amount would have been equal to the total funding gap for operating costs.
- **Investment aid:** The 2005 Aviation Guidelines recognised the need and positive impact of investment aid in airport infrastructure on regional development and accessibility, and all airports were eligible for investment aid. The 2014 Aviation Guidelines introduced aid thresholds and limits to the maximum aid amount based on the annual passenger numbers of an airport. Furthermore, the so-called “catchment area” was introduced as a safeguard to prevent the duplication of unprofitable airports or the creation of additional unused capacity in the catchment area. Under the **baseline scenario**, the need and positive impact of investment aid in airport infrastructure on regional development and accessibility would have continued to be recognised. All airports would have been eligible for investment aid. No further guidelines would have been provided as to what proportion of funding for infrastructure project could be supported with state aid and whether this proportion should have varied according to the airport size.
- **Aid to airlines:** Under the 2005 Aviation Guidelines, start-up aid to airlines was allowed for a limited period of time, for airports below 5 million passengers per annum and subject to strict conditions concerning eligible costs and awarding process. The 2014 Aviation Guidelines maintained the compatibility rules on start-up aid to airlines to promote connectivity while otherwise confirming the strict State aid assessment of airport-airline agreements under the so-called Market Economy Operator principle (“MEOP”).
- Under the **baseline scenario**, start-up aid to airlines would have been allowed for a limited period of time, for airports below 5 million passengers per annum and subject to strict conditions concerning eligible costs and awarding process.

The introduction of Article 56a GBER was aimed at addressing the need for a further simplification of the State aid rules for Member States. The objective was in particular to facilitate and provide legal certainty for investments and to allow the Commission to focus its State aid control on the potentially most distortive practices.

The intervention tried to tackle this need by extending the scope of the GBER and by introducing a new Article 56a in 2017, allowing for the granting of investment aid and operating aid to airports under certain conditions without prior notification to the Commission. Article 56a furthermore provided for further simplifications for small airports below 200 000 passengers per year. The criteria of the catchment area was introduced as a safeguard for investment aid for airports above 200 000 passengers per year to ensure the Commission’s assessment of potentially distortive practices.

The introduction of Article 51 GBER was aimed at pursuing European social objectives such as the connectivity of residents of remote regions.

The intervention tried to tackle this need by introducing Article 51, thereby simplifying the rules and allowing for the granting of certain social aids without prior notification at the Commission.

III. Small amounts of aid

De minimis Regulation

Context

The *de minimis* Regulation is a horizontal regulation which applies in principle to all types of aid granted to undertakings in all sectors. It aims to provide a ceiling below which aid measures are deemed not to meet all the State aid criteria and are therefore exempted from the notification procedure. Even though the Regulation supports mainly SMEs, it remains above all a cross-sector, overarching legislation.

Purpose of the rules

The 2013 *de minimis* Regulation aimed to tackle the following problems:

- The definition of the right ceiling which needed to be assessed so that aid measures can be deemed not to have any effect on trade and competition;
- The use of conditions which were simpler and easy to apply for local granting authorities;
- The objective of ensuring monitoring and transparency of *de minimis*.

The 2013 *de minimis* Regulation was expected to have positive effects:

- On the support to undertakings, in particular SMEs;
- Alleviating administrative burden by Member States. For instance, simplification and reduction on administrative burden were expected by re-including undertakings in difficulty.

Baseline scenario

The baseline scenario implied maintaining the 2006 Regulation without modification. As regards the *de minimis* ceiling, on the one hand, maintaining the ceiling was considered to have a limited impact. On the other hand, not increasing the ceiling could have impacted the SMEs. As regards the simplification of the rules, in particular, the definition of undertaking would have maintained legal uncertainty and potential non-compliance. If the exclusion of undertaking in difficulty were to be maintained, granting authorities would have continued to apply it in an incorrect way due to reasons of legal uncertainty. Concerning monitoring, maintaining the choice of a declaration by the undertaking or the set-up of a central register would not have necessarily ensured compliance, nor would it have solved the problem of lack of data to measure the impact of the ceiling on completion for a future policy review.

IV. Environmental protection and energy

EEAG / Relevant GBER provisions

Context

The 2014 EEAG, together with the relevant provisions of the GBER (Section 7), provide a stable and appropriate framework for public investments across the EU supporting Member States to reach their 2020 climate targets and support the Energy union. These rules facilitate a more effective (and less distortive) deployment of State resources over the full range of the Green Deal objectives, thereby contributing to environmental goals, climate targets and new business opportunities. This ranges from investments in renewable electricity schemes for cheaper and more integrated green energy, the roll-out of clean vehicles or circular economy schemes such as the reuse of waste heat or recycling waste.

Purpose of the rules

On the basis of the problems identified in achieving the 2020 energy and climate targets and the objectives laid down in the SAM strategy, the EEAG aimed at addressing the following four, largely independent, problems:

1. The previous State aid rules for support schemes to electricity from renewable energy sources (RES-e) did not prevent cost-inefficiencies and undue market distortions.
2. Financing the support to electricity from renewable energy sources may lead to higher retail energy prices, which may increase pressure on Member States to exempt certain undertakings from the costs of financing renewable energy. The 2008 EAG contained no specific rules for this type of support.
3. Insufficient levels of generation adequacy, as identified in the Commission Communication "Delivering the internal electricity market and making the most of public intervention".
4. The scope and criteria in 2008 EAG and GBER: unnecessary ex-ante scrutiny of certain measures with little impact on competition and diverging criteria across State aid rules.

The general objective of the review of the previous guidelines and consequent adoption of the EEAG was to help achieving the Union's environmental and energy policy objectives while ensuring an effective and efficient State aid control.

The more specific and operational objectives were to:

- Assist in achieving the 2020 renewable energy targets while minimising the distortive effects of support schemes. Operationally, i) to reduce the support per unit of energy produced, and ii) to increase the volume of renewable electricity participating directly in the market and in balancing markets.
- Minimise distortions to competition and trade resulting from the financing of support schemes to renewable energy sources, while limiting negative impacts on the

competitiveness of EU firms. Operationally, to reduce the incidence of firms relocating due to competitiveness issues linked to high RES financing costs.

- Contribute to ensuring the required generation adequacy level of the Union's energy system while minimising competition distortions. Operationally, to increase reserve capacity margins.
- Focus on the measures with the largest potential to cause competition distortions. Streamline, clarify and align the rules with the common assessment principles agreed in the SAM Strategy. Operationally, i) to increase the share of aid granted under GBER at the expense of aid granted under EEAG, and ii) to reduce the time required to assess notifications.

Baseline scenario

The baseline scenario was to extend –without changes- the existing 2008 Environmental Aid Guidelines.

The existing rules however did not guarantee that the support mechanisms for renewable electricity were cost-efficient or that they did not introduce undue distortions. Unless Member States designed stricter measures than the conditions in the 2008 EAG, maintaining the rules unchanged would have allowed the distortive effects of support schemes for renewable electricity to continue. While some Member States had themselves seen the issue and started to design stricter support schemes, it was uncertain if other Member States would follow, would do so in a timely manner, and with the necessary design elements to deal with the identified problems across the European Union.

The impacts of a lack of compatibility criteria for exemptions from RES surcharges were difficult to predict but it was expected that the pressure on consumers to finance RES support schemes would continue. In order to avoid risks to the competitive position of their firms, Member States may have been tempted (or feel compelled) to reduce the contribution of their (large) domestic firms, leading to a subsidy race in the form of granting exemptions to large electricity consumers, in the absence of specific state aid rules. Member States sometimes justified putting in place discounts for electricity intensive users (EIU) by pointing at other Member States also having such a system in place. The subsidy race may have eroded the financing base for renewable energy support. The Commission would have assessed exemption schemes directly under the Treaty. There was a possibility that, viewed in isolation on a case-by-case basis, individual Member State schemes to aid EIUs may have been found incompatible even if they were targeted at addressing genuine international competitiveness concerns. While the uncertainty faced by Member States and industry was difficult to quantify, it may have led to an increase in the cost of capital faced by industry, putting at risk investment and economic growth. The impact was expected to be greatest for those sectors with the highest electricity cost intensity ("electricity-intensity"): the extent of exemptions from RES surcharges would have had the biggest impact for companies in such sectors. This could have itself led to a direct loss in competitiveness compared to companies outside the EU.

Maintaining as the sole objective of EAG, the environmental objective would have caused legal uncertainty over measures that stem from the integration of energy and climate policy objectives, in particular, compatibility criteria for State aid to assess the mechanisms that Member States were developing to tackle their generation adequacy problems. The absence of specific rules resulted in legal uncertainty for Member States and potential beneficiaries.

In the baseline scenario Member States had seemingly large discretion to determine the design of the mechanism to address generation adequacy problems. Member States may not have always considered the effect of their measures on neighbouring Member States. As a result, the baseline risked going counter to further integration of the Internal Energy Market.

No changes in the Guidelines would have also lead to diverging compatibility criteria across horizontal and sectorial State aid Guidelines. The Commission and Member States would have also kept allocating similar level of resources to large and small cases.

V. Important projects of common European interest

IPCEI Communication

Context

On the basis of Article 107(3)(b) TFEU, aid to promote the execution of an important project of common European interest may be considered compatible with the internal market.

Before the adoption of the IPCEI Communication in 2014, the then applicable RDI Framework and the environmental aid guidelines contained criteria, based on Article 107(3)(b) TFEU, for the assessment of aid for IPCEI. Under those rules, aid for IPCEIs could be authorised, subject to a case-by-case assessment, up to the necessary level to overcome the pronounced market failures and risks that hindered the project's deployment. Such level could even exceed the ceilings authorised on the basis of Article 107(3)(c) TFEU. Case practice regarding the use of Article 107(3)(b) TFEU was limited at that time; this provision had been mainly used to approve aid for a few large RDI projects¹ and in the transport sector². However, between 2007 and 2012, Member States had not notified any aid for IPCEI in the area of RDI and the very few cases that were approved were all outside the field of RDI. It therefore appeared necessary to provide uniform criteria for the assessment of IPCEIs also in areas other than RDI and environmental protection.

Before SAM, there were indications that the then existing rules did not ensure the necessary clarity and predictability. The main issue was that clear and transparent assessment criteria for IPCEIs could be relevant not only for RDI and for environmental objectives, but also for IPCEI in pursuit of other common European objectives and policies. Reference is made, in particular, to the EU 2020 objectives, the Union's flagship initiatives and key areas for economic growth such as the KETs or the Trans-European Transport and Energy Networks.

Purpose of the rules

The adoption of the 2014 IPCEI Communication tried to tackle at least two types of problems.

- The existing criteria for the assessment of aid for IPCEIs contained in the then applicable RDI Framework and environmental aid guidelines did not ensure the necessary clarity as regards both the eligibility of a given IPCEI and the assessment process to which such cross-border large integrated projects would be subject by the Commission.

¹ See the Commission decisions on aid measures concerning microelectronic technology falling within the scope of the MEDEA+ programme (Cases N 701/A/2001, FR – R&D State Aid MEDEA+, N 702/B/2001; N 207/2002; N 62/2003; N 8/2003 and N 478/2003), with reference to the 1996 R&D Framework, point 3.4.

² See the Commission decisions on the planning phase of a tunnel between Denmark and Germany (Case N 157/2009 – DK – Financing of the planning phase of the Fehmarn Belt fixed link), the channel tunnel rail link project (Cases N 576/1998 and N 706/2001 – UK - The Channel Tunnel Rail Link) and the financing of the Belgian TGV (Case N 800/1996 – Belgian TVG).

- Prior to the adoption of the IPCEI Communication, the existing criteria for the assessment of aid for IPCEIs were sector-specific and covered the areas of RDI and environmental protection only. The Commission had not indicated its assessment criteria for IPCEIs targeting other policies and actions in pursuit of other common European objectives. This created the risk of inconsistencies in the Commission's application of Article 107(3)(b) TFEU and did not allow for sufficient legal certainty and predictability as regards the application of the rules to projects in areas other than RDI and environmental protection as evidenced by the lack of any notifications from MSs.

The IPCEI Communication was expected to stimulate and facilitate the emergence of large, cross-border, integrated IPCEIs in various sectors and strategic value chains of the economy by enhancing the clarity, predictability and consistency of the Commission's compatibility assessment of IPCEIs. The creation of a clear framework consolidating the relevant assessment criteria in one single set of rules, applicable to all sectors of the economy and across all policy objectives, was expected to significantly contribute to this objective.

In addition, the aim to stimulate several Member States to work together in designing and executing IPCEIs was also expected to be attained by putting in place more flexible – besides clearer – State aid rules for IPCEIs. In particular, these encompassed: (i) a higher maximum aid intensity (up to 100% of the funding gap on the basis of a large set of eligible costs). (ii) diversified forms of support (including repayable advances, loans, guarantees or grants). (iii) the possibility for Member States to fund with State aid the first industrial deployment of new research-intensive and innovative products or services.

Finally, by designing rules that define the common features of IPCEIs independently from the sector concerned while allowing for an ad hoc assessment of the specific characteristics of each project, the Commission expected to give a clear signal that IPCEIs – irrespective of the specific common European objective pursued – were to be regarded as an EU priority.

Baseline scenario

In the absence of the adoption of a self-standing secondary legal act setting out clearer, more flexible and uniform criteria for the assessment of State aid for the execution of IPCEIs, the objectives of facilitating and stimulating the emergence of IPCEIs and of ensuring consistency of the Commission's action would not have been reached. IPCEIs in the areas of RDI and environmental protection would have continued to be assessed on the basis of the more cumbersome RDI Framework and the environmental aid guidelines, respectively. For projects beyond these areas, the Commission would have conducted its compatibility assessment under the Treaty directly. Therefore, Member States would not have had sufficient legal certainty as concerns the eligibility conditions for projects to qualify as IPCEIs and the Commission's assessment process under Article 107(3)(b) TFEU.

VI. Cohesion

RAG / relevant GBER provisions

Context

The primary objective of State aid control in the field of regional aid is to support economic development of disadvantaged areas within the European Union while ensuring a level playing field between Member States. The Commission may consider such aid compatible with the internal market on the basis of Article 107(3)(a) and (c) TFEU.

The regional aid rules applicable in the period 2014-2020 are set out in the EU regional aid framework 2014-2020, which consists of 1) the RAG, 2) the regional aid maps, and 3) the relevant GBER provisions.

Purpose of the rules

The regional aid rules adopted under SAM aimed to tackle the main problems related to the effectiveness and efficiency of regional State aid rules:

- The effectiveness, since certain firms would anyway decide to invest in assisted areas even in the absence of aid and therefore an adequate control of the incentive effect is essential to ensure regional aid serves to leverage additional private investment in the assisted areas.
- The efficiency, as more aid would be exempted from the obligation of prior notification to the Commission and fewer cases, which are most likely to distort competition, would be subject to a full assessment by the Commission.

This was aimed to be achieved through a coordinated approach rooted on common principles to ensure consistency across different State aid guidelines and block-exemption regulations, in light of the SAM objectives.

The primary objectives of the revised regional aid rules were:

- Enabling Member States to implement business support measures to promote regional development.
- Limiting the potential negative effects of regional aid on trade and competition to the minimum necessary. The level playing field in the internal market must be ensured in particular by preventing subsidy races – i.e. Member States competing with each other by offering higher and higher aid amounts – that may occur when Member States try to attract or retain investments.

With the introduction of the 2014-2020 RAG, a moderate revision of the rules was implemented, including various adaptations. The selected policy option involved a slight redefinition of the sectoral scope of RAG, focusing its geographical scope in favour of certain categories of regions, restricting the aid amounts or type of beneficiaries in certain categories of regions or for certain types of projects or activities, and focusing the compatibility criteria

on the respect of certain key economic principles (contribution to the cohesion objective, incentive effect, proportionality, balance of positive and negative effects, etc.).

Following the revision of the rules, disadvantaged regions should be able to attract additional investment and economic activity with the help of well-targeted State aid. The desired impact of the EU intervention is that the negative effects in terms of competition and impact on trade between Member States is limited and outweighed by the positive effects in terms of economic development.

Baseline scenario

The so-called “baseline scenario” for the evaluation of the 2014-2020 regional aid rules represent the 2007-2013 rules.

The compatibility assessment of the 2007-2013 rules involved a two-step approach, where the balancing of the positive and negative effect of the aid was presumed to be positive if certain conditions were met. For aid granted under a scheme it was presumed that it contributes to the equity objective as long as the project is located in an assisted area. For ad hoc aid (i.e. aid granted outside a scheme), the Member State had to demonstrate that the aid would indeed contribute to the development of the area. As regards individual aid (granted on the basis of a scheme) above the notification threshold, the underlying presumptions of these formal requirements were verified in-depth only for beneficiaries with a market share of more than 25% or if the capacity created by the project was more than 5% of an underperforming market. In case of an in-depth assessment, the positive and negative effects had to be verified and balanced. The rules for maximum aid intensities depended on the type of assisted areas and were more restrictive for large enterprises than for medium or small enterprises.

No regional aid could be granted in the shipbuilding, the coal, the synthetic fibres and the steel sectors. Regional investment aid to large enterprises for projects located in c-regions was allowed and forum shopping accepted (i.e. the possibility for Member States to choose the most favourable framework between the Regional aid Guidelines and other thematic or sectoral guidelines).

The 2007-2013 rules contained already transparency and evaluation requirements. The Commission scrutiny focused on schemes that allow investment aid to certain sectors and on operating aid schemes in a-regions, the outermost regions and sparsely populated areas. As regards individual aid, only large amounts of aid granted to projects with eligible costs exceeding EUR 100 million and ad hoc aid had to be notified. The notification threshold for individual aid depended on the aid intensity ceiling in the assisted area. Certain information had to be reported also with regards to aid granted for large investment projects.

There were rules for the design of the regional aid maps, based on the statistics of 2000-2002 for GDP and 2001-2003 for unemployment, starting from the principle that the combined population of a- and c-areas in the Union must be lower than that of non-designated areas.

Accordingly, the overall coverage ceiling of the a- and c-areas was set at 45.5% of the EU-27 population for the period 2007-2013. The identification of a- and c-areas was mainly based on GDP and unemployment levels, whereas a-areas were designed for all NUTS 2 regions with a GDP per capita below 75% of the EU. A transition regime applied to former 'a' areas, changing to the status of a predefined 'c' status in the following period. The non-predefined 'c' coverage was allocated among Member States mainly based on disparities in terms of GDP and unemployment at national level and weighted according to the EU average. A safety net of 50% was maintained.

In the period when the 2007-2013 rules applied, the Commission received 453 notified measures, including 38 regional maps. The total number of block-exempted measures amounted to 939.

VII. Supporting railway liberalisation

Railway Guidelines

Context

The political and regulatory context is set by the “railway packages”. The most recent one is the 2016 4th Railway Package, which will complete the liberalisation of the rail sector, thus leading to more competition in the future. In this context the Railway Guidelines, based on Articles 93 and 107 TFEU, were expected to contribute to improving interoperability, promoting the modernisation of rolling stock and to ensure that incumbents are fit for competition whilst at the same time ensuring that barriers to entry are removed.

Purpose of the rules

The main general objective of the Railway Guidelines was to accompany the sectorial policy on the way towards full liberalisation of the rail sector and the completion of a Single European rail market on which full interoperability is ensured.

The Railway Guidelines aimed at (i) codifying and updating the Commission’s practice following the evolution of the sectorial legal framework and (ii) remedying the shortcomings or lack of clarity and transparency of the applicable legal framework and accompany the liberalisation process. The Railway Guidelines tried to address the following problems which are specific to the rail sector and which were identified as negatively affecting the development of the sector and of effective competition:

- High level of indebtedness of incumbents which are burdened by the legacy of the past caused by imbalances between costs and revenues when they had operated in a non-competitive environment.
- Aging rolling stock.
- Need to clarify the rules applicable to restructuring in respect to freight activities divisions of railway undertakings; the application of the RR Guidelines was considered not fully appropriate in case of a freight division of a railway undertaking.
- Market failures due to insufficient internalisation of external costs by other modes of transport as well as problems linked to interoperability and use of infrastructure, which put rail transport at a competitive disadvantage compared to other modes of transport.
- Existence of unlimited State guarantees for railway undertakings, which are distortive and hinder the development of sound competition.

The objective of modal shift was a corollary of the 2001 EU Strategy for Sustainable Development, which included key measures aimed inter alia to increase the stagnating modal share of rail by providing the right incentives, with the aim of ensuring the sustainability of this most environmental-friendly means of transport.

To address the identified problems, the Railway Guidelines provide for:

- the cancellation of historic debt which is directly linked to the activity of rail transport (for debts incurred before 2001);
- measures to encourage purchase and renewal of rolling stock via an amendment of the RAG;
- specific applicable rules for the restructuring of freight branches of railway undertakings (temporarily applicable until 1 January 2010);
- aid for coordination of transport and public service compensation;
- the abolition of unlimited State guarantees.

Baseline scenario

The main general objective of the RG was to accompany the sectorial policy on the way towards full liberalisation of the rail sector and the completion of a Single European rail market on which full interoperability is ensured.

In particular, the Railway Guidelines tried to address the following problems which are specific to the rail sector and which were identified as negatively affecting the development of the sector and of effective competition in the rail transport market: (i) high level of indebtedness of incumbents; (ii) aging rolling stock; (iii) need to clarify the rules applicable to restructuring in respect to freight activities divisions of railway undertakings; (iv) market failures due to insufficient internalisation of external costs by other modes of transport; (v) existence of unlimited State guarantees for railway undertakings.

Accordingly, without the adoption of the Railway Guidelines, the liberalisation process would have likely been slowed down or somewhat constrained by the existing monopolies, which would have continued preventing the access of new entrants to the rail market in a context of consolidated intrasparent public subsidy policies and anticompetitive behaviours. Furthermore, the rail modal share would have continued stagnating to the detriment of the EU objectives of sustainable development, which heavily relies on rail as the most environmental-friendly means of transport.

VIII. Stimulating Research, Development & Innovation

RDI Framework / relevant GBER provisions

Context

State aid rules for RDI are necessary to ensure that funding does not distort competition and is spent where there are market failures to remedy while incentivising risky RDI investments that would otherwise not have taken place. The rules also ensure that investment is leveraged from private investors, the involvement of the latter facilitating efficient use of public money. The public money invested in line with the rules supplements and does not replace ("crowd out") private investment in RDI. By increasing (rather than replacing) private investment, new and otherwise unrealised innovative projects can be carried out. Thus, RDI State aid rules help to build and maintain the foundations of a competitive European economy.

Purpose of the rules

The main problems for State aid control in the field of RDI are related to the need to ensure that the applicable rules:

- bring about a higher level of RDI activities than would otherwise occur, while ensuring that the positive effects of State aid outweigh its potential negative effects in terms of distortions of competition in the internal market,
- take sufficiently into account other EU policies, in particular with a view to ensuring continued interaction with EU RDI policy in the context of the priority themes of the Europe 2020 strategy, and
- contribute to further clarity and simplification in the light of the EU initiatives on better regulation.

In addition, whilst the basic principles of the applicable regime before SAM appeared to be well accepted, at the time it had emerged that their practical implementation raises several problems. These mainly related to (i) lack of clarity concerning the presence of State aid in typical R&D&I situations; (ii) the restrictive scope of aid objectives; and (iii) an insufficient degree of predictability of the rules on the assessment of large individual aid.

The adoption of the 2014 RDI rules was expected to address these problems as follows:

- By enabling public interventions that are effectively targeted towards growth-enhancing activities and incentivise enterprises, including new ones, to enter markets and innovate, improving productivity and competitiveness in a global context while limiting distortions of competition that would undermine a level playing field in the internal market.
- By allowing the Commission to focus its assessment on the most potentially distortive cases. By rendering the assessment of the effects of RDI State aid by the Commission more efficient, the revised rules were also expected to better support Member States' policies to address the relevant structural barriers and market inefficiencies.

- By minimising administrative burdens and compliance costs on companies and national administrations,
- By simplifying and rationalising the transparency and reporting requirements for Member States.

Baseline scenario

According to the impact assessment conducted in the context of the 2014 review of the State aid rules for RDI the evaluation baseline was characterized as follows:

- First, the use of the 2008 GBER was relatively limited in the area of R&D&I aid. This was regarded as an indication that the GBER's rules on R&D&I could be simplified and streamlined (e.g., by providing for increased notification thresholds or by explicitly allowing aid for activities relatively close to the market). Without the major revision of the RDI related sections of the GBER, the effect commonly referred to as "GBER uptake" would not have taken place. Member states would still have to revert to the more cumbersome notification procedure in the field of RDI for numerous RDI measures and cases so that we would not observe the drastic decline in notifications we currently observe.
- Second, the State aid rules for R&D&I were not used to their full extent. In particular, Member States appeared to remain below the permitted maximum aid intensities.
- Third, while the 2006 R&D&I Framework provided already for certain definitions and explanations, it still did not ensure a sufficient level of certainty and predictability with regard to the application of State aid rules and the compatibility assessment. Insufficient legal certainty could have multiple undesirable results and potential impact on effective support, including notifications for legal certainty or Member states refraining from granting aid at all in view of the legal risks and procedural requirements to notify.

In total, RDI State aid awarded under the previous rules amounts to an estimated EUR 62.4 billion. In spite of an upward trend, the use of the 2008 GBER remained relatively limited in the RDI field, as the share of block-exempted aid only reached 30% of total RDI aid.³

³ https://ec.europa.eu/competition/publications/cpb/2014/005_en.pdf

IX. Restoring the viability of firms in difficulty

Rescue and Restructuring Guidelines

Context

The overall objective of the EU policy for restructuring aid to the non-financial sector is to contribute to successful restructuring of undertakings, i.e. return to viable operation. Financial distress at the company level plays a signalling role in an economy, indicating that a firm is not making optimal use of its resources. While financial distress and consequent market exit plays a key role in ensuring an efficient allocation of resources, they can have negative economic consequences. The European Commission has, at least since the 1970s, allowed State aid to undertakings in difficulty on the basis of the EU Treaties, under strict conditions.

Purpose of the rules

Rescue and restructuring aid can only be granted to undertakings which are in financial difficulty and can only be given under strict conditions, set out in the Rescue and Restructuring guidelines. Rescue and restructuring aid may only be regarded as legitimate if it can be justified by social or regional policy considerations, by the need to take into account the beneficial role played by small and medium-sized enterprises (SMEs) in the economy, or by the desirability of maintaining a competitive market structure when the demise of the undertaking could lead to a monopoly or to a tight oligopolistic situation. Restructuring aid requires an agreed and realistic restructuring plan setting out the measures necessary to restore the viability of the undertaking (See Annex 8 on the impact assessment of restructuring plans). The amount of aid allowed is kept to the minimum necessary to implement the plan and appropriate measures are to be taken to minimize the adverse impact on competition; such as own contribution by the beneficiary to the restructuring costs, and compensatory measures, such as for example to reduce its market share or operating capacity.

The main problems the 2014 Rescue and Restructuring Guidelines tried to tackle vis-à-vis the preceding ones related to some provisions that were regarded as unclear, ineffective and burdensome. These included the definition of "firms in difficulty"; the fact that the rules could not be applied easily to SGEI providers; the lack of incentives to grant less distortive forms of aid; lack of compulsory contributions by investors and the absence of a mechanism to ensure that the aid is justified.

As a result of SAM major changes were introduced in the guidelines:

- The existing disappearing capital criterion of UID was made more restrictive and additional, more objective eligibility criteria of UID was defined (hard/quantifiable) giving away earlier "soft" (vague/subjective/non-quantifiable) criteria. This new UID definition was introduced as exclusion criteria for the new GBER rules as well;

- Check on whether aid is needed: 1) aid contributing to objective common interest or addressing market failure (unemployment, essential input, systemic role), 2) counterfactual scenario without aid;
- Inclusion of SGEI providers, with specific flexibility; continued service provision, SGEI compensation not accounted for as aid;
- Burden sharing and "matching" (type of support) and own contribution provisions;
- Decentralised screening of Rescue and restructuring aid to SMEs and small SOEs through the introduction of: a) schemes implemented at national level; b) disincentive for individual notifications aid to SME (would have same condition as large firms); c) new temporary restructuring support instrument (only for SMEs).

Baseline scenario

The most comprehensive change was the change of UID. In the baseline scenario, the definition of UID under the 2004 R&R guidelines was composed not only of the “hard” criterion of disappearing capital, which was objective, and but also the “soft” criteria, which involved an element of judgment. This soft criterion meant that an undertaking could be considered to be in difficulties, in particular where the usual signs of a company being in difficulty were present, such as increasing losses, diminishing turnover, growing stock inventories, excess capacity, declining cash flow, mounting debt, rising interest charges and falling or nil net asset value. The old soft criteria have no thresholds and no way of weighting their importance when some suggest difficulty and others do not. It was therefore impossible to apply them objectively in practice.

The old hard criteria of the baseline scenario was not sufficient to avoid waste of public money and competition distortions, because they only captured firms that were on the brink of insolvency. If recipients of aid become insolvent shortly after they receive that aid, the money is wasted and no public interest goal is achieved. The new hard criteria make it possible to capture firms that are not yet on the brink of insolvency, but that are struggling and are likely to face the risk of insolvency in the medium term. The exclusion from the GBER is based on the new as well as the old hard criteria. In this way the new GBER contributes to a more effective use of state aid.

The choice of financial ratios for the new hard criteria was based on the selection of a rating of CCC+ as identifying firms that are at high risk of default in the medium term (the 5-year cumulative default rate for firms in the CCC/C rating category is 46.64%). This should ensure that the new hard criteria are broadly equivalent to the old soft criteria. The debt to equity and interest cover ratios have been selected as the common financial ratios that best identify firms that have a rating of CCC+ or below.

X. Level playing field among export-credit insurers and exporters

STEC

Context

State aid control in the area of short-term export-credit insurance is addressing actual or potential distortions of competition in the internal market, not only among exporters in different Member States (in trade within and outside the Union), but also among private and public or publicly supported export-credit insurers operating in the Union. The STEC lays down rules to ensure that State aid does not distort competition among private and public or publicly supported export-credit insurers and to create a level-playing field among exporters.

Purpose of the rules

The Commission laid down the principles for State intervention in the sector of short-term export-credit insurance for the first time in 1997. The rules were subsequently amended and their validity extended in 2001, 2004, 2005 and 2010. Experience gained in applying the 1997 Communication, in particular during the financial crisis between 2009 and 2011, suggested that the Commission's policy in the area of short-term export-credit insurance should be reviewed. The reviewed Communication adopted in 2012 clarified and simplified the existing rules. The enhanced rules aimed at providing more transparency while ensuring predictability and equal treatment.

The 2012 STEC aimed to give Member States more detailed guidance about the principles on which the Commission intended to base its interpretation of Articles 107 and 108 TFEU and their application to short-term export-credit insurance. It was intended to make the Commission's policy in this area as transparent as possible and ensure predictability and equal treatment.

Baseline scenario

It laid down a clear set of conditions that must be fulfilled when State or State-supported insurers wish to enter the short-term export-credit insurance market for the risks that are in the scope of the STEC. This in turn ensured that private insurers were able to provide insurance to exporters without States unduly interfering in this market. However, in case a market failure would be identified, the STEC allowed the Member States to notify the need for State intervention to the Commission in order to ensure exporters could take out State insurance following approval by the Commission. This last option included a more flexible approach to the list of marketable risk countries, from which countries could be temporarily removed based on objective criteria.

Annex 6

Overview of the implementation of the individual rules

2014-2019

Rule/ policy objective	Total number of notified measures	Total number / % share of GBER measures	Total number of measures subject to evaluation	Total number of measures subject to monitoring
RAG	101 out of which 37 represent regional maps	1051/91%	15	95
EEAG	(more than) 180	More than 1000 schemes	7	69
RDI	15	More than 2500	9	52
IPCEI	3 projects**	n.a.	n.a.	n.a.
Risk finance	10	212	5	25
Aviation	26	42	0	6
RR	37/39?	n.a.	n.a.	2*
STEC***	7	n.a.	0	0
Railway	88	n.a.	n.a.	7

* The criterion of “company in difficulty” as defined in the Rescue and Restructuring Guidelines (which is an exclusion criterion) is also monitored in other schemes

** For those three projects, formally the Commission received 12 notifications in total, i.e. one for each participating Member State (one for the infrastructure IPCEI *Fehmarn Belt*, four for *Microelectronics* and seven for *Batteries*).

*** For STEC the time period concerned is 2013-2019.

I. EEAG / Relevant GBER provisions

The State aid rules for environmental protection and energy (EEAG 2014-2020) and the related provisions of GBER have created a stable and appropriate framework for public investments across the EU supporting Member States to reach their 2020 climate targets and support the Energy union.

The statistics (State aid Scoreboard, Transparency Award Module) and the internal analysis of the case practice show an increasing volume of compatible aid granted in the period 2014-2018 in the environmental and energy field. Since July 2014, the Commission has adopted more than 180 decisions under the EEAG, approving Member State plans to support decarbonisation and green transition in the common European interest, and Member States have communicated more than 1,000 schemes or amendments of those schemes under the GBER. In addition, most of the EU Member States have implemented individual aid measures or schemes that have been approved by the Commission under the EEAG. The most prolific Member States have been France, Germany, the United Kingdom, Denmark and Poland.

In the period 2015-2019, DG Competition has monitored 69 schemes in the environmental and energy sector.

In the environmental and energy sector, there are seven schemes subject to the evaluation requirement, in the following Member States: 2 in Germany and 1 in the UK, Spain, Poland, France and Sweden.

In addition, in 2015-2016 the Commission carried out a sector inquiry into the financial support that EU Member States grant to electricity producers and consumers to safeguard security of electricity supply (capacity mechanisms). This exercise provided the Commission with valuable information on the functioning of 35 previous, existing or planned capacity mechanisms in the 11 Member States covered by the inquiry. Following this exercise, the Commission has approved 13 generation adequacy measures under the EEAG.

II. RAG / Relevant GBER provisions

The existing ISIS⁴ records on regional aid cases and the annual State Aid Scoreboard published by DG Competition provide valuable insights on the implementation of regional aid during the current period 01/07/2014-01/11/2019 (compared to the period of 01/01/2007-30/06/2014). The two major developments that can be concluded from the data are first, a strong increase of the total number of measures exempted under GBER, from a yearly average of 125 to 191, and second, a strong decrease of the total number of notified cases, from a total number of 453 to 101 cases. This parallel evolution is in line with the objectives of SAM, notably to widen the scope of GBER and accordingly increase the number of cases where notification is not necessary and to focus the Commission assessment on the most distortive cases.

DG Competition continued its general monitoring practice for the regional aid rules 2014-2020 in the form of the annual monitoring exercise for a selected case sample. Specific monitoring indicators for the RAG 2014-2020 were developed with the objective to evaluate the biggest and potentially most distortive schemes. For the current regional aid rules, so far 95 monitoring cases were selected.

For the current period, in total 15 schemes will need to be evaluated by the Member States on the basis of the evaluation plans approved by the Commission.

⁴ Case management system in DG Competition.

III. Risk Finance Guidelines / Relevant GBER provisions

According to available data⁵, Member States have made an extensive use of both the Risk Finance Guidelines and the GBER in the risk finance field. When analysing the 222 schemes implemented after the new rulebook (2014 GBER and Risk Finance Guidelines) was in force, total expenditure reaches €7.318m. Accordingly, the use of the schemes and the total expenditure significantly increased over time.

- 212 schemes were implemented under the 2104 GBER for a total expenditure of € 2.642m. Of these, 161 schemes are based on art. 22, dedicated to start-ups, with a total expenditure of nearly € 976m, while € 1.485m have been granted through the 51 Schemes that have art. 21 (risk finance) as a legal basis.
- Only 10 schemes (or 4.5% of total schemes) have been approved under Risk Finance Guidelines for a total expenditure of € 4.857m (or 66% of total expenditure)

It would follow that the new Risk Finance rulebook has notably fostered the use of GBER vs the traditional prior notification, but notified schemes continue to mobilise bigger aid expenditures. There have been 25 monitoring schemes in 13 Member States. In addition, five schemes have put in place an evaluation plan so far. Four were subject to the SA evaluation requirement, out of which two were pure risk finance schemes and two entailed both risk finance and RDI objectives. (Germany has also implemented an evaluation plan.)

The Commission has so far not received any formal complaint or opened an ex-officio investigation related to Risk Finance aid.

⁵ SARI data on Risk Finance schemes during 2014-2018.

IV. Aviation Guidelines / Relevant GBER provisions

The Aviation Guidelines came into force on 4 April 2014, while article 56a GBER entered into force on 14 June 2017.

The number of notified cases under the 2014 Aviation Guidelines amounts to 26, out of which 8 for operating aid, 12 for investment aid, and 6 for start-up aid to airlines. Contrary to expectations, the Commission received only very few operating aid notifications under the Guidelines including two national schemes, even though, according to the available market information, many regional airports in Europe are loss making and receive subsidies.

For what concerns GBER, the number of measures under Article 56a GBER according to TAM data amounts to 29. The Member States that have been using the GBER the most are Sweden and Denmark. However, due to the EUR 500 000 threshold, we suspect that many GBER measures were not reported and are therefore not contained in the data set. The number of measures under Article 51 GBER (Social aid for transport for residents of remote regions), according to SARI data, amounts to 13.

To check how Member States implement State aid measures in the area of SGEI, the Commission used monitoring and ex officio investigations. During the 2016-2017 monitoring cycle, the Commission had monitored the award of a *SGEI* compensation for the management of 2 *airports* in the United Kingdom and 4 airports in Sweden. The Commission detected problems with 2 Swedish airports. During the period 2016-2019, the Commission opened 4 ex officio cases concerning aid to airports and airlines, including one SGEI case.

V. Railway Guidelines

The political and regulatory context is set by the 4th Railway Package (and preceding packages) which was adopted in 2016 and which will complete the liberalisation of the rail sector, thus leading to more competition in the future.

The Railway Guidelines address the problems identified in the IA section by section.

- Section 3 - Measures to encourage purchase and renewal of rolling stock:
Under this section, only three decisions have been adopted. The small number of decisions is due to the possibility to finance rolling stock as part of a public service obligation under Regulation 1370/2007, which is a block exemption Regulation. Provided the requirements of that Regulation are met, rolling stock, which is exclusively used for the provision of a public service obligation, may be funded without notification and prior Commission approval. In most Member States, regional passenger transport services are provided under public service contracts, which explains the limited number of decisions.
- Section 4 - Cancellation of historic debt incurred before 2001 respectively before the accession date for new Member States:
The Commission adopted two decisions under the Railway Guidelines. The Commission furthermore approved two restructuring aid measures, under the Rescue and Restructuring Guidelines.
- Section 5 - Restructuring of freight branches of railway undertakings (applicable until 1 January 2010):
Three decisions were adopted to support the restructuring of freight subsidiaries. So far the only negative decision concerns case SA.43549, Alleged aid to CFR Marfa which was adopted on 24 February 2020 and which orders recovery of an amount of EUR 570 million.
- Section 6 - Aid for coordination of transport:
Under this section, 72 cases have been administratively opened; out of which 51 led to a Commission decision. None of the notifications has led to the opening of the formal investigation procedure. Four of the approved schemes have been prolonged after verification of whether the initial scheme had the desired impact of (an even small) modal shift.

The Commission carried out the monitoring of seven of the approved measures (Austria, Germany, Hungary), none of which led to the opening of the formal procedure. The Commission has not received any formal complaint or opened any ex officio case against any of the measures falling under the Railway Guidelines.

VI. IPCEI Communication

Currently, State aid for the execution of an IPCEI can only be implemented after it has been notified to and approved by the Commission, in accordance with the assessment criteria set out in the IPCEI Communication.

After the entry into force of the IPCEI Communication, the Commission adopted one decision approving State aid for an IPCEI consisting in an infrastructure project⁶, and two decisions approving State aid for the execution of IPCEIs in the area of research and development: one in December 2018⁷ and one in December 2019⁸. No negative decisions, finding State aid incompatible with the internal market, were adopted for State aid for the execution of an IPCEI since 2015.

France, Germany and Italy have been so far the most active Member States in the granting of public funding for the execution of IPCEIs. However, recent case practice demonstrates that an increasing number of Member States are getting involved in such important projects. The notification to the Commission of a number of ambitious joint initiatives of Member States since 2015, as well as the ongoing discussions between Member States and stakeholders for additional such projects, if compared to the limited number of cases concerning IPCEIs before 2015, may be regarded as confirmation that the Communication is capable of facilitating the emergence of IPCEIs.

State aid for IPCEIs is not yet subject to monitoring nor evaluation. However, participating Member States are subject to detailed annual reporting obligations on the progress and results of the approved IPCEIs. Additionally, a detailed governance system has been put in place by the participating Member States to monitor the progress of each IPCEI. The Commission's competent services (which may vary for each specific IPCEI) participate to the governance bodies, together with the Member States and industry, to ensure that all the commitments and objectives of the IPCEIs are sufficiently met.

⁶ See Commission decision C(2015) 5023 final on the *Financing of the Fehmarn Belt Fixed Link project* (SA.39078).

⁷ On 18 December 2018, the Commission approved State aid from four Member States (France, Germany, Italy and the UK) for research and development and first industrial deployment activities in the microelectronics sector under the IPCEI on Microelectronics. See Commission decision C(2018) 8864 final on the *IPCEI on Microelectronics* (SA.46578; SA.46705; SA.46590; SA.46795).

⁸ Subsequently, on 9 December 2019 the Commission approved the granting of State aid from seven Member States (Belgium, Finland, France, Germany, Italy, Poland and Sweden) to enable ambitious and risky research and development activities in the area of batteries. See Commission decision C(2019) 8823 final on the *IPCEI on Batteries* (SA.54793, SA.54794, SA.54796, SA.54801, SA.54806, SA.54808, SA.54809).

VII. Rescue and Restructuring Guidelines

Six Restructuring aid cases have been approved by the Commission under the 2014 Rescue and Restructuring Guidelines; the amount of aid granted was not substantial except for one decision for France. In other cases, the Commission concluded that unlawful and incompatible restructuring aid had been granted to ailing companies and ordered recovery. Fifteen Rescue aid decisions have been taken related to nine Member States (Italy -4, Romania -2, Belgium-3, Germany-2, Netherlands-1, United Kingdom-1, Croatia-1, and France -1). Only one of the fifteen Rescue aid cases was later on turned to Restructuring aid: the case regarding the Italian Ancona Airport, with an aid amounting to EUR 7.28 million. Like the previous ones, the 2014 Rescue and Restructuring Guidelines provide the possibility for Member States to introduce a scheme for rescue and restructuring SMEs. Between July 2014 and November 2019 the Commission approved 16 schemes for SMEs in ten Member States: four schemes in Austria; two schemes in Germany (one federal and one for Brandenburg), the UK, and Spain; and one scheme in Finland, France, Poland, Belgium, Ireland and Slovenia.

The 2014 Rescue and Restructuring Guidelines continue to allow Member States to grant rescue and restructuring aid to SMEs under a scheme, instead of individually notifying each case to the Commission. In 2019 the Commission has monitored two schemes with the highest amount of aid granted, namely the schemes in place in Germany and France covering the period of 2015 and 2016. Although the finalisation of the monitoring is still ongoing, the monitoring of the implementation of the schemes in Germany and France by the Commission services found irregularities in the implementation of both schemes with regard to many criteria of the Rescue and Restructuring Guidelines. Also in 2015-2016, the Commission monitored the implementation of the exclusion of firms in difficulty from aid granted under GBER or approved aid schemes. When systemic shortcomings in the processing of the aid applications were detected, the granting authority corrected them satisfactorily with appropriate IT systems and/or recovery.

VIII. STEC

Seven Member States have been operating export credit schemes approved by the Commission under the STEC (Latvia, Finland, Croatia, Estonia, Austria, Denmark and Romania).

A number of Member States were only providing insurance of short-term export-credit risks towards Greece. Greece has been considered a temporarily non-marketable risk country since the Communication entered into force in 2013 until end-2019 and no prior notification was required under the Communication for the insurance of commercial and political risks for exports to Greece.

Member States must publish the schemes put in place for risks which are considered temporarily non-marketable on the websites of State insurers, specifying all applicable conditions. In addition, at the latest by 31 July of the year following the intervention, they must submit annual reports to the Commission on risks which are considered temporarily non-marketable and are covered by State insurers.

IX. RDI Framework / relevant GBER provisions

RDI spending in the EU has been lagging behind major global competitors, mainly due to lower levels of private investment. It is noteworthy that following the efforts taken by the State Aid Modernisation in 2014, 96% of all RDI measures (more than 80% in value terms) in the Union are implemented under the GBER. In 2019, RDI has been the second most important thematic objective for which State aid was granted in Belgium, Finland, Austria, Ireland, the Netherlands and the United Kingdom. Also RDI GBER schemes are mainly used, in terms of State aid spending, by the most advanced Member States in terms of research and innovation: the United Kingdom, Germany, France, Austria, Italy and the Netherlands.

Since 2015, the Commission has ensured that aid schemes and individual measures notified under the RDI Framework were well targeted to projects enabling ground-breaking research and innovation activities.

Since 2015, 52 aid schemes in the area of RDI have been subject to monitoring. While in the vast majority of cases, the issues encountered – if any – were irregularities mainly concerning the transposition of all the relevant conditions in the national legal bases, in some cases some more substantive irregularities were identified. Reference is made, for instance, to the incorrect application of methodology to calculate the eligible costs (e.g., incorrect use of flat rates) or to Member States exceeding the individual notification thresholds under the applicable rules.

Annex 7

Overview of the methods and tools used in the analysis per rule

I. Risk Finance Guidelines / Relevant GBER provisions

The evaluation of the Risk Finance rules was based on the following pillars:

Targeted consultation

Besides the general public consultation, which also covered the Risk Finance Guidelines, a targeted questionnaire was sent to all EU and EEA Member States. (See also Annex 2 - Synopsis report).

External study

An evaluation support study (“Evaluation support study on the EU rules on State aid for access to finance for SMEs”, hereinafter the “Risk Finance external study”) was produced by external experts. The Risk Finance external study is based on the following input:

- Desk research (literature review and statistical data analysis).
- 85 individual interviews conducted with beneficiaries (30), financial intermediaries (38) and relevant associations of both beneficiaries (9) and financial intermediaries (8), coming from 22 different Member States.
- Case studies of 5 specific schemes⁹ which were selected on qualitative grounds with the aim to reflect actual diversity in risk finance State aid. They are from different Member States, cover schemes under both GBER and Risk Finance Guidelines and use a diverse spectrum of financial instruments (tax incentives in the British scheme, grants in the German scheme, loans in the Dutch scheme, and investments in funds in the Italian and the Finnish schemes).
- The final report of the study was published on 2 June 2020 on the website: https://ec.europa.eu/competition/state_aid/modernisation/risk_finance_study.zip.

Case practice and internal assessment

The expertise of the Commission from approving schemes under the Risk Finance Guidelines since 2014 as well as the monitoring of GBER schemes was also taken into account.

⁹ SA.39243 – SEED Capital regeling (Netherlands); SA.39418 – Tekes Pääomasijoitus Oy:n riskirahoitusohjelma ; Finland); SA.43581 – Fondo Capitale di Rischio POR FESR Lazio (Italy); SA.49923 – Enterprise Investment Scheme and Venture Capital Trust (United Kingdom); SA.46308 – INVEST (Germany)

II. Aviation Guidelines / Relevant GBER provisions

Besides case practice and case law, internal assessments as well as studies provided by various stakeholders (such as ACI Europe¹⁰), the sources used for the current Fitness Check in the Aviation framework are the following:

Targeted consultation

Besides the general public consultation which also covered the Aviation Guidelines, a targeted public consultation was conducted between 24 May and 31 July 2019 (open consultation, see also Annex 2 - Synopsis report) covering all types of aid under the Aviation Guidelines (aid to airports and aid to airlines) as well as the relevant GBER provisions. 81 contributions were received through the targeted public consultation.

External study

The objective of the “Support study for the evaluation of the rules for operating aid under the EU aviation framework”, (hereinafter “Aviation external study”) was to receive an independent evidence-based assessment of the rules for operating aid to airports under the Aviation Guidelines in light of the three following evaluation questions: (1) whether regional airports contribute to regional development; (2) whether the transitional period (2014-2024) provided under the Aviation Guidelines for the phasing out of operating aid is adequate to enable airports to achieve a self-sustainable operating performance; (3) whether the categorisation of airports provided under the Aviation Guidelines to establish the need for operating aid is suitable, and whether the aid intensity thresholds in the Aviation Guidelines are fit for purpose.

The study was based on a survey of several airports in Europe. Among other information, the airports had to provide financial information concerning their costs and revenues, received public support, and incentives paid to airlines. The airports participated on a voluntary basis and their contributions were treated on an anonymous basis. The contractor encountered two main problems: (i) low number of airports willing to participate in the survey and (ii) poor quality of the received financial data. A total of 147 airports were contacted for the survey: 94 of them were contacted as a result of the initial project planning, while the remaining 53 represented a second wave of airports launched to reach a reasonable minimum sample size. The final sample included 68 airports from 11 different Member States.

The final report of the study was published on 2 June 2020 on the website: https://ec.europa.eu/competition/state_aid/modernisation/aviation_study.zip

Meeting with stakeholders

In the context of the evaluation, the Commission organized meetings with various stakeholders during the period July-December 2019. The Commission met the German Airport Association, the French

¹⁰ Oxera, The European Commission’s consultation on the 2014 Aviation State Aid Guidelines, An economic analysis of the European Commission’s definition of airports’ catchment area, Prepared for the ACI EUROPE and the UAF, 4 November 2019; Oxera, The European Commission’s consultation on the 2014 Aviation State Aid Guidelines, An economic analysis of airports’ profitability, Prepared for the ACI EUROPE and the UAF, 4 November 2019

Airports Association, a group of Swedish airports, Ryanair and ACI Europe (more invitations (amongst others to airline associations, environmental associations and airport networks) were sent out but no reply was received). The case team also participated in a number of aviation related conferences and workshops to talk about the evaluation of the Aviation Guidelines (Krakow, Luxembourg, Münster, Brussels, Paris).

III. *de minimis* Regulation

For *de minimis* measures, very little quantitative data is available. In particular, there is a lack of aggregate data as regards the total amount and the sectoral distribution of measures granted under the *de minimis* Regulation.

The data limitations are due to the following factors:

- Since *de minimis* measures are excluded from the notification obligation of Article 108(3) TFEU and are not considered as State aid, there is little quantitative information available, absent case practice and monitoring.
- There is no obligation of reporting to the Commission.
- A large number of Member States have not set a central register for *de minimis* nor do they have a central overview of *de minimis* aid granted by the different regional and local authorities.

The data sources used for the current Fitness Check, besides the responses to the general public consultation, are:

- **Targeted consultation to the Member States** (closed consultation, see also Annex 2 - Synopsis report). 23 Member States replied. However, it did not bring the expected results in terms of data collection. Most Member States were not able to provide aggregate data as regards the total amount and the sectoral distribution of measures granted under the *de minimis* Regulation. A significant part of Member States do not have any relevant available figures on the application of the *de minimis* Regulation.
- **Targeted consultation to stakeholders** (open consultation, see also Annex 2 - Synopsis report). It received 207 replies: 15 from business associations, 121 from companies/business organisations, 9 from individuals, 6 from non-governmental organisation, 36 from public authorities and 20 from other respondents.
- European Economic and Social Committee, *How State aid rules affect access to finance for SMEs and enterprises*, Study, October 2019.
- On **financial instruments**, Fi-compass State aid survey from October 2018 (<https://www.fi-compass.eu/news/2018/12/state-aid-survey-findings>) and European Association of Guarantee Institutions (AECM) data on guarantees issued under different State aid rules (provided by email on 6 December 2019).

IV. EEAG / Relevant GBER provisions

The sources of information used for the current Fitness Check for the EEAG included the following:

External study

An external consultant carried out a study to support the Commission with an independent evidence-based assessment of the implementation of the EEAG and the relevant provisions of the GBER (“Retrospective evaluation support study on State aid rules for environmental protection and energy, hereinafter the “EEAG external study”). The aim of this study is to provide useful input for assessing whether the EEAG and the relevant GBER provisions are fit for purpose taking into account the general State aid modernisation objectives, the specific objectives of the legal framework and the current and future challenges, including the Clean Energy package, the long-term climate and energy strategy, the circular economy strategy and the evolution of the technology and of market conditions. This study, which is mainly a data gathering exercise on different topics, covers the 27 EU Member States and the United Kingdom (which was a Member State during the period covered by the Fitness Check) and provides input and data for answering some of the evaluation questions, as well as a literature review.

The final report of the study was published on 2 June 2020 on the website: https://ec.europa.eu/competition/state_aid/modernisation/EEAG_study.zip

Targeted consultation

The targeted public consultation was launched in May 2019 and was closed in 19 July 2019 (open consultation, see also Annex 2 - Synopsis report). The consultation targeted public authorities, business associations, consumer organizations, companies, research institutions, trade unions, NGOs, environmental organisations and citizens in order to gather their views on the implementation of the EEAG and relevant provisions of the GBER. The questionnaire included 19 questions. 250 replies were submitted providing insights into the views of stakeholders. Many stakeholders also submitted position papers on different topics.

Other sources of input

- Internal analysis and assessment of the case practice
- Internal statistics (e.g. State aid Scoreboard, Transparency Award Module)
- Analysis of interpretation questions received from Member States
- Existing studies¹¹ and literature review, meeting with stakeholders (Member States, industry associations, companies, consumer organisations, NGOs, environmental organisations, investors).

¹¹ Commission Final Report of the Sector Inquiry on Capacity Mechanisms and Staff Working Document accompanying the report: https://ec.europa.eu/competition/sectors/energy/capacity_mechanisms_final_report_en.pdf ; https://ec.europa.eu/competition/sectors/energy/capacity_mechanism_sw_d_en.pdf ; Commission Staff Working Document accompanying the document Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions “Energy prices and costs in Europe”, COM(2019)1 final: <https://ec.europa.eu/energy/en/data-analysis/energy-prices-and-costs> ; 2018 External study (Trinomics) report on Energy Prices, Costs and Subsidies – Final Report: <https://publications.europa.eu/en/publication-detail/-/publication/d7c9d93b-1879-11e9-8d04-01aa75ed71a1/language-en> ; External study (ADE- Compass Lexecon) on ETS State aid Guidelines – Final Report ; Commission Staff Working Document Evaluation of the Council Directive 2003/96/EC of 27 October 2003 restructuring the Community framework for the taxation of energy products

V. IPCEI Communication

In light of the very limited experience outside the Commission (and some Member State authorities) in the application of the IPCEI Communication, no study was commissioned on this topic.

The limited number of cases where the IPCEI Communication was applied since 2015 and the fact that the first decision for an integrated RDI project was adopted under the Communication in December 2018 may constitute limitations in the evaluation of the rules.

Targeted consultation

The targeted consultation on the IPCEI Communication took place between 9 August 2019 and 31 October 2019 (closed consultation, see also Annex 2 - Synopsis report). This was done in addition to the general public consultation, which also covered the IPCEI rules.

The targeted consultation was addressed to Member States' authorities and to the members of the Strategic Forum for IPCEIs (See Commission Decision C(2018)475 of 30.1.2018 setting up the Strategic Forum for Important Projects of Common European Interest. The Strategic Forum is composed of: (a) individuals experts appointed in a personal capacity; (b) organisations representing the interests of academia and research, finance, Industry, SMEs and employees and workers; (c) Member States' authorities; (d) other public entities).

and electricity Evaluation of the Energy Taxation Directive, SWD(2019) 329 final: https://ec.europa.eu/taxation_customs/sites/taxation/files/energy-tax-report-2019.pdf ; Study on the financing models for public services in the EU (including waste management) and their impact on competition by Ecorys : <https://ec.europa.eu/competition/publications/reports/kd021641enn.pdf> ; JRC Study (2018) Electric vehicles in Europe from 2010 to 2017: is full-scale commercialisation beginning? <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/electric-vehicles-europe-2010-2017-full-scale-commercialisation-beginning> ; 2017 and 2019 JRC Study on Energy Service Companies in the EU and Energy Service Market in the EU <https://publications.jrc.ec.europa.eu/repository/bitstream/JRC106624/kjna28716enn.pdf> ; <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/energy-service-market-eu>

VI. RAG / relevant GBER provisions

Besides case practice, data, internal assessment as well as the general public consultation, which also covered RAG, the main sources were: the external evaluation study and the targeted consultation.

External study

An external study for the retrospective evaluation of the regional aid framework (“RAF”, i.e. RAG and the corresponding GBER articles) 2014-2020 was conducted between December 2018 and September 2019 by a consultant consortium (“Retrospective evaluation of the regional aid framework”, hereinafter the “RAF external study”). The objective of the study was to obtain an independent evidence-based assessment of the implementation of the RAG / relevant regional aid GBER provisions and their effects on regional development and competition.

Multiple research methods were applied during the study, in order to obtain a holistic reply to the different evaluation questions.

- Review of relevant literature, studies and reports by national and international organisations;
- Web-based survey of 66 aid-granting authorities that were selected based on criteria ensuring a proportionate representation of national and regional granting authorities and of Member States;
- Case studies;
- Expert interviews;
- Data collection on regional State aid and investments in the European Economic Area since 2007, which were processed in an econometric analysis.

The different research methods are characterised by strengths and weaknesses but can be considered as complementary. In particular, it has to be highlighted that surveys can provide a sample of stakeholders’ views in an efficient way, but are prone to strategic responses. Case studies are an intensive analysis of all aspects in full complexity, but they largely rely on publicly available information and may not be representative. The strength of the econometric analysis is to allow the measurement of the causal effect of the changes introduced in the Regional aid Guidelines / relevant GBER provisions 2014. However, the econometric analysis does not allow to easily identify the mechanisms driving the results and requires large datasets and variation in the data to produce robust outcomes. Potential shortcomings of individual research methods were mitigated by comparing and outweighing contradicting results related to the same research questions.

Limitations related to the data used appeared in the context of the study, whereas due to delays in the statistical reporting, data for the regional aid guidelines 2014-2020 were only available until 2017.

The final report of the study was published on 2 June 2020 on the website: https://ec.europa.eu/competition/state_aid/modernisation/RAF_study.zip

Targeted consultation

On 14 May 2019, a targeted consultation (see also Annex 2 – Synopsis report) was launched. The consultation was open to all stakeholders and closed on 19 July 2019. In total, 62 contributions were received from a wide range of stakeholders from 21 Member States.

The targeted consultation comprised 9 multiple respectively single-choice questions that are based on the evaluation criteria. Participants had the possibility to support their replies with qualitative answers or to provide position papers.

VII. Railway Guidelines

The internal assessment was based on case practice and data, desk research, monitoring results as well as the general public consultation, which also covered the Railway guidelines. In addition, the development of rail transport is assessed on the basis of publicly available documents such as:

- Eurostat data;
- OECD data;
- Report from the Commission to the European Parliament and the Council “Sixth report on monitoring development of the rail market”: <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:52019DC0051>;
- Data collected in the context of the Commission’s review of the Combined Transport Directive 92/106/EEC¹², in particular the Commission staff working document SWD(2016) 141 final of 20 April 2016 “REFIT ex-post evaluation of Combined Transport Directive 92/106/EEC¹³ and the Inception impact assessment https://ec.europa.eu/smart-regulation/roadmaps/docs/2017_move_006_combined_transport_en.pdf;
- Study on Single Wagonload Traffic in Europe (2015): <https://ec.europa.eu/transport/sites/transport/files/2015-07-swl-final-report.pdf>

It has to be noted that the Commission’s Scoreboard excludes aid to railways except compensation payments for the discharge of public service obligations under Regulation 1370/2007 which are reported on a voluntary basis by Member States. The lack of this reporting obligations by Member States as opposed to aid awarded under other State aid rules has created data gaps.

¹² https://ec.europa.eu/transport/themes/urban/consultations/2017-CTD_en

¹³ [https://ec.europa.eu/transport/sites/transport/files/facts-fundings/evaluations/doc/swd\(2016\)141-exec-summary_en.pdf](https://ec.europa.eu/transport/sites/transport/files/facts-fundings/evaluations/doc/swd(2016)141-exec-summary_en.pdf)

VIII. RDI Framework / relevant GBER provisions

Besides the internal assessment based on case practice, monitoring, interpretation questions as well as the general public consultation which also covered the RDI rules, the other key sources of information were external evaluation studies.

External studies

In May 2018, the Commission launched an external ‘Study on the practical impact of RDI State aid rules’. The study aimed to assess the extent to which, if any, the 2014 State aid rules have a detrimental impact on RDI activities in a manner or to a degree which is disproportionate to the objective of these rules. The final report of the study was published on 8 August 2019 on the website: http://ec.europa.eu/competition/publications/reports/kd_01_9_584_en.pdf)

In June 2019, the Commission launched a retrospective evaluation support study on the RDI rules (“Retrospective evaluation of State aid rules for RDI and the provisions applicable to RDI State aid of the GBER applicable in 2014–2020”, hereinafter the “RDI external study”). The study is aimed at supporting the Commission with an independent, evidence-based assessment of the application of the State aid rules for RDI (namely, targeted provisions under the 2014 GBER and the corresponding RDI Framework provisions). To conduct the study, the external contractor collected information on the application of the State aid rules for RDI, notably by way of interviews (with Member States’ authorities, undertaking and other stakeholders) and desk research.

The final report of the study was published on 2 June 2020 on the website: https://ec.europa.eu/competition/state_aid/modernisation/RDI_study.zip

IX. Rescue and Restructuring Guidelines

The assessment was mainly based on internal sources including case practice, monitoring, interpretation questions as well as the general public consultation which also covered the rescue and restructuring rules.

As regards the specific question of “undertaking in difficulty” in terms of eligibility for rescue and restructuring aid, the Commission services reviewed (with the support of the Chief Economist team of DG COMP) publicly available company data.

X. STEC

The evaluation of the STEC was based on the following pillars:

Targeted consultation

In addition to the general public consultation of the SAM as a whole, which also covered STEC, a 10-week closed targeted consultation (see also Annex 2 - Synopsis report) was conducted.

Case practice and internal assessment

An internal analysis of Commission case law and practice in the field of short-term export-credit insurance further supported the evaluation.

Overall, there is not much publicly available data in the field of short-term export-credit insurance, which represents a limiting factor. DG COMP launched a targeted consultation on the Communication in which some 150 stakeholders were asked to reply to a questionnaire to address this point. 37 respondents communicated their views (See also Annex 2 - Synopsis report).

Annex 8

Assessment per rule / objective

While the current Fitness Check aims at assessing SAM as a whole, this Annex 8 focuses on selected issues which are deemed of importance based on the Commission's case practice.

I. Risk Finance Guidelines / Relevant GBER provisions

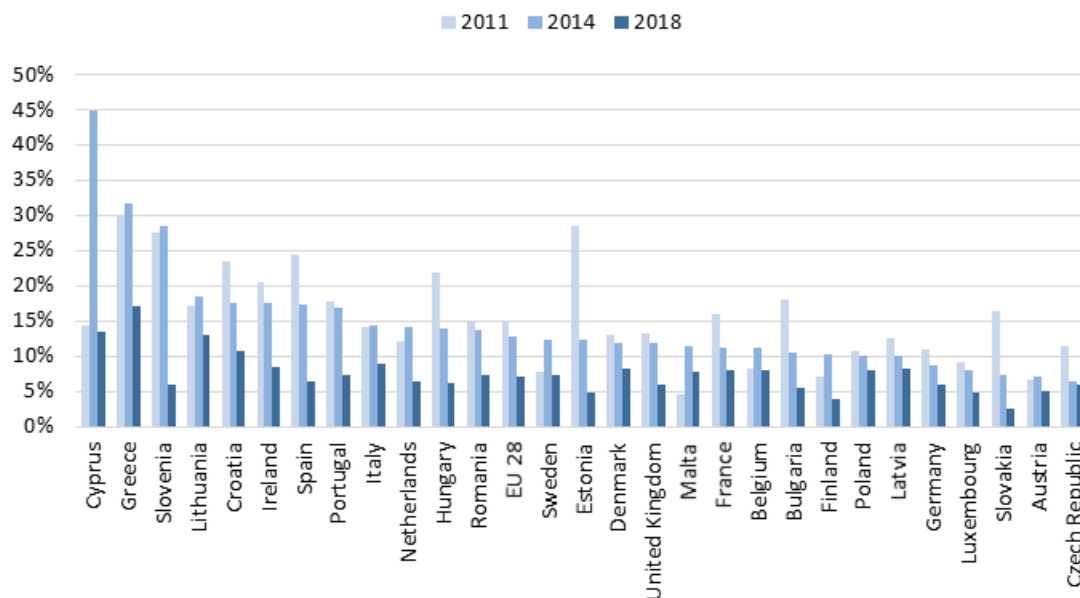
Relevance

Do the rules still correspond to SMEs' needs?

The core objective of the State aid framework on Small and medium-sized enterprises (“SMEs”) access to finance is to address and overcome a market failure that prevents SMEs from attracting the financing required for them to grow and succeed. The analysis below shows that, despite notable improvements between 2014 and 2018, SMEs still struggle to attract the required financing; indicating that a market gap still persists. This means that the State aid rules are still relevant as they still correspond to SMEs’ needs.

More specifically, data from the ECB SAFE database show that access to finance for SMEs in Europe has improved between 2014 and 2018. Figure 1 shows the percentage of European SMEs for which access to finance is the most pressing problem, broken down by Member State in 2011, 2014 and 2018. While the percentage of SMEs that have identified access to finance as their most pressing problem has decreased between 2014 and 2018, it remains the top concern for 7% of SMEs in the EU on average. The latest data from 2019 confirms this trend and the European Central Bank (“ECB”) concludes that “concerns about access to finance remained higher for SMEs as a whole than for large companies”.¹⁴ In addition, the data shows that the concern is particularly acute for some Member States like Greece (17%), Cyprus (13%), Lithuania (13%), Croatia (11%), and Italy (9%).

Figure 1: Percentage of SMEs for which access to finance is the most pressing problem by country¹⁵

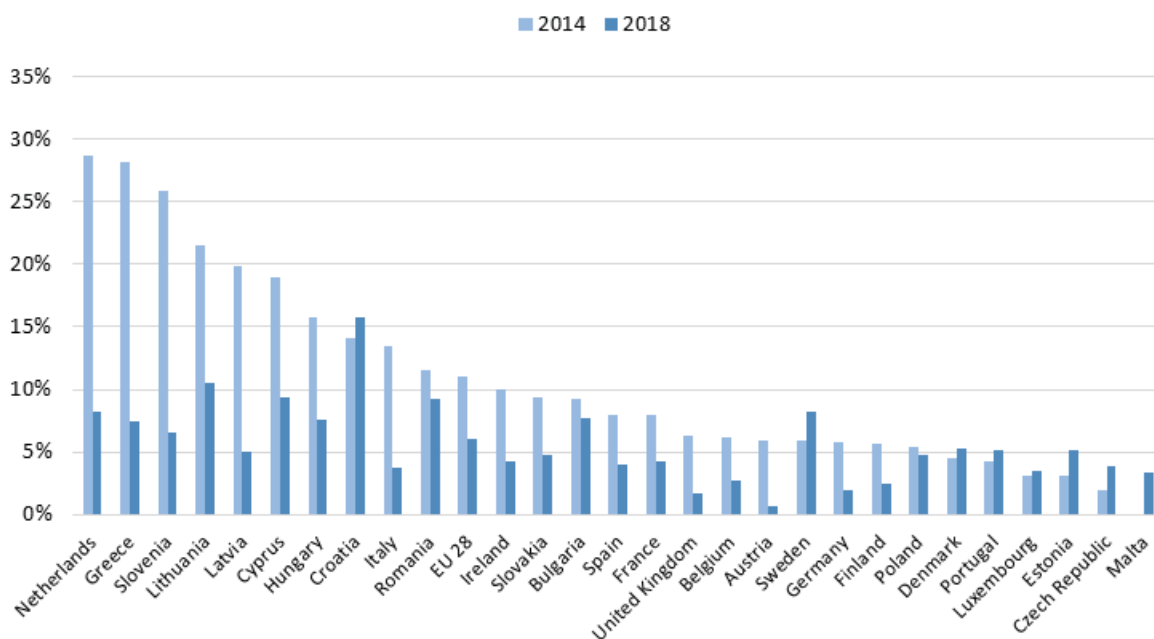


¹⁴ European Central Bank, Survey on the Access to Finance of Enterprises in the euro area 2019 (<https://www.ecb.europa.eu/stats/accesstofinancesofenterprises/pdf/ecb.safe201911~57720ae65f.en.pdf>), p.15.

¹⁵ Source: Risk Finance external study based on ECB / SAFE data.

The general improvement of SME's access to finance can also be observed from a different perspective, i.e. when analysing the outcome of European SMEs applications for external financing (either bank lending or equity) and the share of firms actually rejected by the providers of funding. Figure 2, which also uses SAFE data, shows that the rejection rate has decreased from 11% to 6% for the EU overall. However, it also shows rates of close to or even above 10% in a number of Member States in 2018, indicating persisting issues for SMEs to access finance. Although outright the rejection rate has improved, only 72% of SME reported in 2019 that their loan applications were fully successful, which implies that 18% still faced some kind of obstacle and did not obtain the full amount they had planned for.¹⁶

Figure 2: Percentage of rejected applications by Member State: 2014 vs. 2018¹⁷



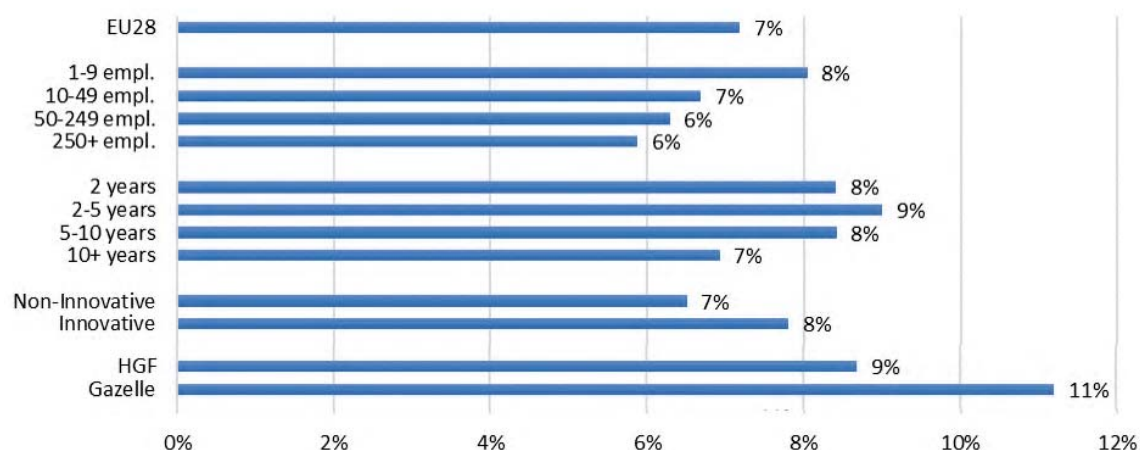
Figures 1 and 2 thus show, from two different perspectives, that the market failure persists in particular for certain Member States, despite the general improvement in SME access to finance.

There are other important drivers of the market failure besides geographical location. In this regard, access to finance for SMEs depends particularly on their development stage. As stems from Figure 3, smaller SMEs, companies in their start-up phase and those in their first 5 years of existence face the biggest challenges. In particular, high growth firms ("HGFs"), i.e. firms with average annualized growth of more than 20% over three years, and so called "gazelles", i.e. HGFs younger than 5 years, face above average access to finance issues.

Figure 3: Percentage of SMEs for which access to finance is the most pressing problem by firm type (2018)¹⁸

¹⁶ European Central Bank, Survey on the Access to Finance of Enterprises in the euro area 2019 (<https://www.ecb.europa.eu/stats/accesstofinancesofenterprises/pdf/ecb.safe201911~57720ac65f.en.pdf>), p.5.

¹⁷ Source: Risk Finance eternal study based on ECB / SAFE data.



Consistently with these results, empirical research widely suggests that access to finance is more difficult for young and/or innovative SMEs¹⁹. The underlying assumption is that particularly young companies are affected by an asymmetry of information problem that is the root cause for the market failure: young and innovative companies lack the collateral and track records they need to signal to the market that they are viable investments. Required investments are also typically too small in total amounts to warrant an in-depth assessment by investors, in spite of potentially profitable returns expressed in percentages. The underlying assumption of a market failure based on an asymmetry of information may be further supported by the fact that smaller loans seem to be less attractive than larger ones. An impact assessment published by the Commission on the COSME+ program²⁰ has shown that in 2017, the growth in new loans in the Eurozone was 5% lower for small loan amounts of up to EUR 250,000 than for larger loans of up to EUR 1 million.²¹ Under the assumption that start-ups and small SMEs are particularly interested in smaller loan amounts, this could be an additional indication that smaller companies face more pronounced financing issues than larger ones.

An asymmetry of information becomes particularly pronounced for small or very young companies that have not (yet) cumulated sufficient amounts of tangible assets which can be used as collateral. Figure 4 shows that absence of collateral and guarantees are more relevant as limiting factors precisely for younger and innovative companies, thus corroborating the information asymmetry issue. The data also shows that while 45% of companies on average in the EU report to have "no obstacles" in receiving the required financing, this number is only 32% for start-ups under 2 years and 36% for young companies up to 5 years of existence.

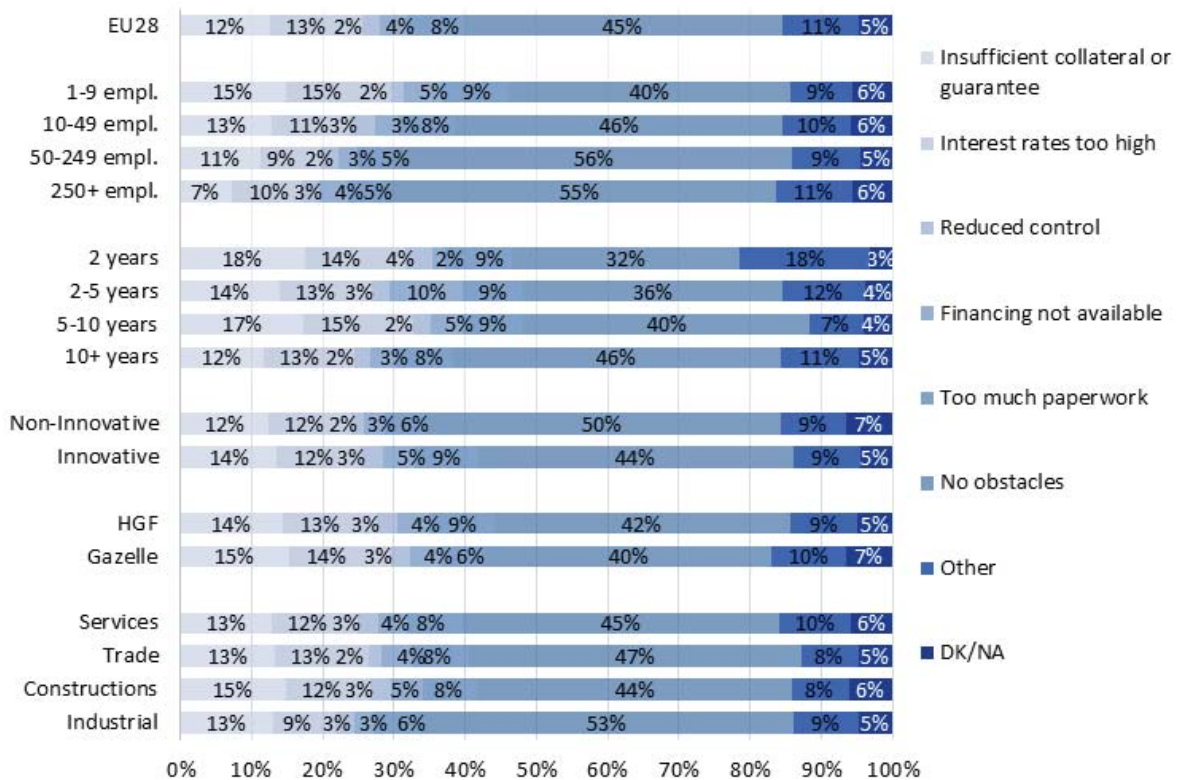
¹⁸ Source: Risk Finance external study based on ECB / SAFE data.

¹⁹ Freel, M.S., 2007. Are small innovators credit rationed? *Small Business Economics*, 28 (1), 23–35.; Schneider, C., Veugelers, R., 2010. On young highly innovative companies: Why they matter and how (not) to policy support them. *Industrial and Corporate Change*, 19 (4), 969–1007. Mina, A., Lahr, H., and Hughes, A. (2013). The demand and supply of external finance for innovative firms. *Industrial and Corporate Change*, 22 (4), 869–901.

²⁰ https://ec.europa.eu/growth/smes/cosme_en

²¹ Commission Staff Working Document – Impact assessment, Annex 15: Programme specific annex on COSME, SWD(2018) 320 final (https://eur-lex.europa.eu/resource.html?uri=cellar:97218bf4-6a31-11e8-9483-01aa75ed71a1.0001.03/DOC_2&format=PDF), p. 317.

Figure 4: Most important limiting factors to get external financing: breakdown by firm type (2018)²²



Consistent with these findings, interviews carried out by the external experts confirm that SMEs (77%) and financial intermediaries (85%) still perceive a financing gap that restricts the supply of external financing even for SMEs that have valuable business models and fulfil standard investment criteria.

In as far as access to finance has generally improved on average for SMEs, this is mainly due to easier access to bank/debt financing (including credit lines and overdrafts) which remain the main sources of external financing for European SMEs. Data drawn from the SAFE database shows that the use of equity has actually decreased between 2014 and 2018 and SMEs are still struggling to find adequate sources of equity financing. The impact assessment mentioned above has also shown that external equity was used by only 2% of SMEs in 2017²³. This is in line with the conclusions of the Risk Finance external study. The fact that European SMEs are highly relying on debt financing could be problematic given that equity may often be more suitable for young SMEs because it is more stable than bank loans and less sensitive to future interest rate changes.

The overall trend observed in Europe is in line with overarching developments. The OECD concludes in a 2019 study that the "positive trends mask the persistent difficulties that some

²² Source: Risk Finance external study based on Commission/ECB SAFE. Notes: EU28.

²³ Commission Staff Working Document – Impact assessment, Annex 15: Programme specific annex on COSME, SWD(2018) 320 final (https://eur-lex.europa.eu/resource.html?uri=cellar:97218bf4-6a31-11e8-9483-01aa75ed71a1.0001.03/DOC_2&format=PDF), p. 312.

SMEs, particularly micro-enterprises, innovative ventures, start-ups, and young firms, continue to face in accessing finance".²⁴

The above suggests that in spite of notable improvements, SMEs still struggle to attract the financing they need to grow and succeed. Despite substantial public support programmes at EU and national level, the Commission had previously estimated that this gap amounted to EUR 15-25 billion in 2017 for SME debt financing alone. Taking all forms of SME financing into account, this amount is likely to be even higher.²⁵ Addressing this market gap is the core objective of the State aid framework on SME access to finance. The rules therefore address an important need of European SMEs and are still relevant.

Finally, and although it is still too early to fully analyse the economic impact of the current COVID-19 outbreak in depth, it is important to note that young and small companies are particularly likely to be affected by an economic downturn and corresponding tightening credit markets. As already mentioned in the Temporary Framework "SMEs are at particular risk."²⁶ The risk finance framework may be useful to tackle the additional difficulties in access to finance that eligible SMEs will face in this new economic environment and to ensure a quick recovery.

Effectiveness

To what extent have the aid instruments covered by the SME access to finance rules been effective to support those SME mostly affected by the market failure?

Section 3 GBER and the Risk Finance Guidelines mainly target SMEs either before establishment or up to 7 years after their first commercial sale. As described above, these companies are the ones mostly affected by the existing market failure. It can also be concluded that SMEs access to finance has improved notably since the current SME access to finance rules were approved, having regard of the data above and their evolution, although it is however difficult to attribute unequivocally this improvement to SME access to finance rules and to quantify their contribution to this improvement.

In this regard, the results of the surveys carried out by the Commission with Member States and the external expert's interviews with other relevant stakeholders tend to confirm the general adequacy of the rules as a means to address the market failure identified above. 15 out of 19 Member States' responses to the targeted consultation make specific reference to the existence of a market failure regarding SME access to finance and 10 of them deem that the rules contribute to tackle this specific market failure. The interviews with stakeholders conducted by the external experts also show that a majority of beneficiaries (74%) and financial intermediaries (55%) agree that the rules specifically address those companies mostly affected by the market gap.

²⁴ Financing SMEs and Entrepreneurs 2019, An OECD scoreboard, p.23.

²⁵ Commission Staff Working Document – Impact assessment, Annex 15: Programme specific annex on COSME, SWD(2018) 320 final (https://eur-lex.europa.eu/resource.html?uri=cellar:97218bf4-6a31-11e8-9483-01aa75ed71a1.0001.03/DOC_2&format=PDF), p. 330-331.

²⁶ Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak, C(2020)1863, as amended, point (4).

To what extent have the aid instruments covered by the SME access to finance rules been effective in crowding in additional private capital and in protecting competition?

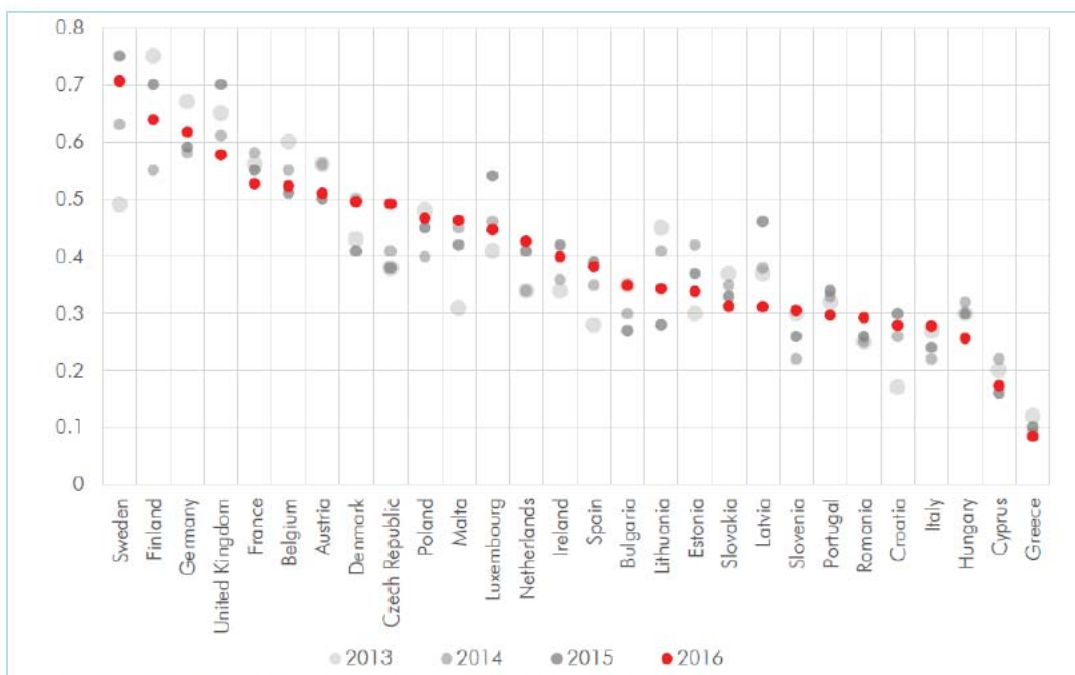
The requirement of the current rules to ensure private participation (with varying thresholds) plays a substantial role for the intended crowding-in effect, by requesting to the granting public authority to always proceed together with private investors.

This crowding-in effect is not easy to trace quantitatively, because the increase in private investment can be due to many different factors, among which risk finance aid is only one. However, qualitative analysis of available data helps underpin the conclusion that risk finance rules actually has contributed to the crowding in of additional private investment.

To this aim, the external experts have carried out several case studies that show consistent results: in SA.39243 Seed Capital regeling Netherlands, the risk finance scheme has contributed to involve professional investors with high requirements in terms of professional reporting, thus contributing to market driven investments. SA.39418 Tekes Scheme (Finland) has contributed to the reach out of additional investors due to the high-quality due diligence required. Case studies SA.46308 Invest (Germany) carried out by the external experts also show a positive impact of public funding in the capacity of financial intermediaries to raise capital from private investors. The 2016 evaluation report of SA.46308 Invest (Germany) claims that the signalling effect of the program may help reduce the market failure and spark additional private financing. The 2016 evaluation report of SA.40991 EIS/VCT (United Kingdom) – a pure tax-credit scheme – provides a more nuanced picture. Although a tax incentive scheme by definition mobilises private investment, the findings could not fully rule-out at least some potential crowding-out effects. Interviews of stakeholders carried out by the external experts also tend to confirm that the rules have been effective in attracting additional private investment. Over 80% of the responding beneficiaries interviewed for the Risk Finance external study confirmed that they could attract additional private funds. Importantly, the application of risk finance measures also helps in two additional ways. On the one hand, the external experts confirm that beneficiaries have in general gained relevant expertise for attracting additional funds. On the other hand, the external experts confirm from their assessment of the supply side that the presence of public money functions as a reassuring signal to investors, further supporting private participation. During the interviews conducted by the external experts, 89% of financial intermediaries have indicated that commercial financial providers have continued investing alongside the public measures, or even increased their investments.

While fully acknowledging the importance of private participation requirements in order to achieve crowding-in, access to finance for SMEs is not uniform across the EU, not even for different regions in the same MS. While access to bank funding may be relatively widespread –with different conditions-, access to non-bank funding, including regulated markets but also so-called alternative finance, varies a lot among countries and within countries. The following table²⁷ shows the results of the EIF SME finance index for all MS:

²⁷ European Semester Thematic Factsheet: Small and medium-sized enterprises access to finance: https://ec.europa.eu/info/sites/info/files/file_import/european-semester_thematic-factsheet_small-medium-enterprises-access-finance_en.pdf



Source: EIF, 2017, *European Small Business Finance Outlook*, figure 8, p. 9.

In those regions where SMEs access to funding is not easy, for instance because alternative finance is not strongly developed, finding a private investor to meet the 10%, 40% and 60% private participation requirements included in GBER art. 21 (10) may be particularly challenging. This difficulty actually makes it very challenging to grant any risk finance aid in some geographical areas.

Both the interviews with stakeholders conducted by the external experts and the targeted consultation conducted with Member States by the Commission confirm the difficulty signalled above. They show that some areas in Europe suffer from an underdeveloped private funding market and that even small private participation requirements may preclude the full utilisation of the existing State aid for framework SMEs due to the difficulties to find private investors in these regions. According to the external experts this was also a concern expressed by some beneficiaries. This lack of critical size of financial markets and investor bases is particularly relevant for certain countries (e.g. Poland, Romania and Greece) and leads to difficulties to attract the minimum private participation as required under the current rules. Consistently, in the targeted consultation, 10 Member States out of 19 expressed that these requirements were sometimes difficult to meet in their jurisdictions.

However, in its analysis, the Commission has to balance this concern against the fact that the requirement to ensure private participation is a key element in the SME access to finance framework not only to foster crowding in, but also to ensure market driven investments. The private participation requirement ensures that investment decisions are taken on the basis of sound economic assessments taking into account meaningful credit risk assessments and a market driven investment due diligence. This intended effect has been confirmed by the external experts: a large majority of financial intermediaries has confirmed that beneficiaries usually provide them with sound and sufficiently elaborated business plans and other information that enable profit-driven financing decisions.

On the level of individual beneficiaries, the rules may actually have had a pro-competitive effect: On the one hand, a majority of beneficiaries interviewed by the external experts has stated that they had been able to improve their competitive position in their market thanks to the aid schemes. On the other hand, the external experts suggest that many of these companies may not have survived long enough to impose competitive pressure on incumbents in their respective markets without the aid.

The above demonstrates that the existing rules have in general been effective in crowding-in additional private capital, so that potential concerns about possible competition concerns linked to crowding-out effects on the level of investors can be generally excluded. As regards the impact of the rules on the level of competition among beneficiaries, there are even indications for pro-competitive effects.

Efficiency

Are the Risk Finance Guidelines and relevant GBER provisions sufficiently clear to apply?

The public consultation shows that 84% of the respondents consider that the State aid modernisation package from 2014 has at least in part improved the applicable rules for SME access to finance. This result is consistent with responses received on the targeted consultations from Member States and in the interviews conducted by the external experts.

While Member States in general support the rules as a means to improve SME access to finance and confirmed in the targeted consultation that they are a clear improvement compared to the previous framework, 8 Member States explain in their responses to the targeted consultation that some provisions, in particular in Article 21 GBER, are overly complex and would benefit from further simplification. At the same time, only 2 Member States claim that the Risk Finance Guidelines are unclear. Stakeholders interviewed by the external experts echo as well this perceived lack of clarity of certain rules of the risk finance framework.

First, beneficiaries in their responses to the external experts, Member States within the targeted consultation, and several position papers submitted by Member States in the public consultation indicate that some other GBER conditions may not be straightforward to implement in practice. This applies in particular to the 7-year rule in Article 21(5)(b) GBER, which is allegedly difficult to interpret in practice, because the date of the first commercial sale can be interpreted in different ways. Member States propose a variety of solutions to this issue, including substituting the age rule by the general SME definition or at least relaxing the rule by allowing aid under GBER also for older beneficiaries. While it is important to avoid legal ambiguity, the aim of this provision has to be taken into account for the assessment. By linking the age requirement to the moment of the first commercial sale, the rules address a relevant difference between companies that require lengthy research or product development as compared to others. Providing flexibility for those undertakings that require more time before they are ready to enter the market is a valid concern. This can also be shown from case practice, where knowledge intensive enterprises are typically those that require more time, up to the point where specific exceptions even for the 7-year rule are justified.²⁸ In addition, suggestions from Member States to apply more flexibility in this regard should also be seen

²⁸ See for example SA. 49923 – Enterprise Investment Scheme and Venture Capital Trust (United Kingdom).

in the context of the finding of the external experts that the main companies affected by the identified market failure are less than 5 years old.

Second, the need of clarity as stated by the stakeholders interviewed by the external experts and some Member States in the targeted consultation relates also to the provision that aid may be granted to companies that expand their business to new product or geographic markets (Article 21(5)(c) GBER). They flag that it is difficult for SMEs in practice to identify market definitions with sufficient legal certainty. In addition, it is apparently not fully clear to all Member States which methodology should be used to calculate turnover as required under this provision. This uncertainty regarding the correct application of market definitions can also be seen in specific schemes implemented by Member States. For instance, the United Kingdom authorities highlighted the ambiguities of this criterion as regards market definition and the need of subjective judgment also in relation to case number SA.49923 – Enterprise Investment Scheme and Venture Capital Trust (United Kingdom).

Third, both the targeted consultation and the external experts mention perceived inconsistencies between rules on EU-funding (European Structural Investment Fund “ESIF”, Interreg) and EU State aid on SME access to finance, which would make it sometimes difficult to combine multiple sources of funding. As regards the targeted consultation, 6 Member States point out difficulties to reconcile State aid rules and structural fund regulations, while another Member State highlights that EIB enjoys a wider room of manoeuvre than national promotional banks due to the fact that it is not a Member State and is not subject to State aid rules as such. Fourth, case practice and eWiki²⁹ questions asked by Member States to the Commission have shown that inefficiencies from provisions that are not always clear in their interpretation may also arise in the context of the applicable thresholds. Article 21(9) GBER in combination with Article 21(4) GBER limits support on the basis of the total risk finance obtained, which must not surpass EUR 15 million per beneficiary, including both public and private funds. This raises questions of interpretation regarding for example loans, because they can be repaid and it is not obvious whether, after repayment, additional risk finance can be approved in subsequent rounds of support. The same question is also relevant for guarantees that are linked to the underlying debt instruments. It is therefore not always clear to Member States, how the development of the funding of an SME over time (including the replacement of one financing instrument with another) should be accounted for.

Finally, case practice has shown significant uncertainties about the requirements for an *ex ante* assessment to be provided by Member States under the Risk Finance Guidelines, which is in fact one of the elements underlying longer pre-notification discussions. Granting risk finance aid beyond GBER exemptions is only justified in case of the existence of a specific market failure. Member States therefore need to show in an ex-ante assessment that specific measures are required. However, within the targeted consultation, some Member States have identified the need to produce this ex ante assessment under the Risk Finance Guidelines as an administrative burden that would deter them from using the guidelines, rather than a constructive tool to ensure well targeted set-ups of aid measures. At the same time, it also

²⁹ The eWiki is an electronic platform created by the Commission to allow Member States to ask questions regarding the interpretation of inter alia, GBER provisions. See also Section 3.1.1 of the SWD.

needs to be considered that case practice has also shown some *ex ante* studies that did provide important insights that were highly relevant for the set-up of a specific scheme.

In light of the above, it can be summarised that the existing rules are mostly clear and do not put unjustified administrative burden on Member States. However, several specific provisions should be reviewed and improved to enable an even more efficient implementation of compatible schemes by Member States.

Coherence

To what extent are the SME access to finance rules consistent with other GBER provisions?

There are no inconsistencies within Section 3 GBER, the Risk Finance Guidelines or between these two and other GBER provisions. However, certain provisions could benefit from further alignment. For example, eligible undertakings under Article 21(5)(b) GBER are limited to SME that have been operating for less than 7 years following the "first commercial sale", while start-up aid under Article 22(2) GBER uses an age definition based on the registration of the undertaking.

Coherence could also be increased to improve clarity of the EU framework as regards the definition of "innovative mid-caps" in Section 2.3 Risk Finance Guidelines, which is not exactly the same as the definition of "innovative enterprise" in Article 2(80) GBER which applies to aid for RDI.

To what extent are the Risk Finance Guidelines and relevant GBER provisions complementary to other EU policies?

Improving SME access to finance to overcome the identified market failure is the goal of several dedicated initiatives on EU and national level, including for example the COSME programme. In addition, SMEs are often eligible to receive support from the ESIF that have a broader focus on investment and employment or other instruments targeting for example European territorial cooperation (Interreg). In the targeted consultation, six Member States pointed out perceived difficulties to reconcile State aid rules and structural fund regulations, a circumstance that may be attributable to the fact that the two sets of rules are complementary, but pursue different, although both valid, policy objectives.

The underlying reason for these difficulties originate from the question of whether or not specific support is imputable to the State or not, which is not always straight-forward to decide in practice.

A related comment made by Member States highlights that EIB enjoys a wider room of manoeuvre than national promotional banks due to the fact that it is not a Member State and is not subject to State aid rules as such. While this remark is true, it should be highlighted that since this distinction comes from the Treaty itself, it exceeds State aid law and policy.

The Risk Finance Guidelines and the relevant GBER provisions are also coherent with the EU Industrial Strategy and the EU SME Strategy for a sustainable and digital Europe. These different frameworks rely on a similar assessment of a need to improve SMEs access to finance. While the Risk Finance Guidelines and GBER provisions are, in a general manner, addressing the market failure underlying SMEs access to finance, the EU Industrial Strategy and the EU SME Strategy are complementary by focusing on more specific policy initiatives.

These objectives include the support of SMEs through the InvestEU programme and to improve access to alternative source of financing (i.e. the private-public funding specialising in IPOs for SMEs). In this context it is also important to note that the latest GBER revision ensures full consistency between State aid rules and the InvestEU programme by including a dedicated section on aid involved in financial products supported by the InvestEU Fund (Section 16).

Conclusions and potential for further improvement

The evaluation results show that the SME access to finance rules are overall fit for purpose. However, specific areas have been identified where improvements could be made to increase efficiency in application by Member States and beneficiaries without jeopardising the goal to protect the level playing field and minimise potential market distortions. The following provides areas identified in Section 3 GBER, and in particular Article 21 therein, as well as the Risk Finance Guidelines, that could be further improved.

First, the valuation has shown that it is sometimes difficult to identify with sufficient precision the date of the "first commercial sale", which is the baseline for the age requirement under Article 21(5)(a) GBER, allowing aided risk finance investments only up to 7 years after that date. It should also be noted that this provision is different from Article 22(2) GBER, which defines age related eligibility based on the "registration of the company". An alignment of these relevant points in time, with a potentially corresponding adjustment of the age threshold to ensure that the eligibility criteria are not substantially altered, could simplify application of the rules in practice, without changing the focus of the rule on young SMEs.

Second, the current rules provide in Article 21(5)(b) GBER the possibility to support SMEs that extend their business. The evaluation has shown that the corresponding eligibility criterion, which limits aid to undertakings to those entering a new "product or geographic market" may sometimes cause issues in practice. The reason is that it may be difficult to define a relevant product or geographic market with sufficient certainty. The legal risk associated is that a market definition that would not be upheld in court could lead to aid becoming declared illegal. Detaching the possibility to provide risk finance aid from the definition of a specific market, while still focussing on the actual underlying market failure, could lead to an improvement of the rules by simplifying application and eliminating legal risks for Member States and beneficiaries.

Third, the evaluation has shown that the requirement for private co-investments pursuant to Article 21(10) GBER is difficult to achieve in certain Member States that suffer particularly from weak private investment markets. At the same time, the evaluation has confirmed the importance of this requirement to ensure crowding-in as well as adequate due diligence for investment decisions. An improvement of the rules could therefore be to adjust the level of private participation for those areas where financial markets are particularly underdeveloped, without changing the principle of private participation requirements as such. Any such adjustment should be limited to those areas where private risk capital is particularly scarce. Since MS apply GBER directly with no ex-ante compatibility assessment by the Commission, these criteria should be direct and easy to consult and apply, to avoid legal

uncertainty. In this regard, several articles of the GBER outside those addressing regional aid, use the “assisted region” definition to soften the aid conditions³⁰.

Furthermore, additional minor clarifications could be made in relation to the calculation of thresholds and the requirements for the use of national promotional banks as financial intermediaries. Finally, the structure and readability of the text could be improved without any changes in substance.

As regards the Risk Finance Guidelines, they follow closely the logic of Article 21 GBER, as they account for additional measures beyond what is block exempted. Therefore, the possible improvements identified above should be considered in parallel for both legal instruments at the same time.

In addition, the evaluation has shown that the Risk Finance Guidelines may benefit from some structural improvements that would increase readability and ease of application. In particular, while the evaluation has shown that the basic principle of the Risk Finance Guidelines to require an ex ante assessment to prove a specific market failure that should be addressed by a national measure works overall well, the content of the Guidelines on this issue is sometimes perceived as overly complex by some Member States. Without changing the material requirements as such, a possible improvement could be made by consolidating all requirements linked to the ex ante assessment -currently mentioned in several parts of the guidelines- and streamlining the specific content and level of evidence needed in different cases.

The necessity of current Section 2.1 of the guidelines on no-aid measures has to be balanced against the existence now of the Notice on the Notion of Aid ("NoA"),³¹ not in force when the Risk Finance Guidelines were adopted. On the one hand the guidelines could concentrate on the compatibility of aid measures and leave the overarching question on existence of aid to the NoA. On the other hand, Section 2.1 of the guidelines actually provides useful guidance focused on risk finance measures, difficult to find elsewhere.

The evaluation has also shown that, while there is an overall coherence between GBER, Risk Finance Guidelines and other rules, namely those governing centrally managed funds, there is room for further aligning the definitions within the Risk Finance Guidelines to those used elsewhere, where it is possible without significant changes to the scope of the rules as they stand. It has to be taken into account that this exercise has to be very careful, since the rationale behind the rules and definitions under State aid rules, which is the link to a demonstrable market failure, may differ, for instance, from the one in EU programs.

³⁰ Art. 22 (start-up aid), 27 (innovation aid), 36-48 (environmental aid) and 56 (maritime ports).

³¹ Commission Notice on the notion of State aid as referred to in Article 107(1) of the Treaty on the Functioning of the European Union, OJ C 262, 19.7.2016, p. 1–50.

II. Aviation Guidelines / Relevant GBER provisions

The main focus points of the evaluation are the rules on operating aid for airports as the transitional period, introduced by the 2014 Aviation Guidelines, will end in 2024, as well as the passenger thresholds and aid intensities introduced for operating as well as for investment aid, including the rules under the GBER. Furthermore, the Commission has evaluated the rules for aid to airlines, including the rules on start-up aid under the Aviation Guidelines.

Effectiveness

Have the provisions on operating aid had an effect on the gradual phasing out of operating aid?

Prior to the adoption of the 2014 Aviation Guidelines, regional airports have received widespread operating support from public authorities in the absence of any legal base. In contrast to the previous guidelines, the 2014 Aviation Guidelines allow smaller airports (with fewer than 3 million passengers per annum (“p.a.”)) to receive aid for operating purposes for a transitional period. The objective of the 2014 Aviation Guidelines was to “legalise” operating aid to airports under certain conditions, and by introducing a transitional period of 10 years, to enable the aviation industry to adapt to the new market situation and phase out operating aid by 2024. The Member States were expected to notify individual aids and national aid schemes, whereas airports were expected to adapt their business model to the changing market conditions in order to become cost covering. The aid intensities were based on the annual passenger numbers of the airports. Smaller airport below 700,000 passengers p.a. were assumed to have a need for a higher aid intensity compared to larger airports. Airport above 3 million passengers p.a. were assumed to have no need for operating aid.

- The introduction of the transitional period did not prove successful:
 - The Commission received only a very small number of individual notifications (in total 8) and only two national schemes (French and Irish). This is in particular surprising for airports below 200,000 passengers p.a., for which the Aviation external study has concluded that there is a structural need for aid.³² The Aviation Guidelines thus improved only to a very limited extent compliance by Member States.
 - The evaluation has shown that the transitional period will not be sufficient for many small airports to become cost covering by 2024. Based on the available data from the Aviation external study, stakeholder information and the targeted consultation, a majority of airports below 500,000 passengers p.a. and many airports below 1 million passengers p.a. will continue to need operating aid after 2024.
 - The results of the Aviation external study show that airports with more than 1 million passengers p.a. are unlikely to need operating aid after the end of the transitional period in 2024. However, this result seems to be linked to economic reasons (i.e. a certain number of passengers is needed to run an airport profitably), and not to the intervention itself.

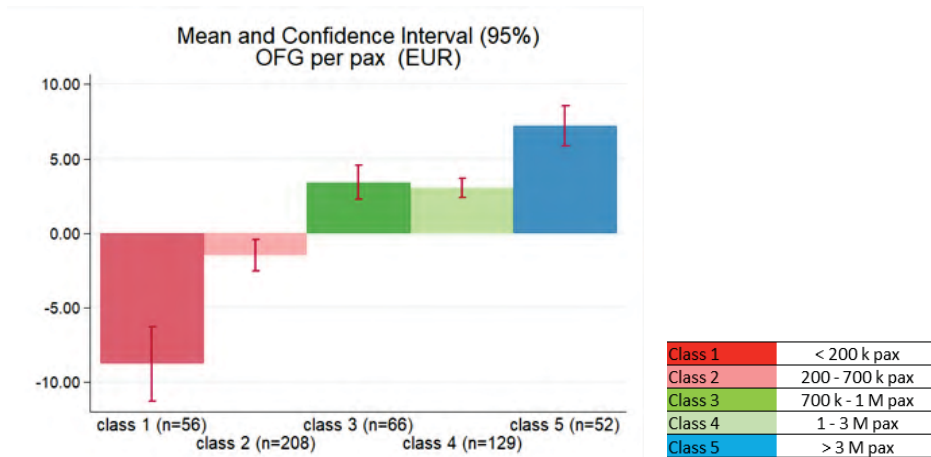
³² Article 56a GBER, which exempts airports below 200,000 passengers p.a. from the notification requirement, was only introduced in June 2017.

- The Commission's case practice shows that not all of the assessed airports have adapted their business models to changing market conditions in order to be costs covering (increasing their efficiency, saving costs etc.). However, the Aviation external study has shown that airports conducting reforms are more likely to cover their operating costs.
- Based on the Aviation external study, airports below 700,000 passengers p.a. have shown only very little growth potential during the period 2014-2018. The Aviation external study has also shown that a business model based primarily on low costs carriers is normally not viable for small airports.
- As shown in the Commission's case practice, many small airports that have a structural need for operating aid have difficulties to demonstrate that they will be profitable by 2024 as is currently required by the Aviation Guidelines. This problem has been confirmed by Member States and stakeholders during the targeted consultation. According to Member States which have notified operating aid to airports, the transitional period puts small airports in a difficult position, as they have no legal certainty whether they will receive operating aid and therefore continue to exist after 2024. This uncertainty is affecting investment decisions and makes it even more difficult for the airports concerned to grow and to become profitable.
- The Commission's case practice and the targeted consultation have shown that point 132 of the Aviation Guidelines, which requires a Member State to demonstrate that all airports in the catchment area of an aided airport will be able to achieve full operating costs coverage at the end of the transitional period, is hard to implement in practice, in particular in situations where other airports are privately-owned or located in a different Member State.
- According to information received from stakeholders during individual meetings and replies received during the targeted consultation, the small number of notifications is partly due to the perceived long and complex notification process. An economic analysis of airport's profitability prepared for the ACI Europe and the UAF by OXERA has shown that the notification procedure takes on average 18 months until the decision is sent to the Member State. To tackle this, the Commission has provided for a block exemption for the smallest airports in the amendment of the GBER in 2017. Furthermore, airports have explained that the calculation of the operating funding gap and the notification as such require external economic and legal support, which is putting airports, which are already loss making, in a difficult position.
- As regards the fact that many smaller airports will not be able to cover their own operating costs by 2024, airports and other stakeholders have explained that this is due amongst others to the increase of security costs, as well as recent bankruptcies of airlines and the consolidation of the airline market.
- The Commission notes that the aviation sector is one of the sectors heavily affected by the COVID-19 pandemic. In March 2020, the sector observed a 88% fall in passenger traffic compared with last year. Therefore, various actors active in this sector, including regional airports, suffered significant losses due to the COVID-19 pandemic, which might have implications on their ability to become cost covering by 2024.
- To assess whether the rules on operating aid are fit for purpose, the DG Competition, inter alia, commissioned above-mentioned the Aviation external study. The external study, which was finalised in October 2019, covers the period 2014-2019. While the impact of the COVID-19 pandemic had not been assessed in this external study, the International Air Transport Association predicts that the air passenger traffic will go back to its pre-COVID-19 levels by 2023.

Figure 1: Fraction of airports (whole sample) that cover their operating costs (2015-2018), showing that in class one and two, many of the selected airports are still not able to cover their operating costs.³³



Figure 2: EBITDA per passenger for the whole sample of airports 2010 - 2018³⁴



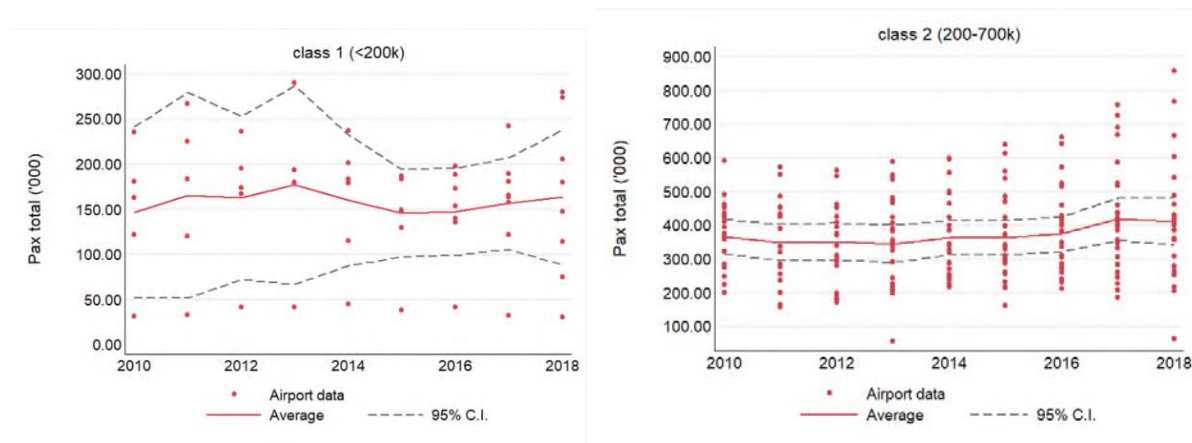
³³ Aviation external study.

³⁴ Aviation external study.

Figure 3: only 16.7% of the airports in class one and only 20% of the airports in class two that are currently loss making are expected to cover their operating costs in 2024³⁵

Class	Total number of airports in the class	Number of airports that were not in equilibrium in 2018	Number of airports in equilibrium in 2024 among those that were not in equilibrium in 2018	Number of airports in equilibrium in 2024 as % of those that were not in equilibrium in 2018
1	8	6	1	16.7%
2	26	10	2	20.0%
Total	34	16	3	18.8%

Figure 4: airports below 700,000 passengers p.a. have shown only very little growth potential during the period 2014 – 2018³⁶



- The categorisation of airports to establish the need for operating aid and aid intensities that were introduced by the 2014 Aviation Guidelines are only partly still fit for purpose:
 - The Aviation external study has shown that passenger numbers are a leading factor in determining the profitability of an airport and its need for operating aid.
 - Airports with less than 200,000 passengers p.a. that have a structural need for operating aid currently fall under the GBER and can receive 100% aid intensity under Article 56a GBER.
 - For airports between 200,000 and 700,000 passengers p.a. the Aviation external study has shown that the situation is very diverse. When comparing the different airports by groups of 100,000 passengers, airports below 500,000 passengers p.a. and airports above 500,000 passengers p.a. seem to be similar in terms of their need for aid.
 - The Aviation external study and the information provided by stakeholders have shown that the threshold of 1 million passengers p.a. seems to be relevant in determining

³⁵ Aviation external study.

³⁶ Aviation external study.

whether there is a continued need for operating aid. According to the Aviation external study, only very few airport above 1 million passengers p.a. currently require operating aid and those that do, expect to cover their operating costs by 2024.

- The Aviation external study as well as the targeted consultation have shown that the upper threshold of 3 million passenger p.a. for operating aid seems to be adequate and that airports above this threshold do not seem to need operating aid. Only one airport with more than 3 million passengers p.a. participated in the targeted consultation.
- The Aviation external study and the targeted consultation have shown that smaller airports continue to have a need for a higher aid intensity compared to larger airports.
- As regards the calculation of the operating funding gap, the Commission's case practice has shown that the existing rules are complex and require extensive communication and exchange with the Member States concerned. This was confirmed by the contributions during the targeted consultation and stakeholder meetings. Furthermore, the calculation of the initial funding gap based on the fixed period 2009-2013 was perceived as being outdated and not fit for purpose as regards notifications received after 2014.
- The Commission's case practice shows that the Commission mainly looked at cases of smaller regional airports³⁷ and had to invest a lot of resources, even though the impact of the operating aid given to these airports on the market is limited.

Is the mechanism and the passenger thresholds for investment aid appropriate?

The mechanism and the passenger thresholds for investment aid are generally appropriate. The 2014 Aviation Guidelines impose greater restrictions on aid received by airports for the funding of infrastructure. Prior to the adoption of the 2014 Aviation Guidelines, there was no limit to the maximum permissible investment aid amount other than the funding gap and the Commission could observe the creation of overcapacity on the aviation market. The 2014 Aviation Guidelines introduced aid intensities based on the annual passenger numbers of the airports. Smaller airport below 1 million passengers p.a. were assumed to have a need for a higher aid intensity compared to larger airports with up to 3 million and 5 million passengers p.a. Airports above 5 million passengers p.a. were assumed to have no need for investment aid unless there were "very exceptional circumstances". In addition, the introduction of the criterion of the "catchment area" was supposed to prevent the duplication of unprofitable airports as well as the creation of unused capacity.

- The information received during the targeted consultation and stakeholder meetings shows that the mechanism and the passenger thresholds for investment aid contained in the Aviation Guidelines are appropriate, and that larger airports above 5 million passengers p.a. seem to have no need for investment aid.
- However, as regards very small airports, stakeholders and airport associations such as the ACI Europe and the ADV³⁸ have stated that the existing investment aid intensities for very small airports of currently 75% during the targeted public consultation do not reflect current market needs. According to them, in particular small airports below 200,000

³⁷ E.g. see SA. 41635 (2015/N) Operating and investment aid to Flughafen Heringsdorf airport (less than 40 000 passengers p.a.); SA.44377 (2016/NN) Operating and investment aid to Aarhus Airport (less than 400 000 passengers p.a.); SA.49709 (2017/N) Operating aid to Rostock Airport (less than 300 000 passengers p.a.); SA.45140 (2017/NN) Operating and investment aid to Antwerp Airport (less than 300 000 passengers p.a.); SA.46945 (2018/NN) Operating aid to Erfurt-Weimar Airport (less than 300 000 passengers p.a.).

³⁸ German Airport Association.

passengers p.a., which are often not able to cover their running operating costs, are unable to provide the 25% own contribution for the necessary investments. The external contractor received similar comments when interviewing the selected airports for the Aviation external study.

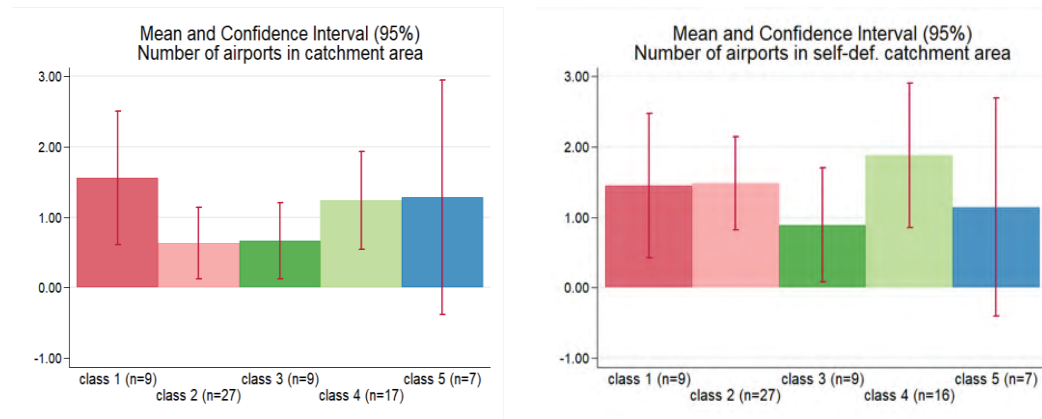
- Furthermore, some stakeholders have pointed out during the targeted consultation that the Aviation Guidelines currently do not provide mechanism to favour or specifically target investments for environmental purposes.

Is the criterion of the catchment area introduced in the 2014 Aviation Guidelines adequate?

Under the 2014 Aviation Guidelines, the criterion of the “catchment area” was introduced in order to create a safeguard to avoid distortion of competition. According to the catchment area criterion, an airport, which is situated within the distance of 100 km or 60 minutes travelling time of another airport can only receive investment or operating aid, if it can show that this aid will not lead to the duplication of unprofitable airports or the creation of unused capacity in this catchment area. Under the GBER, airports above 200,000 passengers p.a. seeking investment aid can only grant the measure without prior notification to the Commissions if there is no other airport in the same catchment area.

- The abovementioned objective has been partly achieved. The internal review of the Commission’s case practice has shown that, since the entry into force of the Aviation Guidelines, the Commission only in two instances concluded that the aid to an airport would lead to the duplication of unprofitable airport infrastructure or creation of unused capacity and was therefore not compatible with the internal market (Zweibrücken airport, SA.27339 and Gdynia airport, SA.35388). However, both of the abovementioned cases concerned new or recent airport infrastructure. In cases of established airport infrastructure, the Commission has recognized the existing situation but in all cases has come to the conclusion that due to different business models of the airports in the same catchment area or due to other factors, e.g. a lack of overlapping routes, limited capacity, differences in infrastructure, aid to the airport was unlikely to have a negative effect on competition and therefore it was found to be compatible with the internal market.
- Furthermore, the internal review has shown that contrary to the definition of the catchment area contained in point 25 of the Aviation Guidelines, in which the geographical element of 100 km or 60 minutes travelling time is only mentioned as one element of the assessment, the Commission has only in few instances looked at the effect of aid to airports outside of this radius. In this respect, the Aviation external study observed that, in particular regional and medium size airports perceive their own catchment area to be much larger than the 100 km or 60 minutes travelling time mentioned in the GBER and in the Aviation Guidelines.

Figure 5: replies from the selected airports under the Aviation external study ³⁹



Are the provisions on start-up aid for airlines appropriate?

The 2014 Aviation Guidelines have maintained the compatibility rules on start-up aid to airlines in order to promote connectivity between different regions in the European Union and to stimulate regional development. The Aviation Guidelines however introduced some changes to the conditions under which airlines can receive aid for launching new routes. Under the 2014 Aviation Guidelines, start-up aid is restricted to airlines connecting smaller airports with fewer than 3 million passengers p.a. However, the Aviation Guidelines allow a slightly higher proportion of aid relative to eligible costs allowed in the previous 2005 Aviation Guidelines.

Overall, the Commission has dealt only with six start-up aid cases since the introduction of the Aviation Guidelines. During the targeted consultation and individual meetings, stakeholders stated that the current rules on start-up aid are not sufficient to meet the needs of in particular smaller airports and that they are only little used. According to stakeholders, the conditions of start-up to airlines are too demanding for airlines in light of the quickly evolving market and the need of flexible contract provisions. Therefore, the provisions on start-up aid for airlines seem to be only partially appropriate to promote connectivity between different regions in the European Union and to stimulate regional development and might require some further flexibility.

To which extent the Commission succeeded in focusing its ex ante control on cases with a significant impact on the internal market through the introduction of Articles 56a and 51 GBER?

By extending the scope of the GBER to cover aid to airports, the Commission aimed at simplifying and clarifying State aid rules, allowing the Commission to focus its State aid control on the potentially most distortive cases. The objective was to facilitate and provide legal certainty for investments, in line with the Commission's objective to stimulate investment in order to boost and job creation and growth. This objective has been achieved.

- According to the available SARI⁴⁰/TAM⁴¹ data, Article 56a GBER has been used by Member States in 29 cases in 2017 and 2018 for a total aid expenditure of 47.7 in million

³⁹ Aviation external study

EUR. Furthermore, the Commission received positive feedback about the extension of the GBER to airports during the targeted consultation. The introduction of Article 56a GBER did help to lower the administrative burden of Member States and to simplify the rules. Furthermore it helped the Commission to focus its ex ante control more on cases with a significant impact on the market.

- Article 51 GBER embodies specific European social objectives to be pursued by Member States such as the connectivity of residents of remote regions. The Commission has handled 13 cases in 5 Member States. The existing cases show that the article has been used and that it has helped to lower the administrative burden for Member States.

Efficiency

To which extent Aviation rules lead to lower the administrative burden for the public authorities and for the beneficiaries?

- The introduction of the new rules on operating aid and investment aid under the **Aviation Guidelines** overall did not help to lower the administrative burden of Member States.
 - Stakeholders and Member States have explained during the targeted consultation and individual meetings that the provisions on the **calculation of the operating and capital cost funding gaps are too complex and not sufficiently clear**. Airport associations and Member States have explained that templates for business plans and the calculation of the funding gaps would be very helpful. This result has been confirmed by the internal review of the Commission's cases, which showed that in particular the existing operating aid notifications required extensive exchange and explanations regarding the business plan and funding gap calculation, which often caused lengthy procedures.
 - As smaller airports have usually very little staff, they depend on external economic and legal experts in order to provide the Commission with the necessary information for the notification of operating or investment aid. Small airports therefore face greater difficulties and the notification process is more burdensome for them compared to larger airports.
- The introduction of Article 56a GBER did help to lower the administrative burden of Member States and to simplify the rules. The level of complexity appears to be adequate.
 - During the targeted consultation and stakeholder meetings, the Commission received positive feedback on the new provisions of the GBER set out in Article 56a. This finding is also in line with the results of the public consultation during which a majority of the participants stated that the State aid modernisation package for the GBER has overall led to clearer rules.
 - Stakeholders have explained during the targeted consultation and individual meetings that they would like the Commission to add more criteria to the catchment area definition beyond the geographical element in order to allow for more investment aid measures to fall under the GBER. Furthermore, they expressed their wish for the Commission to extend the scope of Article 56a GBER for operating aid by increasing the existing passenger threshold.

⁴⁰ State Aid Reporting Interactive tool.

⁴¹ Transparency award module, see Section 3.2.4 of the SWD.

Relevance

How well do the objectives of connectivity and regional development still correspond to the needs within the EU?

- Increased connectivity of citizens and regional development remain valid EU objectives⁴². In this context it is worth noting that more than 70% of the participants of the public consultation which deemed the respective question to be relevant for them, are of the opinion that the State aid rules in the aviation sector contribute to the connectivity between regions.
- Airports have long been recognised as key contributors to the region they are positioned in, supporting direct and indirect jobs, as well as tourism, trade and business. The literature review conducted by the external contractor shows that an increased air traffic has a positive impact on economic growth. Nevertheless, some studies suggest that other transport infrastructure may be equally or even more effective to increase accessibility and connectivity of remote regions.
- While the aviation sector continues to grow, the tension between different societal objectives is looming. On the one hand, the EU is promoting a policy of further growth, connectivity and expansion of the EU aviation sector. On the other hand, the announced Green Deal and the increased focus on the aviation sector in this respect is likely to have a curbing effect on the growth/connectivity in aviation. It is thus relevant to question whether the State aid rules applying to the aviation sector need to be rebalanced between development of connectivity and sustainability.

How well adapted are the Aviation rules to market developments?

- In particular in the area of airport-airline agreements, DG Competition's case practice has shown that the market is evolving quickly and that the Commission has to continuously deal with new types of agreements. The Aviation Guidelines do not reflect the most recent case practice and do not give sufficient guidance to the Member States.
- In points 56 et seq. of the Aviation Guidelines, the Commission explains that at the time of the introduction of the Guidelines, a large majority of EU airports benefitted from public funding to cover investment and operating costs and that publicly owned airports were used by public authorities to facilitate local development and not as an undertaking operating according to market rules. Therefore, prices at those airports tended not to be determined with regard to market considerations and were strongly influenced by the subsidies given. In those circumstances the Commission voiced strong doubts that an appropriate benchmark could be identified to establish a market price for the services offered by the airports. Establishing an appropriate benchmark for market price services provided by airports still seems doubtful, as the considerations raised by the Commission in the 2014 Aviation Guidelines still seem valid. Firstly, a large fraction of airports is still public or partly public (public-private and public airports represented 83% of the airports in the EU in 2016, against 92% in 2010) and benefits from vast amount of subsidies. Secondly, the market price an airport should charge for its services, or to grant rebates/subsidies to airlines, depends on its cost structure. The Commission has gathered a large experience in this area in the last five years, showing that the cost structure of

⁴² 2015 Aviation Strategy for Europe.

airports varies substantially between two airports, even when these airports are comparable in terms of traffic or catchment area. It therefore appears that to assess whether transactions between public airports and airlines are market conform, the ex-ante profitability analysis remains the most efficient solution.

- The transitional period for operating aid for airports does not correspond to the current market realities and may not be adapted for airports with less than one millions passengers p.a. Due to increasing security costs, the consolidation of the airline market, and recent bankruptcies of airlines, many airports expect to continue to need operating aid after 2024. Furthermore, the Aviation external study has outlined a structural need for operating aid for airports with less than 200,000 passengers p.a. and predicts only very little growth potential for those below 700,000 passengers p.a.
- The internal review has shown that the number of airport networks is growing.⁴³ So far, the Aviation Guidelines do not contain any explanations on how to apply the current State aid rules to airport networks. The results from the targeted consultation point towards the fact that there might be a need for further clarifications or an adaptation of the rules in this regard.

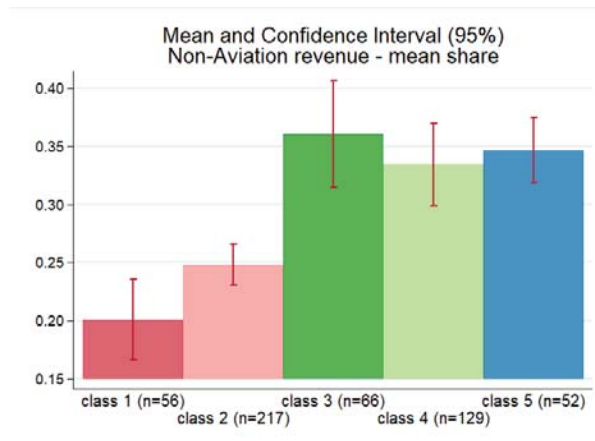
Coherence

Are the provisions of the Aviation Guidelines and the GBER coherent among each other?

- Coherence of operating aid and investment aid rules:
While the feedback received from stakeholders and Member States during the targeted consultation and individual meetings was that the separate assessment of operating aid and investment aid is generally appropriate, the current rules seem to raise certain concerns for small airports, which are dependent on both types of aid. A more holistic approach as regards investment and operating aid for smaller airports may be appropriate. This finding was confirmed by the feedback the external consultants received from the individual airports when collecting the necessary data for the Aviation external study.
However, at the same time, the Aviation external study shows that for class one and class two airports (below 700,000 passengers p.a.), the revenues generated from non-aeronautical revenues only constitute a small part of the overall revenues at the airport, and that this source of revenues seems to be more relevant for medium size and large airports.

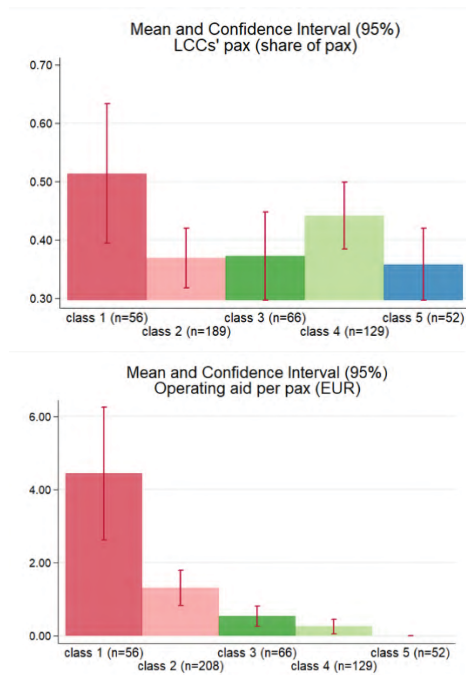
⁴³ A situation where one company manages several airports in one country at the same time.

Figure 6: Non-aviation revenue share, by class of airport in the sample⁴⁴



As regards aid to airlines, between 2010 and 2016, 76% of all growth at European airports came from LCCs. Although the Commission does not automatically consider compatible operating aid to an airport as incompatible aid to airlines using that airport, the question remains whether the safeguards included in the Aviation Guidelines and the GBER to prevent that aid to airports is being passed on to airlines illegally, are sufficient and whether there is a need for further (future) clarification in both instruments.

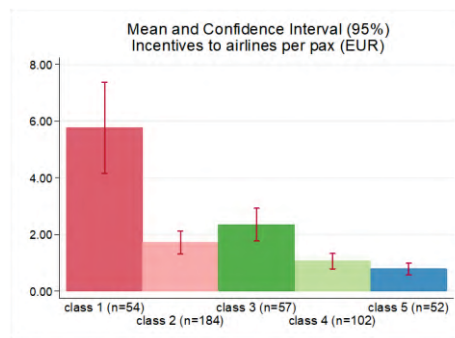
Figure 7: share of LCCs' passengers and the operating aid paid per passenger for each class of airports⁴⁵



⁴⁴ Aviation external study.

⁴⁵ Aviation external study.

Figure 8: the incentive per passenger paid to airlines for each class of airports ⁴⁶



Are the Aviation Guidelines coherent with other State aid rules?

- In order to assess whether the Aviation Guidelines are coherent with other State aid rules, their rules have been compared to those of a number of relevant State aid instruments.
- State aid in the form of public service compensation is exempt from the notification requirement of Article 108(3) of the Treaty if the requirements set out in the Commission Decision of 20 December 2011 on services of general economic interest (“the SGEI Decision”) are met. There is inconsistency between the wording of the SGEI Decision and the Aviation Guidelines as regards how the average number of passengers below which the notification is not required is calculated. The SGEI Decision refers to the average annual traffic of 200,000 passengers during the 2 financial years preceding that in which the SGEI was assigned, whereas the Aviation Guidelines refer to the average annual traffic of 200,000 passengers over the duration of the SGEI entrustment.
- The evaluation found that the Aviation Guidelines are generally coherent with other State aid rules. The evaluation however found some internal incoherencies within the Aviation Guidelines and between the Aviation Guidelines and the GBER.

Are the rules of the Aviation Guidelines and the GBER coherent with other EU policies?

- According to the Communication on the European Green Deal, transport accounts for a quarter of the EU’s greenhouse gas emissions, and is still growing. To achieve climate neutrality, a 90% reduction in transport emissions will be needed by 2050. Road, rail, aviation, and waterborne transport will all have to contribute to the reduction. Furthermore, the Communication states that in order to deliver the European Green Deal, there will be a need to rethink policies for certain sectors, including transport. The objective of connectivity and the promotion of an internal aviation market with vibrant competition therefore will have to be aligned with the sustainability objective.
- The Aviation Guidelines provide that State aid for investments at airports with over 5 million passengers annually shall in principle not be declared compatible with the internal market pursuant to Article 107(3)(c) TFEU other than in very exceptional circumstances. This principal prohibition of investment aid for airports with more than 5 million annual passengers implies that airports of this size should finance investment through their own resources and private capital. The Airport Charges Directive⁴⁷ sets a regulatory framework

⁴⁶ Aviation external study.

⁴⁷ Commission Staff Working Document on the evaluation of the Directive 2009/12/EC of the European Parliament and of the Council of 11 March 2009 on airport charges (SWD(2019) 291 final).

for the setting of airport charges for airports with more than 5 million passengers annually, which has no intention to prevent airports from attracting private capital. The evaluation thus found no incoherence between the Aviation Guidelines and the Airport Charges Directive.

- If it is evident that the market itself will not deliver an acceptable level of air transport services to given regions within Europe, Member States may consider Public Service Obligations to ensure service to and from under-served regions. Regulation 1008/2008 on common rules for the operation of air services in the Community (Articles 16 to 18) recognises that public service obligations are a legitimate tool to ensure territorial cohesion and economic and social development in remote regions or islands. Regulation 1008/2008 sets the applicable conditions, which are aimed at, inter alia, preventing possible misapplication of these obligations. Under Regulation 1008/2008, aid to airline on public service obligation routes is only possible under strict conditions and if the Member State can show that there is a genuine need for the specific route. The provisions are in line with the strict State aid rules for aid to airlines under the Aviation Guidelines and acknowledge the full liberalization of the airline market.
- According to the Aviation Strategy for Europe, aviation is a strong driver of economic growth, jobs, trade and mobility for the European Union. Connectivity (broadly defined as the number, frequency and quality of air transport services between two points) is relevant for the travelling public and for businesses and the economy at large. Furthermore, it states based on a study by Steer Davies Gleave that the better a city, region or country is connected by air to other destinations in Europe and other parts of the world, the more growth can be generated⁴⁸. The Aviation Strategy for Europe calls for aviation to become an integral element of inter-modal transport, for the best possible connectivity, which in turn will help drive growth for Europe's economy. Under the Aviation Guidelines, aid to airports or airlines can be found compatible with the Treaty if such aid, inter alia, facilitates regional development or increases the mobility of EU citizens. As both instruments recognize increase of connectivity or regional development as common objectives, the evaluation found no incoherence between the Aviation Guidelines and the Aviation Strategy for Europe.

⁴⁸ Study on employment and working conditions in air transport and airports, Final report 2015.

III. *de minimis* Regulation

With regard to data quantification, as mentioned under Section 3, one of the main difficulties reported is the lack of aggregate data collected. There are 3 main reasons for this:

- (i) *de minimis* measures are excluded from the notification obligation of Article 108(3) TFEU and is not considered as State aid.
- (ii) There is no obligation of reporting to the Commission.
- (ii) No central register for *de minimis* measures for a large number of Member States.

Nonetheless, some Member States provided figures on aid granted within the period 2013-2019: Poland (EUR 7.46 billion / 874,688 beneficiaries); Greece (EUR 2.2 billion / 70,000 beneficiaries); Lithuania (EUR 447.9 million / 111,298 beneficiaries); Croatia (EUR 503 million for the period 2014-2018).

Effectiveness

Is the de minimis ceiling still adequate given the SAM objectives?

In 2013, the ceiling for granting *de minimis* measures was maintained at EUR 200,000 over a period of three fiscal years (same ceiling as the one laid down in the 2006 *de minimis* Regulation).

An appropriate ceiling is important in the context of the SAM objective of focusing on the cases with the largest impact on competition.

In the public consultation, the majority of respondents who expressed a view (68%) considered that the *de minimis* rule allows the Commission to focus its scrutiny on cases with a significant impact on the internal market.

In the public consultation, the majority of respondents who expressed a view (above 80%) considered that the *de minimis* rule reduced the risk of subsidy races in the EU.

In the public consultation, the majority of respondents who expressed a view considered that the *de minimis* rule achieved the goal of simplification while maintaining a competitive internal market.

Efficiency

Did the de minimis Regulation lead to clearer rules? Did the de minimis Regulation lead to less administrative burden?

Monitoring

In 2013, the *de minimis* Regulation maintained a dual monitoring system of the Member States, thereby leaving the choice between a declaration of the aid by beneficiaries or a central register. Nonetheless, the objectives of transparency and compliance have not been fully achieved:

- 16 Member States have a national *de minimis* register. Nonetheless, the register is public in only 6 Member States (Estonia, Spain, Croatia, Italy, Poland, Slovenia). 12 Member States do not have a *de minimis* register (Austria, Belgium, Germany, Denmark, Finland, France, Ireland, Luxembourg, Malta, Netherlands, Sweden, United Kingdom). This raises difficulties in term of transparency at a national level.
- With regard to data collection, most of the Member States are unable to provide information on the application of *de minimis* measures (including on the aid volume and number of beneficiaries). There is no aggregate data available. This lack of data is problematic from a transparency standpoint in order to assess the impact of *de minimis* measures at the Member State's level and from a cross-sector perspective in the internal market.
- Most of the Member States do not seem to ensure a proper check of the compliance of the State aid criteria.⁴⁹ Only a limited number of Member States has introduced some additional tools (e.g. Greece has implemented an Information System on cumulation; Malta provides for checks with other granting authorities on a case-by-case basis; Latvia has introduced regulations which established a *de minimis* measures control system with declaration forms). The objective of ensuring compliance does not seem to have been ensured in a large number of Member States.

Given the aforementioned difficulties on the dual monitoring system laid down in the 2013 *de minimis* Regulation, introducing a mandatory public register at the EU level or at the Member State level would achieve the following goals:

- Strengthened transparency for stakeholders (including beneficiaries and competitors) and the Member States.
- Strengthened transparency at the EU level with the collection of aggregate data.
- Strengthened compliance, by ensuring that the Member States report the *de minimis* aid granted and ensure thereby the application of the criteria laid down in the Regulation.
- Ensuring a uniform application among the Member States.
- Less burdensome for the undertakings. In the public consultation for stakeholders, some undertakings have pointed out that the procedure would be less cumbersome if a central register were set up.⁵⁰ A self-declaration system can create a certain degree of bureaucracy which may not be proportionate to the potential low impact on competition, in particular for low amounts and for micro-enterprises.⁵¹

Use of financial instruments

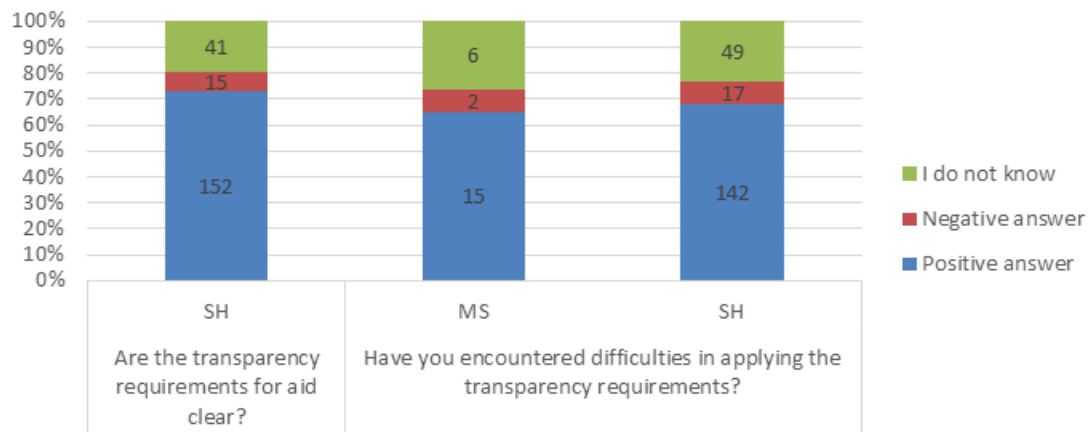
The targeted consultation to Member States and stakeholders revealed that a large majority of both Member States and stakeholders found the transparency requirements clear (stakeholders question only, 73%) and that they did not encounter difficulties in applying them (Member States 65%, stakeholders 68%). The responses are thus quite positive, indicating that most Member States / stakeholders find it clear how to design transparent aid.

⁴⁹ For instance, in the public consultation, Denmark considers that the sole responsibility of each granting authority to keep all information; France solely asks the beneficiaries for a declaration on honour.

⁵⁰ Some have reported experiencing difficulties in collecting the declaration form from the granting (especially for local granting authorities support small businesses).

⁵¹ Having an EU-register has been reported by some stakeholders as useful and time-saving tool.

Figure 1: Transparency requirements⁵²

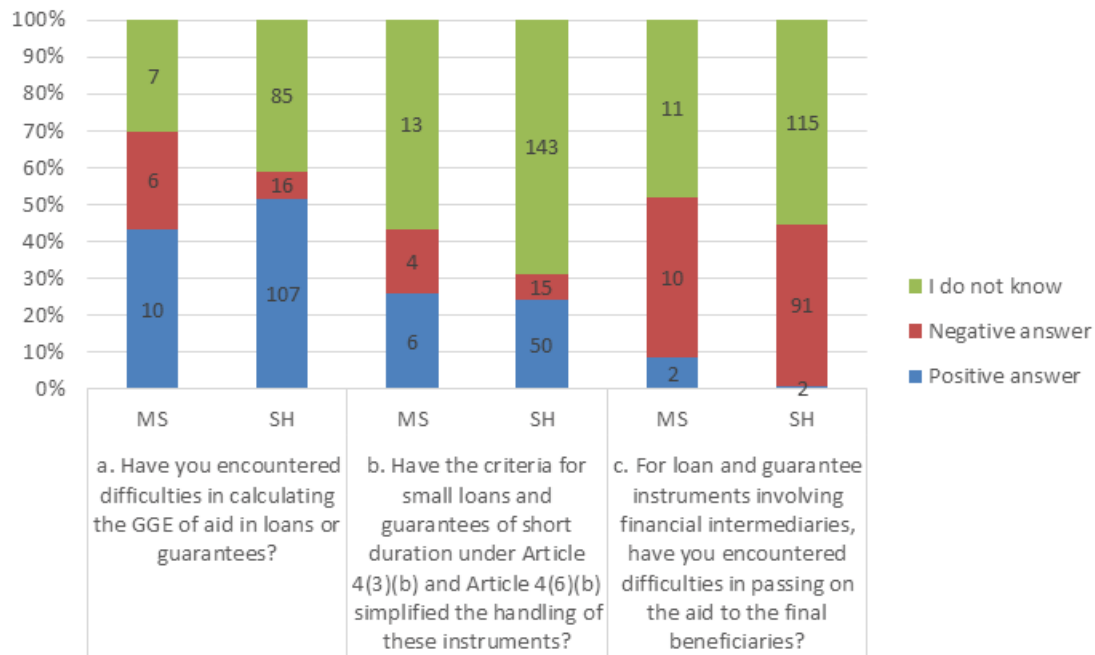


The questions on the experience in using financial instruments under the *de minimis* Regulation reveal some additional insights (see also Section 3). While a relative majority indicated that they did not encounter difficulties in the calculation of the Gross Grant Equivalent (Member States 45%, stakeholders 51%), a significant proportion of respondents answered that they either encountered difficulties or did not know.⁵³ The evidence thus suggests that a significant proportion of stakeholders only use grants but not financial instruments. No information is available on the reasons of why those stakeholders do not use financial instruments.

⁵² Targeted consultation for stakeholders on the *de minimis* Regulation.

⁵³ Only a minority of respondents found that the criteria in Article 4(3)(b) and 4(6)(b) have simplified the use of financial instruments (Member States 26%, stakeholders 24%), whereas the majority of respondents stated “I do not know”.

Figure 2: What has been your experience in using financial instruments under the *de minimis* Regulation?⁵⁴



Relevance

Is the de minimis ceiling still adequate given the overall market developments?

As a preliminary comment, it is noteworthy that the *de minimis* ceiling is important to capture the measures which do not have an effect on trade and competition and hence would escape the State aid definition of Article 107(1) TFEU. If the ceiling is too high, there would be disproportionately an excessive number of measures falling under this definition. In case the ceiling is set too low, there would be a large number of measures which would be deemed to constitute State aid, despite them having little effect on trade and competition.⁵⁵

As the ceiling currently stands, it seems that it is no longer adapted to the evolution of the market and economic developments over the last 7 years. In particular, it can be taken account of the following elements:

- the inflation (accumulated increase of 5.55% for the period 2013-2019; ECB's forecast increase in inflation in the following years)⁵⁶
- GDP growth (nominal accumulated increase of 17.1% for the period 2013-2018)⁵⁷
- increase of government expenditure (increase of 10.5% for the period 2013-2018)⁵⁸

⁵⁴ Targeted consultation for stakeholders on the *de minimis* Regulation.

⁵⁵ On this point, see Nyssens H., 'De minimis', in Mederer W., Pesaresi N., Van Hoof M. (eds), *EU Competition Law*, Claeys & Casteels, 2008, pp. 411 *et seq.*; Reference is also made to this issue in Van Cayseele P., Konings J., Sergant I., *The effects of State aid on total factor productivity growth*, Working Paper Research, National Bank of Belgium, October 2014, p. 1.

⁵⁶ Eurostat, National accounts and GDP, <https://ec.europa.eu/eurostat/data/database>

⁵⁷ Eurostat, National accounts and GDP, <https://ec.europa.eu/eurostat/data/database>

In the targeted consultation to Member States, the majority of respondents took the view that the ceiling of EUR 200,000 is inadequate given the impact of inflation in the internal market.

In the Study of the European Economic and Social Committee on the impact of State aid rules on access to finance for SMEs and enterprises (October 2019),⁵⁹ the main conclusion on the *de minimis* rule was that they should be regularly updated in accordance with changes in economic conditions (the last update was in 2013). As a concrete recommendation, it is proposed to increase the *de minimis* limits (the concrete suggestions from Business Associations were either an increase of EUR 300,000 for 3 years, or keeping EUR 200,000 for a limited period of 2 years).⁶⁰

Coherence

The 2013 *de minimis* rule seems to have fulfilled the SAM objectives of simplification and clarifications. To this end, it introduced the following changes:

- Clarification of the notion of undertaking. In particular, it provided an exhaustive list of criteria for determining when two or more undertakings within the same Member States are to be considered as a single undertaking. By doing so, the objective of clarification has been achieved to a large extent (in the public consultations, 56.5 % of the Member States and 63.5 % of the stakeholders found the definition clear). It is noteworthy that some side issues remain (e.g. use of fiscal year instead of tax year).
- Exclusion of undertaking in difficulty: by keeping this exclusion, the 2013 Regulation has attained its objective of simplification, avoiding thereby the assessment of criteria for undertaking in difficulty. This has alleviated the administrative burdens for the national administrations.

In the public consultation, the majority of respondents (above 95%) who expressed a views stated that the *de minimis* rules are, at least partially, coherent with changes in EU legislation which have occurred since the SAM rules were adopted.

Use of financial instruments

It appears that *de minimis* Regulation would have achieved its objective with respect to simplification as evidenced by the relative use of *de minimis* Regulation versus other State aid rules for financial instruments.

The fi-compass State Aid⁶¹ survey shows that most ESIF financial instruments are implemented under the *de minimis* Regulation (43% of the 295 FIs covered by the survey), whereas GBER (29%), market-conform instruments (21%) and notifications (7%) are significantly less used ways forward. Loans and guarantees are the most extensively used FIs, equity products are only used in few cases. Respondents cited mainly the simple and efficient nature of *de minimis* Regulation as factors that led them use it. Most of them stated that the calculation of the GGE and the use of the safe harbour amounts did not pose challenges. The

⁵⁸ Eurostat, National accounts and GDP, <https://ec.europa.eu/eurostat/data/database>

⁵⁹ European Economic and Social Committee, *How State aid rules affect access to finance for SMEs and enterprises*, Study, October 2019.

⁶⁰ *Ibid*, p. 8.

⁶¹ <https://www.fi-compass.eu/news/2018/12/state-aid-survey-findings>

survey also revealed that *de minimis* measures were used across thematic objects (and relatively more widely in SME financing). This finding suggests that the objective of the *de minimis* Regulation to support SME financing and to apply across sectors legislation are effectively met in practice.

The data provided by AECM⁶² on aid amounts comprised in guarantees under the different State aid rules show that a high proportion of guarantees are issued under the *de minimis* Regulation (84% in terms of volumes). In the same survey, AECM states that its members view the *de minimis* Regulation positively due to its simplicity and make us of it to the maximum extent possible.

⁶² Data provided by AECM by email from Felicia Covalciuc on 6 December 2019 and 10 January 2020 as follow-up to AECM-DG Competition meeting of 20 July 2019.

IV. EEAG / relevant GBER provisions

The EEAG are a very detailed and compartmentalised set of guidelines, which include specific rules for many different types of support measures, some of which relate to the same overarching objective. In this evaluation both the EEAG and relevant GBER provisions as a whole set of rules are analysed, but also some of the different sections separately (e.g. support to renewables, capacity mechanisms, reductions for energy intensive users “EIUs”, energy efficiency, waste), in particular those provisions that aim to address the problems identified in the intervention logic of these guidelines.

Effectiveness

Have the EEAG and/or the GBER generally achieved the relevant environmental protection or energy objectives?

The results of the analysis of the several sources of input used in this exercise suggest that, in general terms, the EEAG and relevant GBER provisions have contributed to achieve the relevant climate, environmental and energy objectives while maintaining a competitive internal market.

The public consultation on the Fitness Check shows that a large majority of those respondents that expressed an opinion believe that the EEAG have allowed for a clean and secured supply of energy (28% to a large extent and 58% to some extent) and for an increased environmental protection (38% to a large extent and 53% to some extent) while maintaining a competitive internal market (40% to a large extent and 54% to some extent).

In the same line, the targeted consultation on the EEAG also shows that more than 90% of those respondents that expressed an opinion believe that the EEAG and GBER related provisions have achieved (~20%) or partially achieved (~70%) these objectives.

The public consultation on the Fitness Check, also shows that 91% of those respondents that expressed an opinion think that the EEAG, as part of the State Aid Modernisation package, led to clearer rules in the environmental and energy field (19% yes, 72% partially).

In addition, the statistics (State aid Scoreboard, Transparency Award Module) and the internal analysis of case practice show an increasing volume of compatible aid granted in the period 2014-2018 in the environmental and energy field, and more than 180 decisions adopted under the EEAG and more than 1,000 schemes implemented under the GBER. This shows that the State aid framework has been instrumental to provide a common legal framework for EU Member States’ efforts to reach their 2020 climate targets and other environmental objectives with a set of tools compatible with the internal market.

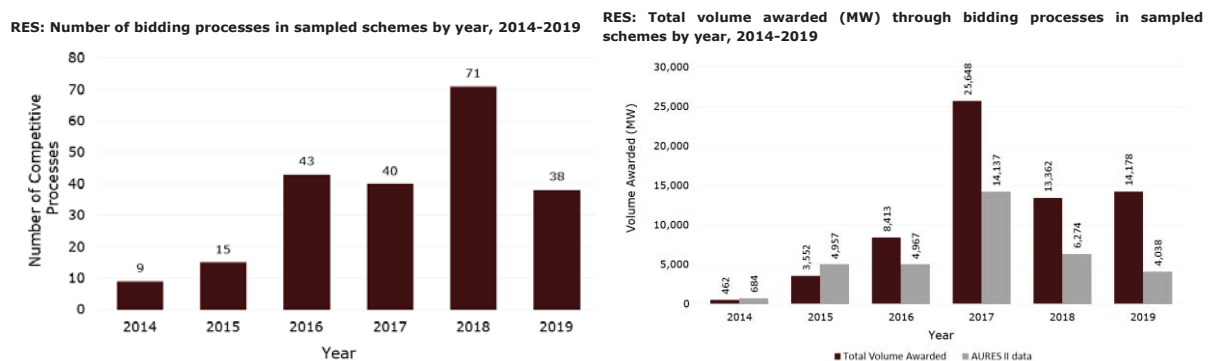
Support schemes to electricity from renewable energy sources (“RES”)

From the results of the analysis of the different sources of input used in this exercise, it has been shown that the EEAG have been effective in allowing for the deployment of RES at lower costs and in a market integration perspective.

The targeted consultation on the EEAG shows that more than 75% of those respondents that expressed an opinion believe that the EEAG and the GBER have been effective in enabling the deployment of renewables while lowering societal costs and reducing the amount of aid needed (76.6%) and in facilitating the integration of renewable energy into the electricity market (78.3%), stressing the positive effect of the tendering and market integration requirements.

The EEAG external study shows that following the introduction of the tendering requirement for renewables support schemes in the EEAG, the number of auctions/competitive processes has increased over time⁶³, in particular from 2016, growing from 9 in 2014 to 71 in 2018, the last full year for which data is available. It also shows that the volume of renewables capacity awarded per year peaked in 2017, with 25,648 megawatt (“MW”) compared to 2019 with 14,178 MW.

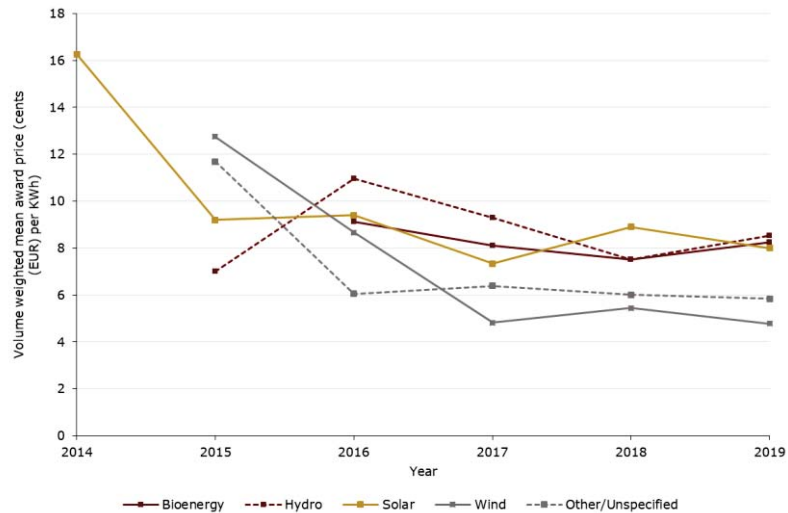
Figure 1: number of bidding processes and volume awarded⁶⁴



The EEAG external study also shows that the evolution of “awarded prices”, and consequently the amount of aid per kilowatt hour (“kWh”), resulting from the different auctions for the different technologies has significantly decreased over the period as can be seen in the chart below. For example, the mean awarded price of solar and wind power more than halved between 2014-2015 and 2019. This reduction in prices can be partially attributed to the tendering requirements included in the EEAG which have fostered competition between developers, in addition to the evolution in the maturity of the different technologies.

Figure 2: Volume weighted mean price per kWh in sampled schemes split by high-level technology category, 2014-2019⁶⁵

⁶³ Taking into account the sample of 17 Member State used in the EEAG external study.
⁶⁴ Source: Consultant report.
⁶⁵ EEAG external study.



However, while this picture of declining prices for renewables is generally positive, it is clear from the EEAG external study that the prices paid per unit of renewable energy vary significantly depending on the different types of technology, some of which can cost as twice as much.

Finally, the EEAG external study also shows that the total volume of announced ‘subsidy-free’ renewable energy projects currently in Europe is approximately 18 GW. The majority of this capacity results from zero subsidy bids made in renewable energy auctions, which shows the benefit of putting the different project developers in competition. However, note that although in these cases no subsidy is received in relation to electricity generated by the power plants, these projects may benefit from other support in terms of e.g. subsidised connection costs to the grid, or access to land/seabed. In any case, also note, that the number of projects put forward outside of auction systems (i.e. directly in market agreements between producers and consumers) is rapidly increasing.

Aid to measures to ensure generation adequacy

On the basis of the analysis of the different sources on input used in this exercise, it has been shown that the EEAG have achieved to a great extent the objective of ensuring that capacity mechanisms were cost-effective in providing security of supply and least distortive of competition, taking into account the applicable regulatory context. However, it also appears that the effectiveness of the EEAG in limiting the risk of capacity mechanisms providing environmentally harmful subsidies fuels is difficult to determine.

The EEAG are the first set of State aid guidelines to contain criteria on measures to ensure generation adequacy measures. Such measures, commonly known as capacity mechanisms, aim at ensuring that electricity systems are adequately supplied in order to meet demand. Typically capacity mechanisms remunerate the investments needed to guarantee the availability of capacity providers (for instance, generators, demand-response and storage operators). Given their variety and complexity, this type of measures do not fall under the scope of the GBER.

The application of the rules on generation adequacy has benefitted from the results of the sector inquiry on capacity mechanisms⁶⁶, which has provided the Commission with valuable information on the functioning of 35 previous, existing or planned capacity mechanisms in the 11 Member States covered by the inquiry. However, this area of State aid enforcement still remains relatively new compared to others covered by the EEAG.

The targeted consultation on the EEAG shows that around 72% of those respondents that expressed an opinion believe that the EEAG have ensured that capacity mechanisms were introduced only when necessary, were cost-effective in providing security of supply and were least distortive of competition and intra-EU trade. In particular, 45.6% of those respondents think that these objectives have been reached to some extent, while 26.5% believe that they have been attained to a large extent. Still, there is a 27.4% of those respondents that do not share this view claiming for example, that the divergences and different types of capacity mechanisms across Member States potentially threaten the integrity and efficiency of the internal energy market.

Overall, those respondents were less positive as regards the effectiveness of the EEAG in ensuring that capacity mechanisms did not negatively impact the objective of phasing out environmentally harmful subsidies, including for fossil fuels. In this respect, 65 % of them think that this objective was attained to some extent (33%) or to a large extent (32%), while 35% believe that it was not attained at all.

The Commission has approved 13 generation adequacy measures under the EEAG since their introduction in 2014⁶⁷. In 12 of those cases, Member States have followed a probabilistic approach when assessing the ability of the system to ensure generation adequacy⁶⁸. This means that Member States took into account a wide range of variables and the behaviour of capacity providers under multiple scenarios. This includes not only state of the art weather forecasts, but also factors in less predictable capacity sources such as the contribution from demand response, interconnectors or renewable energy sources.

Moreover, the majority of the Member States that have introduced capacity mechanisms, have assessed their necessity against a reliability standard which quantifies the probability of a given level of unmet demand over a certain period of time, or have committed to do so. Such a standard is normally expressed as Loss of Load Expectations (LOLE). The LOLE sets

⁶⁶ In April 2015 the Commission launched a sector inquiry into the financial support that EU Member States grant to electricity producers and consumers to safeguard security of electricity supply (capacity mechanisms). The final report of this sector enquiry was published in November 2016.

⁶⁷ In United Kingdom, the Commission has approved the decisions SA.35980 – Electricity market reform-Capacity market and SA.35980 – Electricity market reform-Capacity market. In France, the Commission has approved the decisions SA.39621 – Country-wide capacity mechanism; SA.40454 – Tender for additional capacity in Brittany and SA.48490 – Specific demand side response tender. In Germany, the Commission has approved the decisions SA.43795 – AbLaV Interruptibility scheme; SA.42955– Network Reserve and SA.45852 – German Capacity Reserve. In Greece, the Commission has approved the decisions SA.38968 – Transitory electricity Flexibility Remuneration Mechanism (FRM); SA.50152– New Greek Transitory Flexibility Remuneration Mechanism (TFRM) and SA.48780 – Prolongation of the Greek interruptibility scheme. In Belgium, the Commission has approved the SA.48648– Belgian strategic reserve. In Ireland and Northern Ireland, the Commission has approved the decisions SA.44464 and SA.4446 – Irish capacity mechanism and Northern Irish capacity mechanism, respectively. In Italy, the Commission has approved the decisions SA.42011 –Italian capacity mechanism and SA.53821–Modification of the Italian capacity mechanism. In Poland, the Commission has approved the decision SA.46100–Polish capacity mechanism.

⁶⁸ The only exception being the AbLaV scheme, for which the size of scheme was assessed against the potential for flexible capacity in Germany (see Section 3.2.2 of the Commission decision).

out the expected number of hours or days in a year during which some customer disconnection is expected. (for example, if 1 day in 10 years some customers would need to be disconnected, LOLE would be 0.1 days or 2.4 hours). This probabilistic approach can take into account variations in demand over the years as a result of climate fluctuations. When that was the case, the LOLE has been calculated based on Value of Lost Load (VoLL), which estimates consumers' willingness to pay for security of supply.

In some cases, Member States have expressed the reliability standard as Expected Energy Not Served (EENS), which is expressed in megawatt hour ("MWh") over a specific time period (e.g. a year). EENS makes it possible to monetize the shortfall in a system where VOLL has also been calculated (see below) since the amount of EENS can then be multiplied by VOLL.

Both approaches help to avoid capacity mechanisms being introduced when they are not necessary, and avoid them being oversized, even if further progress is warranted to ensure the application of uniform approach across Member States.

In 12 of the measures, the aid for the capacity is allocated through a competitive bidding process. In some cases, the Commission was able to compare the value of capacity resulting from the introduction of a competitive process with that set through an administrative procedure or estimated by public authorities. In these cases, the evidence shows that the competitive process reveals the true value of capacity and that the latter is often significantly lower than the one estimated by public authorities, demonstrating the benefits of the tendering requirement for this type of aid.

As an example, Ireland and Northern Ireland applied until 2017 a capacity mechanism in which the capacity premium (i.e. the aid) was administratively set (I-SEM capacity payment). In 2016, this amounted to 72,820 EUR/MW/year⁶⁹. The total cost of the capacity payment mechanism was around EUR 550 million for a total capacity requirement of 7,070 MW⁷⁰. With the introduction of tenders in December 2017, the premium decreased to 41,800 EUR/MW/year (43% lower than the administratively set premium) for the T-1 2018/2019 auction held in 2017, while the T-2 auction held in December 2019 cleared at 45,950 EUR/MW/year⁷¹ (37% lower than the administratively set premium). Consequently, the total cost of the scheme decreased by approximately EUR 200 million, as compared to the previous system with no tenders, for comparable or even higher auctioned amounts of capacity procured⁷², as shown in the graphs below.

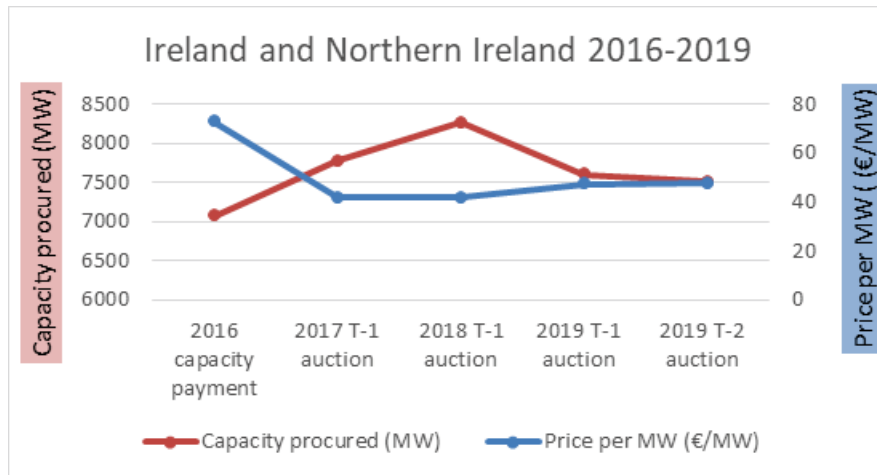
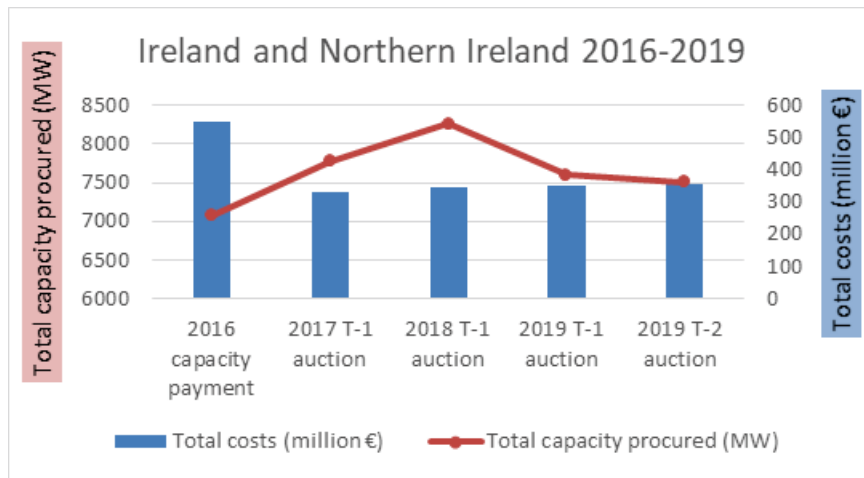
⁶⁹ <https://www.semcommittee.com/sites/semcommittee.com/files/media-files/SEM-15-059%20ACPS%20Final%20Decision%20Paper.pdf>, p. 38.

⁷⁰ <https://www.sem-o.com/documents/general-publications/Quick-Guide-to-Capacity-Market-and-T-1-2019-2020-Auction-Results.pdf>, p. 6.

⁷¹ <https://www.sem-o.com/documents/general-publications/T-2-2021-2022-Final-Capacity-Auction-Results-Report.pdf>, p.4.

⁷² The T-1 Auction held on 15 December 2017 procured a total of 7.774 MW with a total cost of EUR 333 million. The T-1 auction held on 13 December 2018 procured a total of 8,266 MW with a total cost of EUR 345 million. The T-1 auction held on 26 November 2019 procured a total of 7,605MW with a total cost of EUR 351 million. Finally, the T-2 auction held on 5 December 2019 procured a total of 7,511 MW with a total cost of EUR 358 million.

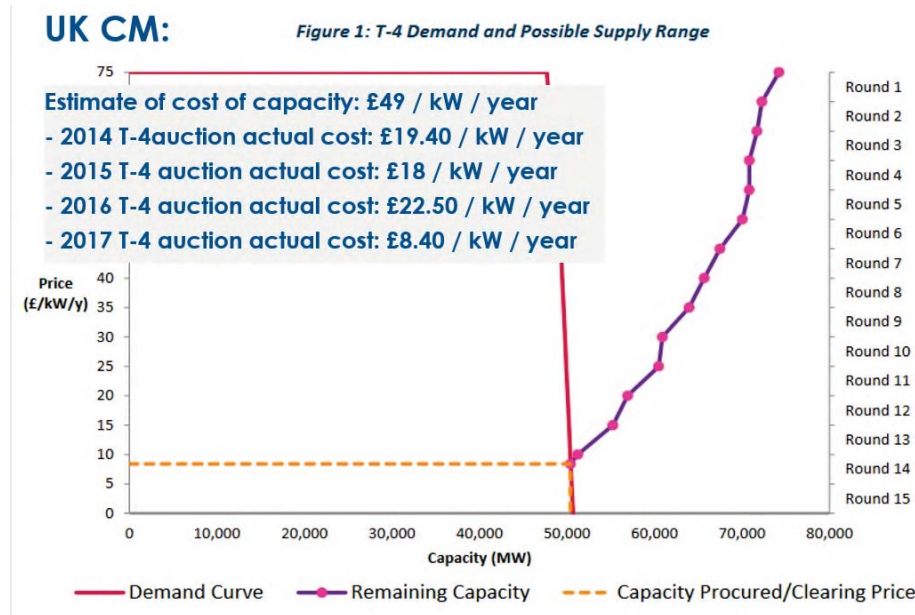
Figure 3: Scheme's total costs and capacity procured in Ireland and Northern Ireland from 2016-2019⁷³



Another example is provided by the British capacity mechanism for which the United Kingdom authorities had initially estimated a cost of 49 GBP/kW/year (the initial ‘target’ capacity price for the quantity demanded), while the subsequent auctions cleared at a much lower prices, as shown in the graph below.

⁷³ European Commission based on data from the Single Electricity Market Committee.

Figure 4: Estimated cost of capacity vs. actual cost ⁷⁴



However, some results of the EEAG external study and the internal analysis seem to imply that there may be a lack of competitive pressure in some schemes, as illustrated by the results in a few Member States where the auction prices cleared at the price cap set by the administration (see graph below for an example). This would prove the necessity of making sure that the design of the different capacity auctions ensures a sufficient competitive pressure in the process.

Figure 5: Capacity and unit clearing prices, plus price caps, for the German ABLAV 'Fast Interruptible Load', 2017-2019⁷⁵⁷⁶



⁷⁴ European Commission based on data from the ERM Delivery Body.

⁷⁵ Covering the weeks from that beginning 27 March 2017 to that beginning 4 November 2019.

⁷⁶ EEAG external study.

As regards the effects of these schemes on competition and cross border trade, the sector inquiry found that, typically, existing capacity mechanisms covered by the inquiry were open only to a limited number of technologies, which included mainly conventional generation technologies⁷⁷ The inquiry also found that the focus of Member States was often either entirely on attracting new capacity or on avoiding the closure of existing capacity, rather than both. The capacity mechanisms were therefore often tailored entirely to address either of those problems, with the result that often new and existing capacity were not put in competition. Finally, the Sector Inquiry found that only four of the capacity mechanisms covered allowed or planned to allow the direct participation of cross-border capacity.

In contrast, an analysis of the 13 capacity mechanisms decisions adopted under the EEAG shows that 9 of the schemes, are open to demand response. Out of the 13, 8 are open to storage capacity and 8 are open to renewables to some extent. Moreover, 8 of the mechanisms approved under the EEAG are open to both new and existing capacity. Finally, all market-wide capacity mechanisms are open to the participation of foreign capacity (directly or via the interconnector). This evolution of the schemes can be seen as a result of the different requirements for generation adequacy measures introduced for the first time under the EEAG.

The strategic reserves approved so far under the EEAG do not include cross-border participation since there is a lesser case for the necessity of including cross border participation once reserves are well designed to enter the market only after a VOLL price cap is reached, and because it is technically and politically challenging to include foreign capacity in strategic reserves.

The openness of the approved capacity mechanisms to demand response, storage and renewables capacity has also meant that a larger amount of low emissions capacity can now participate in this kind of support schemes than in the past making them cleaner and more competitive.

On the other hand, in the absence of a uniform methodology on the assessment of the adequacy needs, it cannot be excluded that capacity mechanisms in some Member States have been over-procured and/or led to a partitioning of the internal market. In this respect is also worth mentioning that the European Court of Justice has increased the burden of proof to discharge from the obligation to ensure that capacity schemes are effectively open to competition.

As regards the question whether the EEAG have been effective in phasing out fossil fuel subsidies, the review of the case practice shows that in 10 of the mechanisms approved under the EEAG, preference is given to low carbon capacity in case of equivalent technical and economic parameters.

Moreover, the EEAG external study has collected data on the percentage of awarded capacity that could be using fossil fuels, over the period 2014-2019 for sampled schemes (see figures below). This data shows that for the sampled capacity mechanisms, in 5 out of 6 years the capacity awarded (in MW) potentially fuelled by fossil fuels was higher than the non-fossil fuel capacity awarded. In 4 years at least 80% of the capacity awarded was potentially fossil

⁷⁷ See Section 5.2.2 of the Sector Inquiry report.

fuelled. However, due to the limitations on the availability of data, these percentages are not weighted by the length of the contracts awarded to different types of plants/capacity and therefore, are based on MW rather than MW-years. Moreover, as the data on awarded capacity is split by technology rather than fuel type, the first figure below only provides an upper bound on the proportion of capacity that could be using fossil fuels⁷⁸. Finally, the EEAG external study also shows that in the sampled mechanisms, 65.5% of the capacity in MW/years was awarded via one-year contracts.

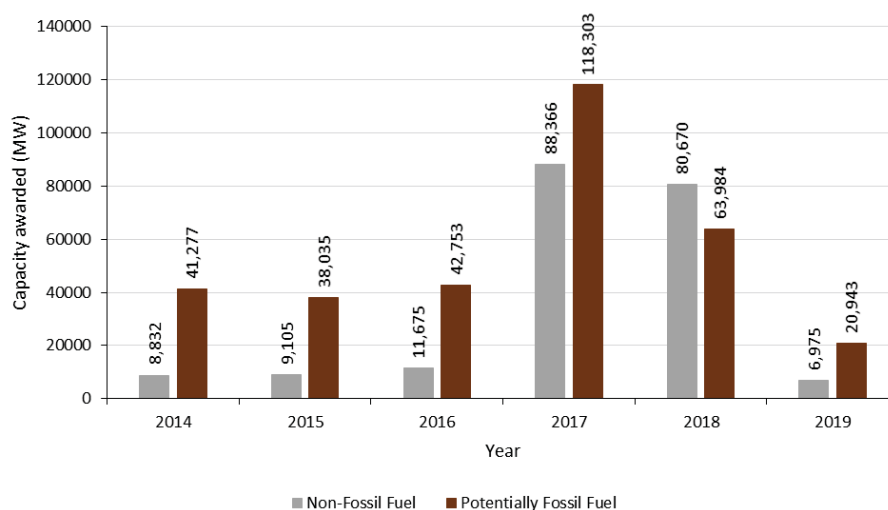
Figure 6: Percentage of capacity (MW) receiving support that may use fossil fuels in sampled capacity mechanisms by Member State, 2014-2019⁷⁹



⁷⁸ The fact that 100% of the capacity in Germany is non-fossil fuel results from its sampled scheme being demand response, which is also the reason for Greek capacity being 87% non-fossil fuel. The fact that 76% of the capacity in the sampled French schemes is non-fossil fuel is the result of around 60% of awarded capacity involving nuclear plants. In contrast, in Poland and Ireland over 90% of awarded capacity is potentially fossil fuelled.

⁷⁹ EEAG external study.

Figure 7: Capacity awarded (MW) in sampled capacity mechanisms split by potential fuel type, 2014-2019⁸⁰



Reductions for EIUs from RES financing

Pursuant to Section 3.7.2 of the EEAG, the underlying logic of reductions for EIUs is to **increase the acceptability of ambitious renewables schemes and hence to help to secure the financing base for such policies**. In fact, Section 3.7.2. recognised that without those reductions, the financing of renewables support may be unsustainable, as undertakings particularly affected by that financing cost could be put at a significant competitive disadvantage.

However, on the basis of the analysis the results of the EEAG external study, the analysis of the case-practice, as well as the consultation activities, it cannot be concluded that there is a correlation between the existence of reductions for EIUs and the introduction of ambitious renewables policies.

First of all, the analysis of the **case practice** shows that only 13 Member States have introduced a scheme to compensate EIUs from RES support levies (Bulgaria, Denmark, France, Germany, Greece, Italy, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia and the United Kingdom). In addition, some Member States have notified reductions from other charges with similar objectives (e.g. charges to finance schemes to support energy efficiency investments)⁸¹.

The **EEAG external study** shows that out of the 13 Member States for which the Commission has approved reductions to EIUs' charges, 6 already met or exceeded their 2020 renewables targets in 2018 (provisional data). However, of the remaining 15 Member States, which have not financed RES through levies nor have granted reductions to EIUs, 5 also already met or exceeded their 2020 renewables targets in 2018 (provisional data). More

⁸⁰ EEAG external study.

⁸¹ The Commission approved reductions from CHP levies in the following decisions: SA.36511 - Support for EIU under the CSPE in France, SA.42393 - Reform of support for cogeneration in Germany, SA.52413 - Reduced RES and HECHP financing contribution for EIUs in Greece, SA.38635 - Reductions of the renewable and cogeneration surcharge for electro-intensive users in Italy, and SA.52530 - Poland - Reductions for EIUs from CHP charge.

specifically on public acceptance of Member States setting up ambitious RES policies, the EEAG external study has also shown effects consistent with lasting or short-lived redistribution between consumers' categories were observed, except if reductions were financed with the State budget (e.g. Denmark, France, Latvia).

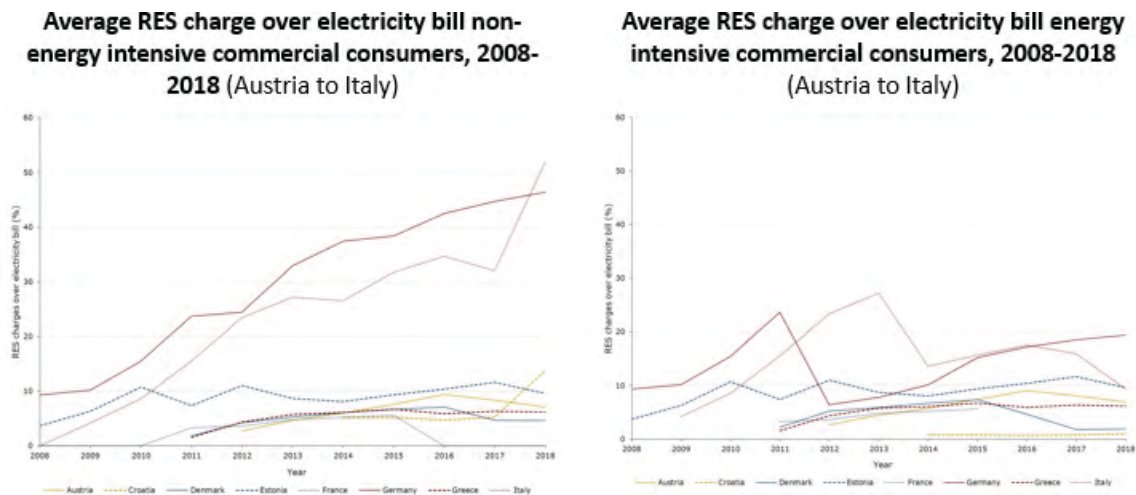
In the context of the **targeted consultation**, many industrial stakeholders argued that the EEAG have had a positive effect on facilitating the deployment of renewables. However, some respondents also argued that, the lack of conditionality of the current reductions failed to provide incentives for EIUs to decarbonise. In addition, sectors argued that effects of the distribution of the charges to other consumers were minimal. On the other hand, consumers associations argued that the burden on households and non-EIUs caused by EIUs reductions was too high.

As regards the objective of limiting the negative impact on competitiveness, the **literature review** performed by the consultant has focused on the recent economic literature that has analysed the impacts of asymmetric environmental regulations on competitiveness. Unfortunately, most of the papers do not discuss RES levies per se. The results of that review are mixed. Some studies support the risk of relocation due to stringent environmental policies. Other studies, instead, did not find evidence that exemptions from RES levies had an impact on competitiveness indicators. While it is true that the absence of empirical evidence of instances where relocation has occurred could in principle be an indicator that the EEAG were successful in minimising such risk, decisions of industries to relocate or not are multi-factorial and can hardly be traced-back to one single cause. This is in line with the results of the evaluation conducted on the 2012 ETS Guidelines⁸².

In the **targeted consultation**, sectors have argued that reductions are essential to preserve their competitiveness. Nevertheless, the **EEAG external study** shows a more complex scenario. For the two Member States (Germany and Italy) where the proportion of the RES charge over the electricity bill for EIUs would have been very high (more than 20%), the reductions granted under the EEAG allowed those Member States to keep the level of RES charges for EIUs in line with that of other European countries (see figure below).

⁸² Guidelines on certain State aid measures in the context of the greenhouse gas emission allowance trading scheme post-2012, OJ C 158, 5.6.2012, p.4.

Figure 8: Average RES charge over electricity bill for non-EIUs compared to EIUs, 2008-2018⁸³



On the other hand, the same **EEAG external study** has also shown that for some Member States the proportion of the RES charge over the electricity bill for EIUs was rather low, and therefore would have hardly created *per se* a significant competitive disadvantage for those EIUs. It should also be recalled that the choice of the financing mechanism primarily belongs to the Member States, some of which have been able to ensure a more even distribution of costs by recurring to State budgetary financing. In those cases, some unnecessary (albeit limited) competition distortions could have occurred. Some respondents to the **targeted consultation** said that the non-uniform application of the EEAG by Member States led to some distortions in the internal market. The risk of competition distortions was also mentioned by some non-governmental organisations (“NGOs”) and consumers associations in the targeted consultation, as a consequence of the lack of harmonised rules on RES financing and reductions.

Finally, the **EEAG external study** has analysed the impact of the grandfathering rule foreseen in point 197 of the EEAG in some Member States (Germany, Italy and Poland) where data was available. Even if the list of grandfathered beneficiaries is underestimated due to data availability, their relevance in terms of proportion of sales in their economy sector and country in 2017 was nevertheless quite high.⁸⁴ This shows that this provision has likely created competition distortions in those sectors.

Re-use and recycling of waste

From the results of the analysis of the different sources of input used in this exercise (see Section 4), it appears that the EEAG and the GBER have been overall effective in allowing aid to foster sustainable and smart growth in re-use and recycling of waste while avoiding disproportionate distortions of competition.

⁸³ EEAG external study.

⁸⁴ According to the results of the EEAG external study, for Germany, there are four sectors (out of 30) with shares between 5% and 10%, while all other sectors have shares below 5%. For Poland, there are at most three sectors (out of 15) with sales shares exceeding 5%, two of them being very high, between 20% and 35%. For Italy, there are 19 sectors (out of 83) with sales shares exceeding 5%, and in three of them the sales share exceeds 30%.

The targeted consultation shows that around 83% of respondents believe that GBER ensured to some extent public support for waste recycling while limiting distortions to competition (72.3% “to some extent”, 9.2% “to a large extent”).

The EEAG external study shows that at least a certain number of Member States have been able to support an important number of various recycling and preparation for re-use projects in various sectors (recycling of plastics, asphalt, cement, rubber, etc.). Surveyed granting authorities from France, Germany, Netherlands, Estonia and Sweden reported aid of around EUR 200 million. However, the EEAG external study, the targeted consultation and the review of GBER questions on the e-Wiki also show that at least some Member States have encountered difficulties in understanding the scope of Article 47 of the GBER⁸⁵ and in understanding the definition of eligible costs under this article. Those difficulties seem in some cases to have led to a suboptimal use of the article (granting of *de minimis* instead of aid under 47 GBER with then more fragile projects being implemented; rejection of projects related to own waste while they could in fact have been covered by 36 GBER⁸⁶ of which the granting authorities were not always aware). The EEAG external study and the targeted consultation also revealed that in some instances the basis aid intensity of 35% might have been too low to allow the project to go ahead.

Finally, some stakeholders pointed out during the targeted consultation that the EEAG and the GBER did not sufficiently promote the re-use and recovery of waste heat while it was allowing support for energy production by incineration from waste despite signs of overcapacity and despite the lock-in effect of such investments at the expense of recycling. Case practice (pre-notification contacts and interpretation questions⁸⁷) confirms that the assessment of waste heat recovery cases do not always fit easily in the categories of the EEAG. It also suggests that the provisions on aid to waste treatment activities that are lower in the waste hierarchy seem to sometimes be slightly easier to implement than compatibility conditions for aid for recycling, which could have a counterproductive effect.

Energy efficiency in buildings

While the data collected based on annual reports shows that many energy efficiency projects including for buildings are supported under Article 38 GBER⁸⁸, the data of annual reports, the consultation activities and the EEAG external study show that Article 39 of the GBER⁸⁹ that was aimed at facilitating support to energy efficiency projects in building through financial instruments was hardly used. Under the EEAG external study, a survey of a sample of authorities was conducted. From the sample, only Greece had granted aid under the article. The authority indicated that Article 39 of the GBER was sufficiently clear and easy to supply and confirmed that many projects had received support through the financial instrument set up for this purpose. Greece only regretted that the article did not provide for a possible cumulation of the support with *de minimis*. The other authorities from the sample which replied to the survey indicated that Article 39 of the GBER was difficult for Member States and stakeholders to understand and consequently to implement. The EEAG external study,

⁸⁵ Investment aid for waste recycling and re-utilisation.

⁸⁶ Investment aid enabling undertakings to go beyond Union standards for environmental protection or to increase the level of environmental protection in the absence of Union standards.

⁸⁷ Interpretation questions in eWiki, see also footnote xxx

⁸⁸ Investment aid for energy efficiency measures.

⁸⁹ Investment aid for energy efficiency projects in buildings.

however, also showed that some granting authorities found financial instruments as such too sophisticated as a form of aid and preferred grants under Article 38 of the GBER.

Efficiency

Have the costs and administrative burden associated with the implementation of EEAG and the related GBER rules been adequate and proportionate with respect to their achievements and benefits?

The public consultation on the Fitness Check shows that a large majority of those respondents that expressed an opinion believe that the EEAG have ensured, at least to some extent, an efficient State expenditure (31% to a large extent and 60% to some extent).

The EEAG targeted consultation shows that almost 37% of those respondents that expressed an opinion argue that the administrative costs represent between 1% and 5% of the actual amount of compensation received, while 16% think the percentage of these costs lays below 1%. Around 24% believe these costs represent 5-10%, while 18% think they are high, representing 10-20% of the compensation received. Only 2 of those respondents believe administrative costs represent more than 20% of the aid. Overall, the majority of those respondents (53%) thinks the amount of administrative costs are low with respect to the total compensation.

In addition, in the EEAG targeted consultation, those respondents that expressed an opinion rated the clarity and simplicity of application of the GBER and EEAG provisions. In general, around 66% of contributors deemed the provisions clear and simple. Almost 70% of the contributions rated the methodology for the calculation of eligible costs for investment aid to go beyond standards as clear and easy to apply. The “yes” replies are similarly distributed for the other sub-questions related to clarity and ease of use, with the highest percentage of positive replies for what regards the methodology to assess proportionality (78%) and the lowest for the methodology to assess eligible costs for energy efficiency investment aid (58%).

Table 1: Clarity and simplicity of application of the GBER and EEAG provisions ⁹⁰

⁹⁰ EEAG targeted consultation.

14. Based on your experience, to what extent are the different compatibility conditions and methodologies included in the EEAG and the GBER related provisions sufficiently clear and easy to apply ?	Number of respondents	Number of respondents	%	%
	YES	NO	YES	NO
in general terms ?	82	43	66%	34%
as regards the methodology for calculating eligible costs for investment aid to go beyond standards, in the absence of standards and early adaptation to standards under Article 36 of the GBER and points 73 to 75 of the EEAG?	56	25	69%	31%
as regards the criteria for limiting bidding processes for renewables to specific technologies (see EEAG point 126 and GBER Article 42.3)?	60	31	66%	34%
as regards the methodology for calculating eligible costs for investment aid to renewables and co-generation (CHP) projects?	58	37	61%	39%
as regards the methodology to assess proportionality of aid based on levelised cost of energy (see point 131 of the EEAG and Article 43, paragraphs 5 and 6 GBER)?	59	17	78%	22%
as regards the provisions for demonstration projects (as defined in point 19 paragraph 45 of the EEAG) and for the new and innovative renewable energy technologies (see Article 42.4 of the GBER)?	47	28	63%	37%
as regards the methodology to assess eligible costs for energy-efficiency investment aid under Article 38 of the GBER?	46	34	58%	43%
as regards the compatibility conditions (in particular the full passing on, the leverage condition, the conditions imposed on the financial intermediaries) for energy efficiency projects in buildings (see paragraphs 4 to 10 in Article 39 of the GBER)?	33	21	61%	39%
as regards the compatibility conditions for aid for Resource Efficiency (section 3.5.1 of the EEAG read in combination with section 3.2 of the EEAG)?	41	15	73%	27%
as regards the compatibility conditions (in particular the "state of the art" requirement, the "polluter pays principle" and the "treatment of the waste of others") for waste management projects under 47 of the GBER and section 3.5.2 of the EEAG?	39	20	66%	34%
as regards the methodology for calculating eligible costs for waste management projects under Article 47 of the GBER and section 3.5.2 of the EEAG?	36	15	71%	29%

Concerning the methodology of eligible costs for the category of support for environmental protection to go beyond standards, the internal review of GBER data and GBER interpretation questions confirm that Member States did not seem to encounter particular difficulties with understanding and implementing the methodology. Internal statistics show that 16 Member States reported expenditure under Article 36 of the GBER and several schemes were also notified under the corresponding provisions in the EEAG (in particular for clean vehicles going beyond standards). The analysis of case practice (in particular complaints and monitoring), however suggests that some granting authorities had difficulties understanding the concept of the counterfactual (considering that the alternative scenario being less environmentally friendly it could not qualify as valid counterfactual), in particular when they did not have previous experience in using it under a scheme approved under the 2008 EAG. As mentioned above, the methodology to determine eligible costs under Article 38 GBER obtained the lowest percentage of positive replies, although the methodology is the same as for Article 36. This is somewhat reflected in interpretation questions which for Article 38 of the GBER focus more often on eligible costs than questions under Article 36 of the GBER. It might be mainly due to the fact that for energy efficiency investments, the counterfactual is more difficult to identify and is not necessarily an "investment" as the wording of Article 38 of the GBER requires.

The EEAG external study as well as interpretation questions and case practice suggest that Article 39 of the GBER is difficult to understand and use. Several granting authorities even misunderstood the scope of Article 39 of the GBER believing that it would apply to all aid for energy efficiency in buildings while it only applies to support in the form of financial instruments (contrary to Article 38 of the GBER). Under the EEAG external study, a survey of a sample of 21 granting authorities (out of 8 Member States) was conducted. From the 17 authorities who replied to the questionnaire, only Greece had granted aid under the article. The Greek authority indicated that Article 39 of the GBER was sufficiently clear and easy to apply and that many projects had received support through the financial instrument set up for this purpose. Greece only regretted that the article did not provide for a possible cumulation of the support with *de minimis*. By contrast, the other authorities who replied to the survey (22) pointed out that the article was difficult for Member States to understand and

consequently to implement. The EEAG external study also suggested that some granting authorities found financial instruments in themselves too sophisticated as a form of aid and preferred grants.

Relevance

How well do the objectives of the EEAG and GBER still correspond to the current EU priorities?

The general objective of the adoption of the EEAG and the relevant provisions of the GBER in 2014 was to help achieving the Union's environmental and energy policy objectives while ensuring an effective and efficient State aid control and hence a level playing field within the EU.

Under the current Commission, the European Green Deal is one of the key priorities. Another key priority is reaching a Europe fit for the digital age, including a European Industrial Strategy for the green and digital transformation of the industry and small and medium-sized enterprises. Delivering on the objectives and ambitions of the twin green and digital transitions will require significant efforts and adequate support. Competition policy, and State aid rules in particular, have an important role to play in enabling Europe to fulfil its Green Deal and Just Transition objectives and the new Industrial Strategy, i.e. reaching its environmental and climate targets and creating new business opportunities and growth in a sustainable way for Europe as a whole.

The transformation efforts will require steering massive amounts of public and private capital towards sustainable investments. The public sector alone cannot stem the investments required. Therefore, in order to reap the full benefits of limited public funds, it is crucial that State aid rules continue to do their part. This means i) minimising costs for the State, industry and consumers (e.g. through competitive bidding processes), ii) ensuring that public money does not crowd out private spending, and iii) contributing to a level playing field in the Single Market.

In this respect, the EEAG and GBER related provisions should accompany the new Green Deal and its ambitious new emissions targets and the new Industrial Strategy also taking into account the policy initiatives to be developed by the Commission in this field.

In this respect, the public consultation on the Fitness Check shows that 18% of the respondents that expressed an opinion believe that the objectives of the EEAG still correspond fully to the current EU priorities, while 77% think that they correspond only partially to those priorities.

Do the EEAG and GBER still adequately address recent market developments or technological changes?

From the results of the analysis of the different sources of input used in this exercise, it has been shown that, although the EEAG and relevant GBER provisions still offer an appropriate set of tools supporting Member States, this set of tools may be insufficient to deal with technological changes, market developments and new types of measures designed by Member States in the energy and environmental field.

The EEAG and the related provisions of the GBER have created a stable and appropriate framework for public investments across the EU supporting Member States to reach their 2020 climate targets, based on proper markets functioning.

However, technology and markets evolve very rapidly in this sector making some of the rules outdated or insufficient to cater for new developments in the field. This starts to show in case practice. For instance support for low emission mobility infrastructure normally does not fall in the scope of the EEAG and the GBER although support for the deployment of such infrastructure pursues a clear environmental objective. Moreover, the deployment of that infrastructure has become one of the priorities under the Green Deal. In order to test the relevance of the EEAG and the GBER with respect to low emission mobility infrastructure and in particular verify whether the developments in this field would show that the absence of compatibility conditions in the EEAG and/or the GBER would actually constitute a gap, the Commission verified under the EEAG external study how schemes in this field had been implemented and whether projects deployed outside approved schemes had been deployed without any public support (see below sub-section on low emission mobility).

In addition, the scope of the guidelines is limited to a list of 14 specific aid measures often linked to a specific technology or method to achieve environmental protection. The EEAG therefore present the risk of not being able to deal with new types of measures or technologies that cannot be therefore assessed under the current guidelines. This happens for example when a Member State wants to achieve an overarching common objective (e.g. to reduce GHG emissions) by putting different technologies (e.g. renewable energy, energy efficiency, electricity storage, carbon capture storage and/or use, electrification, and green hydrogen projects) into competition. Some of the technologies, while contributing to the GHG emission reduction fall outside the scope of the EEAG (for example hydrogen) or could potentially fall under a category of aid measures that target a totally different objective (storage could potentially be covered by the generation adequacy provisions but the compatibility conditions are not suitable for an aid scheme in which storage competes with other low carbon technologies with the objective of reducing emissions instead of securing generation adequacy).

The public consultation on the Fitness Check shows that only 6% of those respondents that expressed an opinion believe that the EEAG are fully adapted to recent developments and technology while 82% think that the rules are just partially adapted to those developments and 12% that the rules are not at all adapted.

The EEAG targeted consultation also shows that, according to stakeholders, the EEAG and GBER provisions need to be updated to better cater for a certain number of new developments in technologies and in the market. The market developments that contributors to the targeted consultation think are the most adequately addressed by EEAG and GBER among those proposed is advanced technology for water reuse (75% positive replies). A majority of positive replies was also expressed for smart energy technologies (52%). On the contrary, stakeholders considered that zero subsidy bids and low or zero emissions vehicles should be better reflected in the new rules, alongside new technologies such as hydrogen, synthetic fuels and low carbon gas (51%) and storage (39%).

It is also noteworthy that some stakeholders claim that given the rapid technological changes and market evolution in the sector, it is important that the guidelines remain flexible enough to accommodate future evolutions.

Support schemes to electricity from RES

In the field of renewables support, the EEAG external study shows an increasing volume of ‘subsidy-free’ renewable energy projects in Europe many of them resulting from competitive bidding process in which the developers made a zero bid in the auctions. However, the EEAG external study has also shown that many of these projects benefit from other advantages beyond the subsidy linked to electricity generation price such as grid connections, seabed concessions, guaranteed low price floors, which are transferred to beneficiaries without being fully accounted for as aid.

According to the EEAG external study, for example, the subsidy-free offshore wind projects in both Germany and the Netherlands were not fully subsidy-free given the guaranteed connection to the grid. Magnus Hall, the chief executive officer of Vattenfall, which won both of the two Dutch offshore wind projects, has estimated that the value of free grid connection is up to EUR 10/MWh, which is more than 20% of the market electricity prices in the region of EUR 45/MWh, and Vattenfall paid EUR 2 million/year for the seabed sites. Moreover, in the auctions in Spain, which also delivered subsidy-free projects, though the guaranteed price floors are so low that they are unlikely ever to materialise, they still help to reduce the risk faced by the projects and can therefore be viewed as an implicit subsidy.

Aid to measures to ensure generation adequacy

In the field of generation adequacy and capacity mechanism, from the targeted consultation on the EEAG it can be observed that only a minority of those respondents that expressed an opinion consider that the EEAG adequately address recent market developments as regards storage (34%) and repowering of existing capacity.

In addition, analysing the case practice, it is noted that only half of the capacity mechanisms approved under the EEAG allow the participation of storage and that the treatment of repowering of existing capacity is not clear. The EEAG external study has also shown that the amount of available information found on repowering was very limited.

More generally, there is also scope for ensuring that the way certain mechanisms aimed at security of supply are designed do not translate into undue subsidies for domestic industries, potentially leading to over generous support and subsidy races across the Union.

Reductions for EIUs from RES financing

As explained in the 2018 report “Energy prices and costs in Europe” in the period 2008-2018 the share of renewables (including wind, solar, hydro and biomass) in the EU electricity mix increased from 17% to 33%. This increasing share of renewables had a downward impact on the wholesale market. A recent study conducted by the EC (Trinomics et alia, 2018) estimates that one percentage point increase in the share of renewables in Germany results in a decrease of the wholesale electricity price by 0.5 EUR/MWh. The same report explains that since 2008 the energy component, which consists mostly of wholesale prices, remained on a steadily decreasing trajectory and diminished both in absolute and relative terms. However, the share of the regulated part of retail prices is growing, reaching 40% EU-wide. RES support costs

decreased in the last reporting year by 1% for households, but increased by 7% for medium industrial and by 17% for large industrial consumers. RES levies ranged from 1 to 73 EUR/MWh across reporting countries. In this context, several respondents to the targeted consultations argue that EIUs cannot yet benefit from falling RES costs. They point to the fact that the financing costs of ongoing RES schemes will still be charged to consumers for several years. In addition, stakeholders mentioned that the increasing RES penetration might lead to an increase in system costs and network charges.

As confirmed by the results of the targeted consultation, the changes to trade intensity and electro intensity of the sectors included in Annex 3 and 5 of the EEAG, which are based on 2009-2011 data, seem to be substantial. On electro-intensity, the 2018 report “Energy prices and costs in Europe” shows that energy intensity fell in most of the highly energy intensive sectors studied in manufacturing, including steel, refineries and paper. There were, however, manufacturing sectors in which energy intensity increased (i.e. cement, grain products, sawmills and chemicals). In non-manufacturing, energy intensity decreased in sectors like land transport and other mining although increased in electricity-gas and agriculture. Energy intensity overall decreased or remained relatively stable in the less energy intensive sectors (manufacturing and non-manufacturing). In addition, in the context of the Commission’s case-practice, several Member States have also argued that, since 2011, some sectors that are not eligible would now meet the requirements under the EEAG. As regards trade intensity, the data used for the revision of the Carbon Leakage List 2021 adopted by the Commission showed considerable changes for sectors that are eligible under the EEAG.

Low emission mobility infrastructure

The number of State aid schemes for alternative fuel infrastructure in the transport sector that are notified to the Commission is increasing. The EEAG external study showed that all examined infrastructure projects, included projects conducted outside of approved aid schemes, had been conducted with some form of public support (aid under an approved scheme, EU support under the CEF) with the exception of one charging station in a shopping mall that has been established for the use of the customers. With the Green Deal and the ambition to have 1 million charging/refuelling points in the EU by 2025 (while there are currently only 164,000⁹¹) it is likely that the number of support schemes will increase. However, neither the GBER (apart from aid for ports), nor the EEAG contain any provisions on support for alternative fuel infrastructure (charging stations and re-fuelling stations). Until now, those schemes, if notified to the Commission, have been assessed directly under the Treaty. In addition, the review of case practice and the EEAG external study show that aid intensity in these projects can vary significantly (range between 20% and 100%) and that schemes can vary also in the way that proportionality is ensured (call for applications, bidding process, administrative setting of the subsidy). Almost all schemes (10 out of 11) approved by the Commission entailed the granting of aid through a bidding process. Interest for the market is increasing; complaint cases start to be filed to the Commission on alleged distortive subsidies in this field.

Table 2: Overview of beneficiaries’ financing regarding Commission decisions⁹²

⁹¹ Updated on 22.01.2020 based on data from <https://eaf0.eu/alternative-fuels/electricity/charging-infra-stats#>.
⁹² EEAG targeted consultation.

Commission decision	Direct public contribution (avg.)	Other financing source		Geographical scope
		Public involvement of different nature (avg.)	Private contribution (avg.)	
SA.46574	34%	66%		Country wide
		of which ca. 40% of beneficiaries are municipalities and publicly owned undertakings	of which ca. 60% of beneficiaries are privately owned undertakings	
SA.48190	69%	31% (beneficiaries are publicly owned undertakings)		Urban
SA.37322	51%	49% (beneficiary is a public agency)		Urban/harbor
SA.45694	32%	68%		Urban
		of which ca. 80% of beneficiaries are publicly owned undertakings	of which ca. 20% of beneficiaries are privately owned undertakings	
SA.38769	34%	43% (beneficiaries are municipalities/provinces)	23%	Urban and country wide

Table 1: Overview of financing of electric charging stations projects⁹³

Project	Direct public contribution	Public involvement of different nature	Private contribution	Geographical scope
SIRVE	Project was not implemented			
CIRVE	50%		50%	Country wide
ELMO	100%			Country wide
Ladestationen Wien	5%	95% (beneficiary is publicly owned company)		Urban
BENEFIC	20%		80%	Cross-national
Flens Kommun	50%	50% (beneficiary is municipality)		Urban
T1 Mall of Tallinn			100%	Urban
SmartEnCity	100%			Urban
Corri-Door	50%		50%	Country wide
GREAT	50%		50%	Cross-national

Energy efficiency

Case practice and consultation with other services reveal that the energy efficiency market is developing with new actors appearing: energy service companies and other aggregators. The question arises whether the inclusion of these new actors among those eligible for public support is warranted and to what extent, to further promote their contribution to energy efficiency and be on an equal footing with their competitors. Neither the EEAG nor the GBER fully recognise their role and possible needs. Several stakeholders have also deplored this in the targeted consultation and the EEAG external study confirmed that Member States were starting to include ESCOs in energy efficiency support schemes.

Decarbonisation measures

On the basis of case practice and interaction with Member States, it appears that Member States start to consider developing schemes based on CO2 emission reductions. The EEAG

⁹³ EEAG targeted consultation.

and GBER do not prohibit this type of support schemes but the limited scope of the EEAG does not offer Member States the possibility to set up schemes for CO₂ emission reductions that would cover all possible technological solutions entirely under the EEAG as some technology fields are not covered by the Guidelines. In addition, Member States are starting to consider granting aid for CO₂ emission reductions not just in the form of investment aid but also in the form of operating aid (contracts for difference based on the operation of the facility). If the solution implemented to reduce CO₂ emissions is based on an energy efficiency measure, the EEAG limits the support to 5 years, which could limit the possibilities to set up those schemes while the reason for limiting the support to 5 years do not seem to apply anymore.

Resource efficiency – circular economy

Under the Green Deal and the new Industrial Strategy, the EU will have to convert its linear economy to a more circular economy. This will require many transformations including new technologies and rearranged value chains from generated waste to waste applications. The current rules address the possible need for public support for the re-use and recycling of waste, but may be insufficient for the higher challenge of the circular economy (see infra). The need to reflect objectives linked to the circular economy in the context of the forthcoming revision of the state rules has been further recognised in the Circular Economy Action Plan.⁹⁴

Coherence

To what extent are the EEAG and the relevant GBER provisions coherent with other relevant EU rules which have similar objectives?

As already mentioned, the European Green Deal and the new Industrial Strategy are key priorities of the current Commission. Competition policy, and State aid rules in particular, have an important role to play in enabling Europe to fulfil its green and digital transformations in a way that maintains the level playing field within the EU. The EEAG and GBER related provisions will have to accompany the new Green Deal (including its ambitious new emissions targets) and the new Industrial Strategy, also taking into account recent and new regulatory developments (e.g. the Clean Energy Package, Clean Mobility Package, Circular Economy Package).

In this respect, the public consultation on the Fitness Check shows that, although 75% of those respondents that expressed an opinion believe that the EEAG are fully coherent with changes in relevant EU legislation which have occurred since the rules were adopted, there are still 25% of those respondents that think that the EEAG is only partially or not at all coherent with those changes.

Support schemes for RES and generation adequacy measures

On the basis of the analysis of the different sources on input used in this exercise, it appears that there is scope for the EEAG to better reflect in these areas the efforts of the EU legislator

⁹⁴ A new Circular Economy Action Plan For a cleaner and more competitive Europe. COM(2020) 98 final.

to promote an effective Energy Union and further support its objectives in the implementation.

In 2018 and 2019, the EU legislator adopted the Commission' proposals for the "Clean energy for all Europeans" package, which consists of eight legislative acts.

With the Clean Energy Package, the EU has agreed a comprehensive update of its energy policy framework to facilitate the transition away from fossil fuels towards cleaner energy and to deliver on the EU's Paris Agreement commitments for reducing greenhouse gas emissions.

The three legislative acts from the Clean Energy Package with a stronger interaction with the EEAG are:

- The recast Renewable Energy Directive⁹⁵, which entered into force in December 2018, and that for the first time defines legislative rules for RES support schemes;
- The amended Electricity Directive⁹⁶;
- The Electricity Market Regulation⁹⁷, which includes detail provisions on capacity mechanisms.

In this respect, the EEAG targeted consultation has shown that a majority of those respondents that expressed an opinion ask for an alignment of the EEAG with the new regulations included in the Clean Energy Package, in particular the new Renewables Energy Directive and the Electricity Market Directive and Regulation. As such, less than 50% of those respondents believe that the EEAG and the related GBER provisions are fully coherent with the Renewables Directive (34%), the Electricity Directive (42%) and the Electricity Market Regulation (38%).

Our internal analysis of this new legislation has also shown that, although the new provisions on RES schemes and capacity mechanisms build to a large extent on the EEAG and on case practice, there are some topics in which some adjustments, fine-tuning and potential alignment of the guidelines may be necessary in order to be fully coherent with the relevant EU rules and further sustain the integrity of the single market. For example:

- Treatment of self-consumption and energy communities in RES schemes;
- Treatment of food-based biofuels;
- CO₂ emissions limits for installations participating in capacity mechanisms (i.e. the 550gr of CO₂/kWh rule);
- Treatment of support mechanisms for the security of supply, including the requirement of an implementation (market reform) plan before a capacity mechanism is introduced.

⁹⁵ Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources.

⁹⁶ Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU.

⁹⁷ Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity.

As regards the treatment of food-based biofuels, the findings of internal analysis are confirmed by the results of the EEAG targeted consultation, in which several associations pointed at the inconsistency between the EEAG provisions and the Recast Renewable Energy Directive, on the one hand, and the Energy Tax Directive (ETD) 2003/96/EC, on the other hand. The same conclusion was also reached by the Evaluation of the ETD⁹⁸.

Reductions from environmental taxes and from RES financing

On the basis of the analysis of the different sources on input used in this exercise, it appears that the EEAG rules on reductions from environmental taxes and from RES financing are, in principle, coherent with the Energy Tax Directive (ETD) 2003/96/EC.

The current rules in the EEAG distinguish between reductions in or exemptions from environmental taxes imposed in order to increase the costs of environmentally harmful behaviour (section 3.7.1.), and reductions in levies imposed to ensure the funding for ambitious renewables policies by limiting the negative impacts of those costs on the competitiveness of EIUs (section 3.7.2). The State aid rules for reductions of environmental taxes that fall under the ETD, are designed to be fully in line with the ETD. While section 3.7.2. requires a limitation of reductions to certain sectors and the establishment of maximum aid intensities calculated as a percentage of total amount of the levy concerned, no such requirement exists for exemptions from environmental taxes subject to the ETD. Provided the minimum rates established in the ETD are respected, taxes subject to the ETD are block exempted under Article 44 GBER. As the ETD is currently the only type of harmonised environmental tax, all schemes under the ETD were block exempted so far.⁹⁹

As regards the coherence of the EEAG in this field, the evaluation exercise has however shown that there could be some situations where reductions from charges that are very similar could be subject to different State aid requirements under the EEAG depending on whether the charge is qualified as a levy under Section 3.7.2. or an energy tax under the ETD.

The results of the **internal analysis** show that Member States have the discretion to decide how to finance their renewables policies (the State budget, an energy tax under the ETD, other energy taxes, or levies) and how to enforce them. In addition, recent Court jurisprudence¹⁰⁰ has clarified that some charges which were previously regarded as levies, would rather qualify as indirect taxes, as long as there is an obligation for the consumers to pay. They could hence potentially be covered by the ETD.

Some respondents to the EEAG **targeted consultation** have also pointed out inconsistencies between the eligibility requirements under the two sets of rules. They also indicated that the proportionality requirements are not aligned.

The Commission has recently announced the review of the ETD, as one of the initiatives of the European Green Deal, to align it with climate and environmental objectives.

⁹⁸ SWD(2019) 329 final, available at https://ec.europa.eu/taxation_customs/sites/taxation/files/energy-tax-report-2019.pdf.

⁹⁹ Only one decision was adopted under 3.7.1. “first situation” in case SA.43468, Taux réduits de taxe intérieure sur la consommation finale d'électricité (TICFE) in France, which is the tax that replaced the CSPE in 2016..

¹⁰⁰ Judgment of the Court of 18 January 2017 in case C-189/15 - IRCCS - Fondazione Santa Lucia, ECLI:EU:C:2017:17 and Judgment of the Court of 25 July 2018 in case C-103/17 - Messer France, ECLI:EU:C:2018:587.

Environmental aid

In general, the consultation activities and internal review of case practice and secondary legislation indicate that the EEAG and the GBER are coherent with environmental legislation (Industrial emissions directive, EU Waste legislation, Air quality directive, etc.), with EU legislation on energy efficiency and with EU legislation on alternative fuels. A certain number of frictions have however been observed in case practice or pointed out in the consultation activities:

- a) Waste hierarchy: the compatibility conditions for aid for the re-use and recycling of waste are coherent with EU legislation and the objective of the circular economy in that they allow support for waste treatment solutions that are in line with the circular economy objective and which are higher up in the waste hierarchy. However, compatibility conditions for recycling seem to stakeholders to be more complex than for waste-to-energy projects (generally eligible under aid for renewables or aid for cogeneration) and aid for landfilling and incineration without energy recovery (often eligible for regional aid or sometimes structured as SGEI). This might create the risk that the rules incentivise more waste treatment activities that are lower ranked in the waste hierarchy. The fact that the provisions do not explicitly provide for aid for separate collection or for sorting, might also create the risk that it would appear that those activities cannot be supported while they are necessary for allowing recycling.
- b) Innovation Fund: Cumulation with the Innovation Fund is not always possible because the Innovation Fund Regulation contains no provision authorising cumulation with aid up to the funding gap (while it authorises such cumulation with EU funds).
- c) Energy performance of buildings: the EEAG and the GBER do not explicitly foresee the possibility to obtain support for both the energy efficiency and the installation of self-generation of renewable energy for residential buildings. The compatibility conditions for both sets of measures are different, including when the aid is granted through financial instruments while EU legislation obliges Member States to renovate buildings to render them not just energy-efficient but also energy performant.
- d) ETS: While the EEAG contain a provision requiring the Commission to verify the coherence between the aid scheme and the ETS system, such requirement does not exist under the GBER. Under the ETS, certain CO₂ emission benchmarks have been established. The ETS normally pushes undertakings to reach those benchmarks. Those benchmarks do not, however, qualify as Union standards within the meaning of the EEAG and the GBER. If those benchmarks are lower than Union standards, undertakings could obtain aid for investments aimed at reducing their emissions down to the level of the benchmarks, which would remove part of the natural incentive of the ETS.
- e) The somewhat unclear status of aid for waste heat capture and supply or upgrade to useful energy makes the EEAG and GBER incoherent (at least in appearances) with the Renewable Energy Directive and the Energy efficiency Directive.

V. IPCEI Communication

Effectiveness

To what extent has the IPCEI Communication achieved the relevant objectives?

In 2014, the Commission adopted the IPCEI Communication. Before the adoption of the IPCEI Communication, the then applicable RDI Framework 2006¹⁰¹ and the EEAG contained criteria, based on Article 107(3)(b) TFEU, for the assessment of aid for IPCEI¹⁰². Under those rules, aid for IPCEIs could be authorised, subject to a case-by-case assessment, up to the level that proved necessary to overcome the pronounced market failures and risks that hindered their deployment. Before the introduction of the IPCEI Communication, Article 107(3)(b) had been mainly used to approve aid for some large RDI projects¹⁰³, and in the transport sector¹⁰⁴. However, between the entry into force of the RDI Framework 2006 and 2012, Member States had not notified any RDI State aid for the execution of an IPCEI, and the few cases that were approved did not involve aid for RDI.

Following the entry into force of the IPCEI Communication, the Commission adopted two decisions approving State aid for an IPCEI concerning a transport related infrastructure project¹⁰⁵, and two decisions approving State aid for the execution of IPCEIs in the area of RDI (concerning key new technologies), one in December 2018¹⁰⁶ and one in December 2019¹⁰⁷.

The limited case practice on the application of the IPCEI Communication, and the fact that the first decision for a large, integrated RDI project under the Communication was only adopted in December 2018 (and the second in December 2019) may constitute limitations in evaluating these rules. The lack of expertise on the IPCEI Communication and experience in its application is also confirmed by the fact that a very large percentage of respondents to the

¹⁰¹ Community framework for State aid for research and development and innovation, OJ C 323, 30.12.2006, p. 1–26.

¹⁰² Chapter 4 of the Community framework for state aid for research and development and innovation (2006) and Point 3.3 of the Community guidelines on State aid for environmental protection (2008). According to those rules, essentially, eligible projects should have been very large and risky, generate positive external effects in the economy at large, and preferably rely on cross-border collaborations between undertakings in a significant number of Member States.

¹⁰³ See the Commission decisions on aid measures concerning microelectronic technology falling within the scope of the MEDEA+ programme (Cases N 701/A/2001, France – R&D State Aid MEDEA+, N 702/B/2001; N 207/2002; N 62/2003; N 8/2003 and N 478/2003), with reference to the 1996 R&D Framework, point 3.4.

¹⁰⁴ See the Commission decisions on the planning phase of a tunnel between Denmark and Germany (Case N 157/2009 – Denmark – *Financing of the planning phase of the Fehmarn Belt fixed link*), the channel tunnel rail link project (Cases N 576/1998 and N 706/2001 – United Kingdom - *The Channel Tunnel Rail Link*) and the financing of the Belgian TGV (Case N 800/1996 – *Belgian TVG*).

¹⁰⁵ See Commission decision C(2015) 5023 final on the *Financing of the Fehmarn Belt Fixed Link project* (SA.39078).

¹⁰⁶ On 18 December 2018, the Commission approved State aid from four Member States (France, Germany, Italy and the United Kingdom) for research and development and first industrial deployment activities in the microelectronics sector under the IPCEI on Microelectronics. See Commission decision C(2018) 8864 final on the *IPCEI on Microelectronics* (SA.46578, SA.46705, SA.46590, SA.46795).

¹⁰⁷ Subsequently, on 9 December 2019 the Commission approved the granting of State aid from seven Member States (Belgium, Finland, France, Germany, Italy, Poland and Sweden) to enable ambitious and risky research and development activities in the area of batteries. See Commission decision C(2019) 8823 final on the *IPCEI on Batteries* (SA.54793, SA.54794, SA.54796, SA.54801, SA.54806, SA.54808, SA.54809).

public consultation did not express their views on the rules, by choosing the options “these rules are not relevant for me” or “I do not know”¹⁰⁸.

At the same time, the emergence of two large IPCEIs in the area of research and innovation in the last two years (on Microelectronics and Batteries) gives a positive indication that, thanks to the clarifications brought by the IPCEI Communication, Member States are more prepared and confident in notifying aid for the execution of IPCEIs and are increasingly considering IPCEI as one of the most suitable instruments allowing for significant investments into strategic value chains and innovative technologies, which could otherwise not be deployed. The important role of IPCEIs in this respect is also recognised in the Commission’s Communication on “A New Industrial Strategy for Europe” (“New Industrial Strategy Communication”)¹⁰⁹, which refers to IPCEIs as “a tool with a proven track record” to mobilise private and public finance for large-scale projects across borders¹¹⁰, and in the Green Deal Communication¹¹¹.

The recommendations made in November 2019, for nine strategic value chains (three pre-existing and six new) by the Strategic Forum for IPCEI in the report “Strengthening Strategic Value Chains for a future-ready EU industry”¹¹² (“report of the Strategic Forum”) are a very good indication of those strategic values chains which could be the subject of future coordinated actions by Member States, including by way of large and integrated IPCEI.

This indication appears to be confirmed by the views that Member States and other stakeholders expressed in the context of the targeted consultation¹¹³ and the public consultation on the Fitness Check¹¹⁴, which reveal that the IPCEI Communication is regarded as an appropriate instrument to achieve the objective of facilitating the emergence of IPCEIs. More specifically, more than 85% of respondents in the targeted consultation (mostly Member State authorities, but also private companies, business organisations, trade associations and research organisations) took the view that the IPCEI Communication has the potential to facilitate the emergence of IPCEIs and provide Member States with a tool to address market failures in financing large, integrated projects of a strategic importance for the EU, and approximately 90% of respondents in the public consultation considered that the IPCEI Communication has achieved the objective of facilitating the emergence of IPCEIs, of which 26% “to a large extent”.

Feedback received through contributions to the two above-mentioned consultations indicates that the IPCEI Communication allowed for clearer and more consistent rules on the assessment by the Commission of the compatibility of IPCEIs. This view was expressed by

¹⁰⁸ For this reason, percentages indicated in this section in relation to the public consultation only encompass respondents who have expressed their views on the question considered and do not take into account the neutral types of responses “these rules are not relevant for me” and “I do not know”.

¹⁰⁹ COM(2020) 102 final, https://ec.europa.eu/info/sites/info/files/communication-eu-industrial-strategy-march-2020_en.pdf

¹¹⁰ Ibid., p. 12.

¹¹¹ See Green Deal Communication, p. 9.

¹¹² <https://ec.europa.eu/docsroom/documents/37824/attachments/2/translations/en/renditions/native>.

The recommendations were taken on board by the Commission, as announced at the COMPET Council of 28 November 2019.

¹¹³ The targeted consultation “Evaluation of the Communication on Important Projects of Common European Interest (IPCEI), in the context of the Fitness Check on State aid policy”, was carried out between August 2019 and October 2019.

¹¹⁴ The public consultation was open between April and July 2019.

more than 85% of contributors to the public consultation; within those, 20% of respondents indicated that the IPCEI Communication led to clearer rules only partially. Open comments – confirmed by case practice – suggest that some notions and definitions have proved particularly difficult to interpret, such as those of “first industrial deployment”, “commercial activities” or “spill-overs”.

Concerns were also expressed by participants in the targeted consultation with regard to the eligibility requirements. In fact, only 47%¹¹⁵ of the participants in the targeted consultation confirmed the appropriateness of the eligibility requirements (e.g., concept of “integrated project”, minimum number of participating Member States, positive spill-over effects) to meet their objectives.

In light of the two compatibility decisions on integrated IPCEIs in the area of RDI adopted to date under the IPCEI Communication¹¹⁶, the concept of “integrated project” appears to have met its objective of allowing for the emergence of projects that see the interlinked involvement of several Member States and numerous undertakings across value chains. In fact, the IPCEI on Microelectronics saw the involvement of four Member States and 29 entities (including SMEs) directly participating in the project, headquartered both in and outside the EU, and the IPCEI on Batteries that of seven Member States and 17 direct participants (including SMEs). At the same time, some concerns have been raised by both Member States and undertakings with regard to the interpretation of the notion of “integration” and the limited scope of the definition of “integrated project”. Therefore, it may be necessary to slightly amend/ improve the definition of integrated project, without affecting the high level of ambition on the actual integration of the various individual components.

With regard to the minimum number of Member States that is required for a project to qualify as an IPCEI, at present, the Communication only requires that “normally [projects] involve more than one Member State”¹¹⁷. It emerged from the consultations that this requirement alone might not be sufficient to allow for a geographically balanced participation of Member States in an IPCEI, which, if not achieved, could contribute to the undesired effect of deepening the imbalances in the economic development of EU countries or regions.

In addition, experience in cases suggests that the minimum number of participating Member States as currently set in the IPCEI Communication (“more than one”) may not be adequate to ensure that the benefits of an IPCEI are not confined to the financing Member States but extend to a wide part of the Union. These observations appear to be particularly valid both for value chain-type IPCEIs, be they projects encompassing research and innovation and first industrial deployment (“FID”)¹¹⁸, or projects in other areas, including environmental protection, energy and transport. At the same time, it would be recognised that it might not be applicable to cases concerning certain individual infrastructure projects (e.g. a bridge or a tunnel connecting two Member States), which due to their specific nature may see the

¹¹⁵ Of those, more than half were Member State authorities. Positive views were also registered by private companies, business organisations, trade associations and a research organisation.

¹¹⁶ Commission decisions in the IPCEI on Microelectronics (SA.46578, SA.46705, SA.46590, SA.46795) and IPCEI on Batteries (SA.54793, SA.54794, SA.54796, SA.54801, SA.54806, SA.54808, SA.54809).

¹¹⁷ The IPCEI Communication provides for an exception to this general rule for “interconnected research infrastructures and TEN-T projects that are of fundamentally transnational importance because they are part of a physically connected cross-border network or are essential to enhance cross-border traffic management or interoperability” (footnote 1, paragraph 16).

¹¹⁸ The phase preceding mass production and fully-fledged commercial activities.

participation of only one or two Member States but allow for benefits beyond the funding Member States.

While the Fitness Check could not fully assess the economic impact of the COVID-19 crisis, the need to ensure that IPCEIs have a truly European character appears to be even more important in the current circumstances. In fact, Member States may use IPCEIs as one of the instruments towards a speedy recovery of the European economy and to reinforce strategic value chains. As also indicated in the Communication on Next Generation EU¹¹⁹, such recovery should be fair and inclusive. Therefore, on the basis of the assessment conducted, it appears necessary to slightly increase the minimum number of participating Member States for a project to qualify as IPCEI, unless a smaller number of participants is justified by the very nature of the project (e.g., single but important infrastructure projects).

As concerns the requirement that IPCEIs create positive spill-over effects, so that the benefits of the project are not limited to the undertakings or sectors directly involved therein, practical experience so far suggests that this eligibility criterion is appropriate to meet its objective of ensuring that the European economy or society as a whole benefit from IPCEI. The two RDI integrated IPCEI approved so far under the IPCEI Communication, in fact, have enabled the creation of positive spill-over effects and ecosystems throughout the EU, including in the form of the sharing of the projects' results with the European scientific/research community and industry, beyond the participating Member States and companies. At the same time, responses to the general public and targeted consultations indicate that additional guidance as regards the types of spill-over activities that the Commission would consider acceptable in order for the project to comply with the requirements set out in the IPCEI Communication would be extremely useful. This appears to be particularly true for environmental, energy and transport projects, for which no guidance can be drawn from the already adopted decisions declaring aid for the promotion of the execution of an IPCEI compatible with the internal market.

In addition, both responses to the consultations and experience in cases suggest that additional clarity is necessary as concerns the difference between positive spillover effects (or positive externalities) and other "spillover-enabling" activities. While the existence of the former is assessed when verifying the eligibility of a project as IPCEI, additional spillover-enabling activities may be required from the participating undertakings, for example to balance out potential negative effects on competition evidenced in the context of the Commission's compatibility assessment.

It may therefore be necessary to provide informal guidance as concerns the identified uncertainties on the basis of the already approved IPCEIs.

Do the Communication's positive indicators (e.g. open nature of the project, active coordination role of the Commission in the project's design and/or selection and/or governance, co-financing by a Union fund) meet their objectives?

The replies to the targeted consultation concerning the appropriateness of the IPCEI Communication's positive indicators to meet their objectives suggest that they allow for the

¹¹⁹ Communication from the Commission, Europe's moment: Repair and Prepare for the Next Generation, COM(2020) 456 final of 27.05.2020

achievement of those objectives to a certain extent only. In fact, 35% of the respondents consider the positive indicators inappropriate to that end.

Most of the comments on the positive indicators gathered through both the public consultation and the targeted consultation, focused on the role of the Commission. According to the respondents, the Commission does not appear to be involved to a sufficient extent in the design of the IPCEI and the selection of the projects. In view of the participants in the consultation, the strengthening of the role of the Commission as a facilitator of the IPCEI would also contribute to ensuring the openness of the projects to all Member States.

With regard to the openness of IPCEIs, currently, making it possible for all interested Member States to participate in a project is a mere recommendation. However, especially in the case of EU-wide integrated projects, as recognised by some participants in the consultations, it may be crucial that all Member States are given a genuine and timely opportunity to join an IPCEI, if interested. In past cases, the Commission has encouraged openness of IPCEIs to all interested Member States; in addition, the activity of the Strategic Forum for IPCEI and of ‘Alliances’ (e.g., the European Battery Alliance¹²⁰) contributed to the attainment of an inclusive and open approach to IPCEIs. The importance of the openness of IPCEIs to all interested Member States is even more evident today, when the EU needs to engage in a recovery path that can be effective only if it is collective. Therefore, it appears necessary to introduce limited amendments to the Communication to ensure that all Member States are given a genuine opportunity to join, if interested.

In addition, as noted by many of the contributors to the consultations, the current provisions do not appear to ensure the open nature of IPCEIs for their entire duration, since the Communication does not regulate the situation in which additional Member States or additional individual projects from the participating Member States wish to access an already existing and approved IPCEI. Based on the consultations, as well as exchanges between the Commission services and Member States in this respect, it appears that a significant level of uncertainty is perceived by stakeholders as to the procedure that should be followed in such cases, which might on the one hand compromise the existence of a sufficient level of transparency and legal certainty, and on the other discourage Member States involved in an already existing IPCEI to maintain the overall project open for accessions following its original approval by the Commission. In this respect, it should be noted that the Commission to date does not have experience in the application of the IPCEI Communication in cases concerning the accession of additional Member States to an already approved IPCEI. In light of this, it may not be appropriate, for the time being, to introduce amendments in the IPCEI Communication in this respect. Based on the experience to be gained once such a situation arises, informal guidance may be provided to address the identified uncertainty.

With regard to the openness of the IPCEI for the interested undertakings, responses to the consultations revealed that the fact that Member States’ selection of beneficiaries on the basis of open and non-discriminatory procedures is only a positive indicator, and not a mandatory requirement, does not allow to reach the objective to a satisfactory extent. At the same time, experience in cases suggests that Member States, based on their individual administrative culture and national requirements, may follow different processes for the selection of beneficiaries. In some Member States, the obligation to organise open and non-discriminatory

¹²⁰ https://ec.europa.eu/growth/industry/policy/european-battery-alliance_en.

tenders for the selection of the beneficiaries may significantly delay the start of the project, or affect the possibility for those Member States to timely join the discussions concerning a potential IPCEI from its design phase.

Finally, in respect to the positive indicator of co-financing of the IPCEI by a Union fund, while the provision of the indicator itself appears to be appropriate to ensure that an IPCEI targets an important objective of EU interest, it emerged from the consultations that problems were encountered in its practical application. In particular, on the one hand, there appears not to be sufficient synergies between EU funding from centrally managed funds and national funding in the context of IPCEIs (including purely national resources and funds under shared management); on the other hand, uncertainties and lack of clarity were registered with regard to the applicable cumulation rules, which are currently not provided for in the IPCEI Communication. In the New Industrial Strategy Communication¹²¹, the Commission acknowledged the importance of allowing for an effective combination of national and EU instruments to leverage investment across strategic value chains while respecting financial and competition rules. On the basis of this assessment, it may therefore be necessary to clarify the applicable cumulation rules.

Is the ‘matching clause’ meeting its objectives?

A significant majority of the respondents in the targeted consultation indicated that the so-called “matching clause”, provided in point 34 of the IPCEI Communication, is appropriate to meet its objectives, while a minority of the respondents, accounting for approximately half of those expressing a positive view, considered that it is not.

At the same time, the results of the targeted consultation and, to a lesser extent the public consultation, reveal that a significant number of Member States and EU companies find it too difficult, or even impossible, to demonstrate that competitors located outside the EU have received or will receive aid of an equivalent intensity, due to the lack of transparency of third country subsidies. In addition, the three-year period was considered to be too limited in order to capture all relevant public funding provided to third country competitors for comparable projects. Fewer respondents having a positive or neutral view on the matching clause and its capability to meet its objectives, made clear in their replies to the dedicated question in the targeted consultation that the emergence of an IPCEI should only be driven by a genuine EU interest and not by the need to match industries or economic activities that are highly subsidised by third countries.

From the purely technical point of view, given that the IPCEI Communication already allows for aid levels up to 100% of the individual projects’ funding gap on the basis of a wide list of eligible costs, it would seem inappropriate to allow for aid above 100% of the funding gap. Even if it is demonstrated that third countries provide subsidies effectively exceeding 100% of the funding gap, following such a practice might result in aid which is not proportionate and kept to the minimum necessary, and which would possibly increase the risk of distortion of competition and subsidy races. The matching clause in this context should be regarded as a signal that the Commission will take into account in its assessment, the level and type of subsidies offered by third countries for comparable projects.

¹²¹ New Industrial Strategy Communication, p. 12.

Based on the above considerations, it does not seem appropriate to amend the matching clause.

Efficiency

Is the IPCEI Communication well-structured and sufficiently clear?

The contributions received in the context of the targeted consultation revealed that the IPCEI Communication is considered well-structured and sufficiently clear by the majority of respondents. At the same time, according to a significant number of contributors, some of the definitions and notions referred to in the IPCEI Communication could have been further or more clearly explained.

Critical views on clarity were expressed by many respondents in the context of both the public consultation and the targeted consultation, especially in relation to (i) positive spill-over effects, and (ii) the notion of “first industrial deployment”.

With regard to positive spill-over effects, as mentioned above, responses to both the public consultation and the targeted consultation indicated that additional guidance (including examples) on the types of spill-over activities that the Commission considers acceptable would have been extremely useful for Member States and other stakeholders. While this observation is horizontally applicable to all types of projects, the need for additional guidance is particularly strong for environmental, energy and transport projects (point 23 of the Communication), for which the already adopted decisions on Microelectronics and Batteries cannot provide suitable examples. As explained above, based on the assessment conducted, it appears necessary to provide guidance in this respect on the basis of the already approved IPCEIs.

With regard to the criteria for projects comprising of first industrial deployment, approximately 30% of the respondents in the targeted consultation took the view that the IPCEI Communication is not sufficiently clear, while 41% had a positive view. As concerns the reasons behind these responses, it emerged from both consultations that the demarcation line between (i) RDI activities (as defined in the RDI Framework and in the GBER) and first industrial deployment, and (ii) first industrial deployment and mass production, is not clear and creates uncertainties for both Member States and undertakings.

Experience in cases also confirms the perceived lack of clarity as concerns the notion of first industrial deployment. In this respect, the definition contained in footnote 1 of the Annex to the IPCEI Communication proved not to satisfactorily clarify the types of activities included in the definition, or to even create further confusion when establishing that first industrial deployment does not cover “mass production” nor “commercial activities”, as the latter notions are not defined in the IPCEI Communication. Therefore, both replies to the consultations and experience in cases demonstrates that the definition of first industrial deployment may need to be further clarified, including by better defining the notion of “mass production” and “commercial activities”.

Results of the targeted consultation suggest that the criteria guiding the Commission’s compatibility assessment, as set out in the IPCEI Communication, are considered sufficiently clear by the large majority of respondents. In fact, only approximately 12% and 15% of the contributors took the opposite view with regard to the necessity and proportionality

conditions, and the prevention of undue distortion of competition requirement, respectively. This is also confirmed by the contributions to the public consultation, the large majority of which recognised that the rules have allowed for the maintenance of a competitive internal market.

With regard to the assessment of necessity and proportionality of the aid, difficulties in the practical application of the rules appear to have been mostly encountered with regard to the identification of the individual projects' funding gaps. On the one hand, this was noted by approximately 59% of the respondents in the targeted consultation, on the other hand, Member States also reported such difficulties to the Commission services in the context of case practice. Based on the experience in the two approved integrated IPCEI cases in the area of research and innovation, the provision of templates and guidance for the identification of the funding gap to the Member States involved proved to be an effective tool to clarify the type of information that the Commission expected to receive. However, the provision of such templates and guidance on a case-by-case basis to the Member States participating to each IPCEI risks not to allow for the desirable level of transparency, nor to ensure that all Member States and interested parties are aware about the information needed for the conduction of the Commission's assessment on the necessity and proportionality of the aid. In this regard, it should be noted that reliable templates for the funding gap for integrated projects in areas other than research and innovation may not be readily available due to lack of case practice. In addition, experience in cases suggests that templates are sector- and project-specific and cannot replace evidence from the beneficiaries' internal documents (e.g., the business plans).

Lack of clarity on how to identify an individual project's funding gap also emerged in the case-practice as a problem encountered by the Member States' authorities and undertakings, since the IPCEI Communication does not specify the indicative time-period – which may differ depending on the life cycle of the technology – in relation to which mass production-related cash flows should be presented to the Commission. In its case practice, the Commission services have assisted the participating Member States in developing templates and provided guidance on how to present the required information on funding gaps.

In addition to the above, some of the requirements included in the IPCEI Communication were regarded by a significant number of contributors to the consultations as potentially constituting obstacles to a wider involvement of SMEs (including start-ups) in IPCEIs. According to a significant number of respondents, the requirements of the IPCEI Communication are too complex for SMEs, which might have high innovation potential but be discouraged from taking part in an IPCEI in light of the resource-intensive notification and assessment procedure. The complexity of the Communication requirements, in addition, would not be justified in cases where it would be borne by SMEs and/or undertakings benefitting from low aid amounts (e.g. below comparable GBER thresholds) in the context of an IPCEI, in relation to which there would be a lower risk of distortive effects. A minority of Member States participating in the targeted consultation took the view that State aid to SMEs for the execution of IPCEIs should be block-exempted. On the other hand other Member States stressed the importance that the Commission continues to assess ex ante the compatibility of State aid for the execution of IPCEIs (in the context of notification procedures), considering the lack of extensive experience in applying the IPCEI

Communication¹²² and the need to ensure that competition is not distorted in the internal market.

In this respect, the importance of encouraging and facilitating the participation of SMEs in IPCEIs has also been recognised by the Commission in the SMEs Strategy¹²³, which identifies this as one of the key actions to improve innovative SMEs' access to finance and leverage private investments. In light of the crucial role that SMEs play in the EU economy, facilitating their participation in IPCEIs also appears very important to contribute to a fast recovery following the COVID-19 crisis. Based on the analysis conducted, it therefore seems necessary to marginally amend the IPCEI Communication on the basis of the Commission's decision-making practice, to ensure that the Commission's assessment of State aid to SMEs is not disproportionate compared to the normally limited risk of competition distortions it causes.

Finally, experience with cases suggests that the introduction of a claw-back mechanism proved to represent a suitable solution to further ensure that especially large amounts of aid granted under the IPCEI Communication remain proportionate and always limited to the minimum necessary, also in cases where the funding gap analysis is based on pessimistic or inadequate projections about future revenues. Even though a claw-back clause is not explicitly provided for in the IPCEI Communication, a claw-back mechanism was introduced in the IPCEI on Batteries to ensure that projects that might turn out to be more successful than forecasted, generating extra net revenues beyond projections, return an appropriate share of the additional realised benefits to the financing Member State. To enhance the predictability of the Commission's assessment of the proportionality condition, it may be appropriate to codify the Commission's practice by introducing an explicit reference to claw-back mechanisms in the IPCEI Communication.

With respect to avoidance of undue distortion of competition, a minority of contributors to the targeted consultation (mostly Member States) indicated that definitions are broad and it is difficult to understand in advance how the Commission will apply them in practice. A minority of Member States noted the fundamental importance of the Commission's assessment of State aid for IPCEIs, and indicated that if not addressed at overcoming market and systemic failures or societal challenges, the IPCEI instrument may risk undermining effective markets, spur protectionism and eventually reduce European businesses' access to global value chains. In this regard, it should be noted that the Communication, in its introduction, already indicates that IPCEIs make it possible to pool financial resources, knowledge and expertise "to overcome important market or systemic failures and societal challenges which could not otherwise be addressed"¹²⁴.

With regard to the question whether the IPCEI Communication contributed to reducing the risk of subsidy race within the EU, almost 50% of the respondents to the public consultation indicated that it did. Of the other respondents, a minority indicated that the Communication did not reduce the risk of subsidy race, while others (of which approx. one third were Member State authorities) indicated that it did so only partially. The economic consequences

¹²² At the time when the public consultation and the targeted consultation were carried out, the Commission had approved under the IPCEI Communication State aid for only one integrated project involving four Member States, the IPCEI on Microelectronics (December 2018).

¹²³ COM(2020) 103 final, p. 15 and ff.

¹²⁴ Point 3 of the IPCEI Communication.

of COVID-19 crisis may require clearer rules concerning the treatment of conditions linked to the location of the beneficiaries' activities to ensure that State aid under the IPCEI Communication does not bring effects that could potentially be contrary with the EU cohesion policy¹²⁵. In fact, in the post-COVID-19 scenario, the availability of public and private resources for IPCEIs may become more limited than before, and differences in budgetary capacities between Member States even wider.

The notion of first industrial deployment, including the eligible costs related thereto, are not regarded as sufficiently clear by the majority of respondents to the general public and targeted consultations.

In particular, some replies to the consultations as well as experience in cases demonstrated that the concepts of “commercial activities” and “mass production” do not provide for a clear boundary between activities and costs that are eligible to be covered with State aid and those that are not. For instance, the reference to “commercial activities” currently contained in the IPCEI Communication does not clarify whether early test, early sample or feedback sales generating very low revenues compared to normal commercial activities, qualify as commercial activities. Similarly, the reference to “mass production” included in footnote 1 of the Annex to the IPCEI Communication is considered not sufficiently clear and not reflecting the real challenges that innovative companies face. In particular, the fact that the IPCEI Communication lacks a clear definition of the concept of “mass production” could lead, according to two respondents, to an excessively rigid approach that may not allow the Commission to sufficiently take into account the level of risk that characterises first industrial deployment. It may therefore be appropriate to clarify the notions of “first industrial deployment” and “commercial activities”, on the basis of the Commission decision-making practice so far.

With regard to procedure, the targeted consultation revealed that approximately 65% of respondents consider that the gathering of necessary information for the Commission's assessment is not satisfactory. In particular, it was noted that the notification process is too administratively burdensome and the gathering of information, differently from other aid instruments, is currently not facilitated through templates or information sheets.

One of the concerns often raised by the stakeholders was that the administrative procedure to obtain the approval of the State aid has been too lengthy. While this would be justifiable in light of the amount and complexity of the information that the Commission is required to assess, it would on the other hand risk to delay the start of projects, some of which may have important innovation content and be extremely time-sensitive. In this respect, however, it should be noted that the public consultation and the targeted consultation were carried out between July and October 2019, when only the administrative procedure on the IPCEI on Microelectronics was completed. A significant reduction in the time needed to conclude the administrative procedure could be registered already with the second IPCEI supporting research and innovation, approved under the IPCEI Communication (IPCEI on Batteries, approved in December 2019). In fact, in an evolution from the IPCEI on Microelectronics, for which the decision followed extended contacts between the participating Member States

¹²⁵ Currently, the IPCEI Communication provides at point 44 that “the Commission will assess the potential negative effects on trade including the risk of a subsidy race between Member States that may arise in particular with respect to the choice of a location”.

and the Commission, the IPCEI on Batteries could be approved after only five months from pre-notification. This can be regarded as an indicator of the fact that the difficulties encountered by the Member States in applying the rules in the first IPCEI supporting research and innovation assessed under the Communication could be due to the novelty of the rules and the absence of case practice on their application. In addition the Commission's initiative to set up a Battery Alliance high level forum together with the Member States provided the necessary political impetus which also benefitted the progress and conclusion of that IPCEI.

The need for additional clarity emerged from the consultations and case practice as concerns certain notions and conditions for State aid for IPCEIs is confirmed in view of the COVID-19 crisis. In fact, providing additional clarity and legal certainty may allow also Member States that do not have practical experience in its application yet to be able to make use of the IPCEI Communication to fund projects in key value chains that otherwise would not be deployed.

Relevance

How well do the objectives of the IPCEI Communication still correspond to the needs within the EU?

On the basis of the information collected in the course of the public consultation on the State aid rules, the objectives of the IPCEI Communication appear to still correspond to the current EU priorities to the majority of respondents, with the 6% only taking the opposite view in response to this question. This is confirmed by the recommendations made in the report of the Strategic Forum, which refer to IPCEIs as one of the instruments to strengthen European industrial value chains through joint or well-coordinated investment and action.

In the report, the Strategic Forum identified – in addition to Batteries, High performance computing, Microelectronics for which coordinated action is already taking place – six key strategic value chains for coordinated actions, including in the form of IPCEIs namely Connected, clean and autonomous vehicles, Smart health, Internet of Things (which is about microelectronics and digital solutions), Low CO₂ Emissions Industry, Hydrogen Technologies and Systems and Cybersecurity. This demonstrates that IPCEIs are recognised by both Member States and the industry as an instrument that can play a role in the implementation of a renewed and modern industrial policy¹²⁶, as well as in the attainment of the objectives set out in the Green Deal Communication¹²⁷ and the digital transformation. The achievement of these ambitious objectives requires massive investments, both private and public (at EU and national level), inter alia in research, innovation and modern infrastructure. In light of this, individual actions from Member States may not be appropriate or sufficient. It can be expected that to successfully develop breakthroughs in the pursuit of the energy, environmental and climate objectives, coordinated pooling of efforts, expertise and resources from different Member States to achieve critical mass are necessary to create new markets. This might include RD for and first industrial deployment of the new green, climate neutral and other innovative technologies – including in the area of digitisation – and for their production processes, which could have a significant impact on the entire EU economy. As also recognised by the Green Deal Communication¹²⁸, IPCEIs represent an important

¹²⁶ New Industrial Strategy Communication, p. 12.

¹²⁷ Communication on the European Green Deal, available at https://ec.europa.eu/info/sites/info/files/european-green-deal-communication_en.pdf.

¹²⁸ See Green Deal Communication, p. 9.

instrument to enable the shift towards a clean and truly circular economy. In addition, IPCEIs also serve as a model in the implementation of the European industrial strategy, as presented in the New Industrial Strategy Communication¹²⁹, which highlights how IPCEIs enable Member States to pool financial resources and connect players along key value chains to enable large-scale investments into cross-border project, which would not see the light of the day without the aid.

The relevance of the IPCEI Communication is confirmed in the current circumstances, in which the EU Member States need to collectively recover following the crisis caused by the COVID-19 outbreak. In the post-COVID-19 scenario, European companies may face significant financial constraints and may not have the means to invest in ambitious projects and breakthrough technologies. In this context, public financing of economic activities may be crucial to also incentivise private investments, allowing the EU economy to recover speedily while engaging in the twin green and digital transition. IPCEIs may constitute an instrument allowing Member States to pool resources and join forces to address contemporary societal challenges and market or systemic failures that may not otherwise be overcome.

To what extent does the IPCEI Communication adequately address recent market developments or technological changes?

The large majority of respondents to the public consultation took the view that the IPCEI Communication is – at least partially – well adapted to recent developments in markets and technology. In fact, only 13% of the respondents (which did not include Member State authorities) took the opposite view when replying to this question.

This positive feedback on the capability of the IPCEI Communication to address recent technological or market technologies is also confirmed by experience in cases, suggesting that the IPCEI Communication is sufficiently flexible in allowing to adapt to the different technologies or activities that have formed or may form in the future the subject of the proposed projects.

On the one hand, both the integrated projects approved so far concern RDI and FID activities, on the other, the report of the Strategic Forum for IPCEI clearly suggest that the IPCEI Communication is regarded as a relevant instrument to also address market failures in areas other than RDI (e.g., environmental protection, transport, digital etc.).

In particular, IPCEIs are explicitly cited as a way to overcome market failure for large-scale development of technology in the New Industrial Strategy communication¹³⁰ and for the ambitious objectives of the Green Deal. It is noteworthy that the New Industrial Strategy Communication also calls for a revision to clarify the participation conditions and improve SME participation.

Only a minority of respondents to the targeted consultation suggested that specific criteria, in addition to the general criteria already set out in the IPCEI Communication, may be necessary for projects in certain areas, such as digitisation and Artificial Intelligence.

¹²⁹ New Industrial Strategy Communication, p. 12.

¹³⁰ New Industrial Communication, p. 12.

Coherence

To what extent is the IPCEI Communication coherent with other relevant EU rules which have similar objectives?

No concerns were raised by Member States or other stakeholders with regard to the possible incoherence of the IPCEI Communication with other EU rules. This is also confirmed by the results of the public consultation, which indicate that over 95% of the stakeholders (including all Member States participating in the consultation) consider the rules coherent, at least partially. Only one individual contributor indicated that the IPCEI Communication is not at all coherent with other EU rules.

The overall positive feedback in this respect can be due to the fact that, differently from the sectorial rules applicable to IPCEIs before 2014, the IPCEI Communication applies horizontally to projects in any sector of the economy that qualify as an IPCEI on the basis of the eligibility criteria listed in Section 3 of the Communication. Additional, specific criteria apply to RDI or environmental, energy or transport projects.

At the same time, the list of EU strategies and policies identified in paragraph 15 of the IPCEI Communication does not appear to be entirely contemporary, since it does not take into account EU initiatives launched after 2014. It may therefore be necessary to update that section of the Communication with relevant, recently adopted initiatives.

In addition, with regard to coherence of the IPCEI Communication with other Commission initiatives, as explained above, the Green Deal Communication¹³¹, as well as the New Industrial Strategy Communication¹³² and the SMEs Strategy Communication¹³³, refer to IPCEIs as an instrument to allow for the achievement of their respective objectives. It may therefore be appropriate to also include in the IPCEI Communication a reference to those recent, contemporary communications, which may guide the Member States' future investments into IPCEIs.

As explained above in relation to the prevention of undue distortion of competition, the current crisis caused by the COVID-19 outbreak increased the need to ensure that State aid under the IPCEI Communication does not bring effects that are in contrast with the EU cohesion policy and which may risk deepening the imbalance between Member States' economies. Therefore, a clarification of the Commission's assessment of relocation clauses may be necessary.

¹³¹ Green Deal Communication, p. 9.

¹³² New Industrial Strategy Communication, p. 12.

¹³³ SMEs Strategy Communication, p. 17.

VI. RAG / relevant GBER provisions

Effectiveness

To which extent the Commission focused its ex ante control on cases with a significant impact on the internal market? In particular, to which extent the notification threshold/trigger and the dividing line between GBER/GL were appropriately defined?

One of the objectives of SAM that was launched in 2012 was to focus the enforcement on cases with the biggest impact on the internal market¹³⁴. The results of the internal research based on the case statistics provide an overview of the development on cases per procedure. They show an increased use of GBER from a total number of 939 for the period 2007-2013 up to a total number of 1,051 for the period 2014-2019. At the same time a significant reduction of the number of notified cases on regional aid occurred, from a total number of 453 for the period 2007-2013 to only 101 in the following period¹³⁵. One potential explanation for this development is the simplification and extension of the regional aid provisions under GBER, which provided incentives to Member States to grant regional aid under GBER. At the same time, the reduced number of notified cases might lead to the conclusion that the Commission managed to focus on the most distortive cases and that the overall objective of SAM was achieved.

However, the results of the case study by the external consultant show that compared to the total number of notified regional aid cases and in particular compared to the number of large investment projects, the amount of new process innovation cases with smaller aid amounts is relatively high¹³⁶. Taking into account the high effort required for the assessment of the latter cases that was concluded from the case study in the context of the evaluation, relatively small aid amounts, and low risk of affectation of competition or trade¹³⁷, it appears that the objective to focus on the most distortive cases was not fully achieved for this particular type of cases. The possibility to grant regional aid for diversification of existing establishments into new products and new process innovations is a specific exception to the general rule that regional aid for large enterprises in c-areas is only allowed for initial investments that create new economic activities. The focus on this type of cases has not proven to be effective.

To which extent the rules at stake led to a clearer, more consistent and more coherent State aid architecture?

One of the objectives of the targeted consultation was to receive deeper insights on potential shifts away from regional aid that might indicate issues related to the clarity and consistency of the current rules. The results confirm changes to other aid types, but also shifts to other infrastructure measures or non-aid measures¹³⁸. Stakeholders explained this development by

¹³⁴ https://ec.europa.eu/competition/state_aid/modernisation/index_en.html

¹³⁵ The number of notified cases takes into account all types of notifications, including on the regional aid maps, large investment projects, individual aid, and schemes.

¹³⁶ For the period current period, in total 23 large investment projects were notified, compared to 13 regional aid cases with smaller aid amounts that still need to be notified according to RAG.

¹³⁷ See section 5.1 of the RAF external study.

¹³⁸ According to the results of the targeted consultation, 35% of the respondents confirm a shift to other categories of aid, 16% to non-State aid measures, 19% to other infrastructure measures, while 24% disagreed to any changes, and 35% did not know the answer (multiple replies possible).

different factors, including the broadened scope of GBER, the introduction of the Commission Notice on the Notion of State aid and infrastructure grids. Other reasons that were provided are the high complexity and administrative burden that lead to the preferential use of other types of aid with less strict rules or even the downsizing of investment projects to avoid the notification procedure¹³⁹. A need for simplification the rules was confirmed by the literature review¹⁴⁰.

A second objective of the consultation was to gain further evidence on the perceived clarity, appropriateness, and ease of implementation of the regional aid provisions in GBER and the RAG. While the overall design of the rules was perceived as positive¹⁴¹, an additional need for clarification on definitions in the regional aid rules was raised with the qualitative comments and occasional contradictions between GBER and RAG highlighted¹⁴². This mixed finding is supported by the results of the public consultation, whereas 11.5% of the respondents agreed that the State aid modernisation led to clearer rules on regional aid, while the relative majority of 60.7% only partially agree to this statement and even 11.5% disagree¹⁴³.

The updated sector exclusion that was introduced with the 2014 regional aid provisions aimed to provide a clearer picture about the sectors that are eligible for aid to reduce any overlaps with other State aid frameworks. The results of the targeted consultation confirmed that the majority of stakeholders agreed to the appropriateness of the sector definitions¹⁴⁴. However, an additional need for clarification was raised during qualitative replies, for example by adding concrete NACE codes of the excluded sectors to the rules, which would ease the implementation¹⁴⁵. The high number of interpretation questions on this point also confirms that the sector definitions were not sufficiently clear to the beneficiaries and granting authorities.

Finally, over the past period the positive effect of the GBER regional aid provisions has been seen, as they facilitated a reduced total number of notifications from 453 to only 101 and a steady increase of aid under GBER from 939 to 1,051. However, the internal assessment of the interpretation questions confirms implementation issues of the Member States and a relatively high number of questions compared to other State aid rules, for example related to initial investments in favour of new economic activities, relocation rules, or the change in the

¹³⁹ See section 5.3 of the RAF external study and replies to the targeted consultation on question 1.

¹⁴⁰ Evaluation of the use of funds within the framework of the joint task "Improvement of the regional economic structure" (GRW) in Thuringia for the period 2011 – 2016 (2017).

¹⁴¹ According to the results of the targeted consultation to question 4 in total 34% of the respondents agreed that the eligibility conditions on regional aid in GBER are appropriate and justified, while 23% disagreed, and 37% could not provide an answer. For RAG, 21% of the respondents agreed to the appropriateness of the eligibility conditions, while 17% disagreed and in total 61% could not provide an answer.

¹⁴² See results of the targeted consultation on questions 4 and 5.

¹⁴³ See results to answer 1 of the public consultation on the RAG.

¹⁴⁴ The targeted consultation assessed the appropriateness of the sector exclusion per sector. Coal sector: 28% agreed, 68% neutral or could not provide an answer, 5% disagreed; shipbuilding sector: 12% agreed, 67% neutral/could not provide an answer, 21% disagreed; fisheries and agricultural sector: each 27% agreed, 60% neutral/could not provide an answer, 13% disagreed; steel sector: 25% agreed, 67% neutral/could not provide an answer, 8% disagreed; synthetics fibre sector: 23% agreed, 68% neutral/could not provide an answer, 10% disagreed; energy sector: 16% agreed, 58% neutral/could not provide an answer, 26% disagreed; transport sector: 23% agreed, 56% neutral, could not provide an answer, 26% disagreed; airport sector: 28% agreed, 61% neutral/could not provide an answer, 16% disagreed; operating aid to principal activity of "financial and insurance activities" etc: 21% agreed, 71% neutral/could not provide an answer, 8% disagreed.

¹⁴⁵ See results of the targeted consultation on question 7.

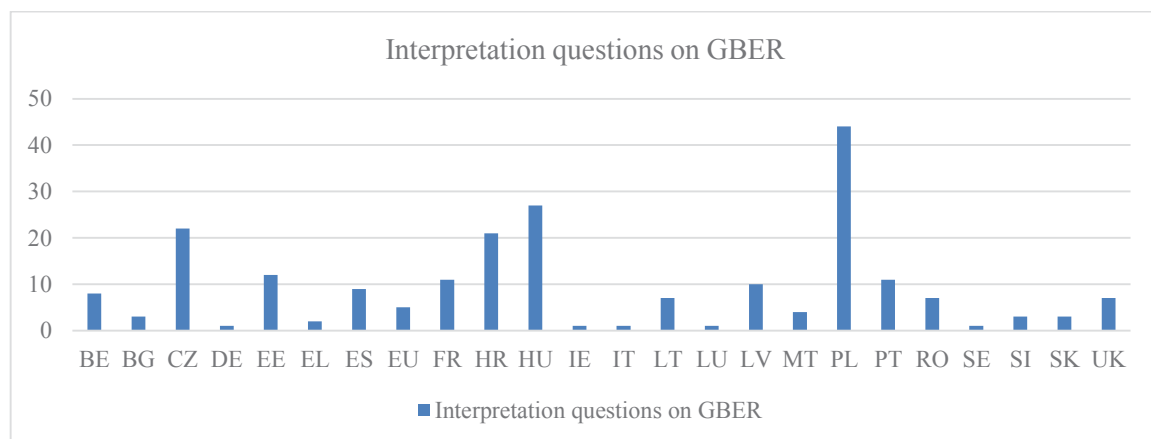
production process. It appears that there is still room for improvement of the regional aid rules, more specifically in clarifying some definitions and ensuring consistency, in particular also between the GBER and the RAG.

To which extent the rules at stake lead to an improved compliance by Member States?

The results of the monitoring exercise overall provide a positive picture of the implementation of the 2014 GBER regional aid provisions by Member States. However, the exercise also revealed some elements of non-compliance. The experience from case practice shows recurring problems to the eligibility assessment of investment projects and the incentive effect of the aid, the definition of replacement investments, application of cumulation rules and the Deggendorf provisions. Some rare cases even revealed breaches of major regional aid principles¹⁴⁶.

The total 221 interpretation questions that were received on the regional aid provisions of articles 2, 13, 14, and 15 of GBER between July 2014 and December 2018 show the interpretation and implementation issues of Member States with the current rules. Recent internal statistics show that compared to other State aid rules, regional aid receives the highest number of questions on GBER. Looking at the statistics related to the interpretation questions, the number of questions per Member States is differing as described in Figure 5, whereas Poland represents the Member State with the most questions. For the Member States not included in the figure, no interpretation questions were received.

Figure 1: Overview of interpretation questions per Member State.¹⁴⁷



To which extent the State aid rules contributed to a competitive internal market and reduced the risk of subsidy races in the EU? In particular, has the market failure been appropriately identified, have the incentive effect and proportionality rules been appropriately defined, and is the 'black list' appropriate or not?

The intervention logic of the regional aid framework illustrates the link between the need to eliminate market failures and the objective to guarantee an equal level playing field. The

¹⁴⁶ According to the results of the internal evaluation on the interpretation questions (eWiki)

¹⁴⁷ According to the results of the internal evaluation on the interpretation questions (eWiki).

market failures that the regional aid framework aims to tackle are defined as externalities, information asymmetries, coordination problems, market power, and public goods, which justify the intervention of the state.

One important element of the regional aid framework that contributes to the creation of an equal level playing field are the regional aid maps. A relative majority (40%) of respondents to the targeted questionnaire confirm that an effective coverage of the disadvantaged regions could be achieved and the development gap between regions reduced. Only 21% of the respondents disagreed, while 39% were neutral or did not know the answer. This observation was supported by qualitative replies to the consultation.

One aspect of the RAF external study was to analyse the relative importance of regional aid during investment decisions of companies. The analysis confirmed the results of the ex post evaluation of regional aid conducted in 2012¹⁴⁸. Based on the replies received during expert interviews, it has been demonstrated that regional aid represents one of the relevant elements in the decision making process, but is not the major decision making factor. According to the experts, the level of importance depends on different factors, such as the sector, company size, and origin of the beneficiary, as well as on the type of investment. The expected regional aid is taken into account during the net present value (“NPV”) and internal rate of return (“IRR”) calculations of beneficiaries¹⁴⁹. Based on these results and the fact that regional aid is not the only decision making factor, it has been shown that the proportionality rules of the RAG are appropriate and limit the aid to the minimum necessary. If the aid was disproportionately high, then it would not just represent an additional factor leading to the investment decision, but would represent the key factor. The public consultation confirms the efficient spending, whereas 40.9% of the stakeholders confirmed that the regional aid rules ensure efficient State expenditure, 50% agreed to some extent, and 9.1% disagreed.

One of the major changes with the 2014 RAG included the reduction of maximum aid intensities¹⁵⁰. The econometric analysis assessed whether despite the modification an incentive effect still exists by looking at the investment changes of the regions. The results confirm that the most disadvantaged regions spent the highest amount of aid (relative to their GDP)¹⁵¹, which indicates that regional aid is well-targeted. The results showed also a positive correlation of private investment with the reduction of maximum aid intensities, providing preliminary suggestive evidence that the changes in aid intensity may affect actual investment flows.

The econometric analysis aimed to gain some evidence on the incentive effect for large enterprises. The results of the analysis show that the investment growth rate for large enterprises in c-regions remained positive despite the restriction in investment eligibility, the decrease of maximum aid intensities, and for some regions even a change of status. This investment growth rate however seems to be slightly lower compared to non-assisted areas in c-regions having experienced a drop in aid intensity or a restriction in eligibility. Those results have to be interpreted with caution since the sample only covered a very limited time

¹⁴⁸ https://ec.europa.eu/competition/consultations/2013_regional_aid_guidelines/study_rag_evaluation_en.pdf

¹⁴⁹ See Section 4.1.1 of the RAF external study.

¹⁵⁰ As in Section 4.2.1 of the RAF external study.

¹⁵¹ A detailed overview on the development of regional aid spent relative to its GDP is available in Appendix 8 of the external evaluation study. The figures are based on an analysis based on the Scoreboard Database, EC search database, TAM Database and the European Commission.

period and since not all results can be considered as statistically significant, which allows only to draw limited conclusions. It is not clear where the investments not taking place in c-regions were finally implemented. It is therefore difficult to draw conclusions on the effectiveness based on that analysis alone (for example, if regional aid rules were able to steer investments away from the more developed c-regions to more disadvantaged regions, it would be in line with the overall objective of the regional aid rules). The reviewed literature suggests that regional State aid has had a positive impact on both employment and investment, at least at the level of SMEs and on manufacturing sector¹⁵². According to the interviewed experts, investment incentives are more important for companies in the course of establishing themselves in the European Economic Area (“EEA”) and for companies from outside the EU considering investment in the disadvantaged areas of the EEA¹⁵³.

Have there been any barriers to achieving the desired objectives of the analysed State aid rules? If yes, which barriers?

Internal figures on the reduction of a-regions over time illustrate a positive development related to the reduction of the development gap between the regions of the European Union. This development is in line with the most recent Eurostat statistics on GDP and unemployment¹⁵⁴ and confirmed by the results of the public consultation, where a relative majority confirms that the regional aid provisions allow for the development of disadvantaged areas in the EU (24.5%), while 69.8% agree to some extent, and only 5.7% disagree¹⁵⁵. These results are confirmed by several stakeholders that replied to the targeted consultation. In their view, the attraction of additional investments to disadvantaged regions with the help of well-targeted aid contributed to this development. Regional aid is therefore still considered as an important tool to promote regional development¹⁵⁶. By implication, this positive development can be linked also the impact of the revised regional aid framework 2014.

One objective of the effectiveness evaluation is to reveal potential barriers that might prevent the achievement of State aid objectives. The main objectives related to regional aid that are defined in the intervention logic are the development of disadvantaged areas within the EU, to ensure a level-playing field, and to limit effects on trade and competition to a minimum.

A first barrier to the objectives of regional aid would result from the current design of the regional aid maps. While the majority of respondents to the targeted consultation confirmed an effective coverage of the regions and reduction of disparities, the use of outdated data for the calculation of the maps was criticised since they are based on GDP statistics from 2008-2010 and no longer reflect the actual reality. According to the feedback received from the targeted consultation, the current design of the rules is lacking flexibility for regions to react to recent developments, such as economic shocks. The treatment of capital regions, which are often economically advanced compared to surrounding regions, is another issue related to the maps, which affects the economic development of the surrounding regions¹⁵⁷. This finding is supported by the results of the public consultation, where only 26.8% of the respondents

¹⁵² As in Section 3 of the RAF external study.

¹⁵³ As in Section 9.1 of the RAF external study.

¹⁵⁴ See Eurostat regional data for 2016-2018.

¹⁵⁵ See result on question 5.3 to the public consultation.

¹⁵⁶ See qualitative replies to question 1 of the targeted consultation.

¹⁵⁷ See answers to question 2 of the targeted consultation.

agreed that the RAG are well adapted to recent market developments, while 58.8% only partially agreed and 14.6% disagreed¹⁵⁸. The flexibility and statistics concern might even gain importance in the context of the COVID-19 outbreak which caused a sharp drop of the European economy¹⁵⁹ with medium and long-term consequences that are hard to predict.

Even though restrictive rules on regional aid for large enterprises in c-regions were considered as a second major barrier (in particular by the affected granting authorities), it needs to be reminded that the more restrictive rules for c-regions were introduced with the objective to support the economic development of the even more disadvantaged a-regions. However, for the affected granting authorities in c-areas, the impact of the revised rules for c-areas was a reduced investment level due to relatively lower maximum aid intensities compared to a-regions¹⁶⁰. A specific effect was reported by c-areas that border a-areas. The aid intensity difference between those regions is limited to 15% in theory. However those c-areas consider that the difference is much more impactful since in practice, due to the restrictions on eligibility, it is very difficult to grant aid at all to large enterprises¹⁶¹.

The internal research and case study revealed also a high number of withdrawn regional aid notifications, in particular related to investment projects in c-regions¹⁶². The survey of granting authorities complemented this finding by providing figures about the actual number of aid requests by large enterprises and the high rejection rate. According to the granting authorities, for 561 projects of large enterprises no regional aid could be granted¹⁶³. The RAF external study therefore looked at the history of those denied projects during the survey of granting authorities and the case study. Results show that out of 561 aid applications by large enterprises, 121 projects were implemented in the same region. Since for the majority of projects only insufficient or no information about the implementation status is available, only limited conclusions can be drawn from this results. However, it shows that not for all investment projects that apply for regional aid, an actual impact on the investment decision exists.

Figure 2: Investment projects of large enterprises without regional aid support¹⁶⁴

¹⁵⁸ See answer on regional aid to question 12 of the public consultation.

¹⁵⁹ Reference to EU economic forecast 2020.

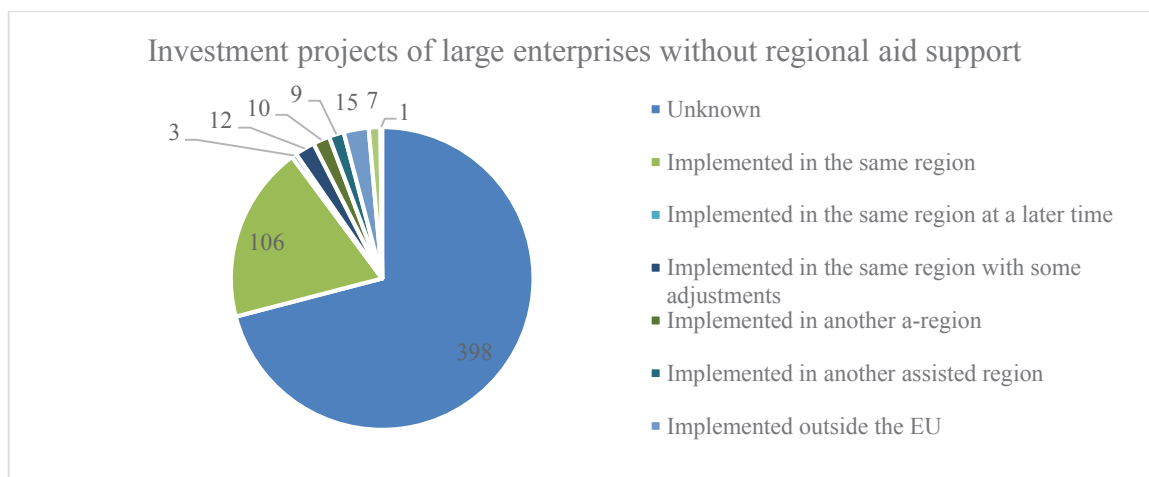
¹⁶⁰ See chapter 4.3 on the restrictions on large enterprises in c-regions of the RAF external study.

¹⁶¹ See answer to question 2 of the targeted consultation.

¹⁶² See Section 4.3 of the RAF external study: For ten out of eleven notifiable investments by large enterprises in c-regions, the notifications were withdrawn.

¹⁶³ As in Section 4.2.4.1 of the RAF external study.

¹⁶⁴ For more details, see Section 4.2.4.1 of the RAF external study.



According to the interviewed experts, the restrictions of the regional aid framework are considered as major constraints by investors, especially in the case of a counterfactual scenario outside of the EU that is often related to less strict rules and which puts the assisted European regions even more in competition with third countries, such as China or the US.

The results of the case study show also that the effort related to the RAG assessment of the compatibility of regional aid for investments of large enterprises in c-regions and in particular for cases related to new process innovation is not justified for cases with low aid amounts.

Efficiency

To which extent the rules at stake lead to lower the administrative burden for the public authorities and for the beneficiaries by simplifying the rules for lower amounts of aid (GBER, de minimis Regulation)?

The results of the internal research revealed an uptake of regional aid under GBER during the period 2014-2020 and in parallel a reduction of the notifications. At the same time, during the targeted consultation a relative majority of respondents confirmed that regional aid provisions in GBER 2014 are clear, sufficiently detailed, appropriate, and easy to implement. We can conclude from these results that the revised GBER provisions had a mostly positive impact on granting authorities, due to an improved and faster implementation that leads to a reduction of administrative efforts.

To which extent the common principles resulted in lower administrative burden for the Commission, public authorities and beneficiaries?

Contrary to the positive development on the regional aid provisions in GBER, the updated RAG lead to a different conclusion related to the administrative effort for beneficiaries and granting authorities. In general, the results of the targeted consultation, the case study, and expert interview confirmed a high level of administrative burden related to the notification procedure for regional aid, especially related to investments focused on new process innovation¹⁶⁵. In particular the ease of implementation of the compatibility and eligibility

¹⁶⁵ As mentioned in Section 5.3 of the RAF external study and the replies to question 5 of the targeted consultation.

criteria were perceived by a considerable number of respondents to the targeted consultation (20%) as difficult to implement (69% were neutral or could not answer the question, while 11% agreed that the provisions are easy to implement). According to experts, the lengthy and burdensome procedure due to the level and depth of confidential information that needs to be provided, bears the risk to lose the investment. It was reported that some investors reduce their project scope or are discouraged to apply for aid when they risk to have to go through a notification procedure. The case study evaluated the effort related to the daily case practice by measuring for example the average number of questions included in a request for information or the number of meetings required. Based on the results, the effort for stakeholders and the Commission is substantially higher for cases related to investments in c-regions compared to a-regions. This observation in particular applies to the new process innovation type of cases. The results show that the effort required for this type of cases is not in balance.

A particularly negative impact was reported for the rules on new process innovation, which are difficult to comply with and create high administrative burden based on the qualitative replies of respondents to the targeted consultation. A lack of clarity of the definitions is concluded from the high number of interpretation questions that leads to legal uncertainty for granting authorities and investors. Respondents to the targeted consultation confirmed that the incentive effect analysis for investments in c-areas, especially for cases on new process innovation, depends on a range of speculative criteria (prediction of sales, prices, or costs) that might be difficult to control (internal company data) and therefore leads to additional burden.

In 2017, a revision of the relocation rules was performed. The updated rules were overall considered as appropriate among respondents to the targeted consultation¹⁶⁶. However, the implementation of relocation rules involves still difficulties for example in the context of audits, where difficulties on the verification of anti-relocation statements occur, which cause a high administrative burden.

The case study provides an in-depth analysis of the effort brought up by the Commission and granting authorities¹⁶⁷ by balancing the ex-ante risk of the aid negatively affecting competition and trade between Member States with the additional burden created by the necessity to notify and assess the case under the RAG 2014-2020. For the current period, the Commission received 11 (pre-) notifications of regional aid to notifiable investment in c-regions¹⁶⁸. All of the 11 cases concerned projects on new process innovation by large enterprises. Based on the assessment, for 8 out of these 11 cases, the burden appeared to be unjustified, given the low risk of the aid to distort competition and affect trade between Member States and the relatively low aid amounts (ranging between EUR 0.1 to 4.6 million¹⁶⁹). Given the high number of withdrawals, the high burden for granting authorities and the Commission services related to the eligibility and compatibility analysis seems to be unjustified. The introduction in the regional aid rules of the possibility to grant regional aid

¹⁶⁶ See replies to question 6 of the targeted consultation.

¹⁶⁷ As in Section 5.1 of the RAF external study.

¹⁶⁸ See results of internal evaluation.

¹⁶⁹ Regional investment aid granted to a large undertaking to diversify an existing establishment in a 'c' area into new products or new process innovations, remains subject to the notification obligation, independent of the aid amount. This lead to the individual notification of rather small cases that are falling under this category.

for diversification of existing establishments into new products and new process innovations, without further specifications, is therefore considered as having led to inefficiencies.

Relevance

How well do the original objectives of the rules at stake still correspond to the needs within the EU?

The primary objective of the regional aid framework is the EU's cohesion objective that is enshrined in the Treaty on the Functioning of the European Union (Art. 174), which aims to strengthen economic and social cohesion by reducing disparities in the level of development between regions.

The results of the targeted consultation confirm a positive development on regional development and a reduction of disparities between disadvantaged regions. This development suggests an improved economic situation thanks to well-targeted regional aid that contributes to the overall objective of regional aid.

The results of the public consultation confirm the relevance of regional aid, whereas 31.5% agreed that the rules still correspond to the current EU priorities, 61.1% partially agreed and only 7.4% disagreed¹⁷⁰.

Regional aid will remain also relevant in the future to contribute to new objectives, such as the sustainable green transition of the European Union that was manifested with the Green Deal Communication, published in December 2019¹⁷¹, or the Industrial¹⁷² or Digital¹⁷³ strategy. Additional incentives for private investments might be required to achieve the objectives of these recent policy initiatives.

The COVID-19 outbreak caused a sharp drop of the European economy¹⁷⁴. With the Temporary Framework on State aid, the Commission provided a targeted tool to respond to the economic consequences. Although it is too early to estimate the medium and long-term consequences of the pandemic, regional aid will remain relevant to provide investment opportunities in the future and to support the economic recovery of disadvantaged regions in the EU.

How well adapted (appropriate flexibility and safeguards) are the State aid rules to subsequent market developments and technological advances?

The main overall objective of regional aid is to contribute to the implementation of the cohesion objectives. However, in a steadily changing business environment the framework needs to respond to new developments, related for example to the transformation of the automotive sector, the rise of new technologies, or the current battery hype.

¹⁷⁰ See replies to question 11.2 to the public consultation on regional aid.

¹⁷¹ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

¹⁷² Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions - A New Industrial Strategy for Europe (COM(2020) 102 final).

¹⁷³ Communication: Shaping Europe's digital future.

¹⁷⁴ Reference to EU economic forecast 2020.

Market development and technological progress are dynamic factors that impinge on investment and location decisions. The endogenous potential of a region may see erstwhile strengths turned to weaknesses by fundamental changes in market and technology conditions over time, if they affect entire segments of an economic activity, such as manufacturing of cell phones or automobile combustion engines.

Furthermore, the regional aid framework needs to take into account recent Commission policy initiatives, such as the European Green Deal¹⁷⁵ and the Digital¹⁷⁶ and Industrial Strategy¹⁷⁷. In order to support the twin transition towards a green and digital economy, a profound transformation of EU policies towards these objectives is required, while ensuring competitiveness and supporting the “cohesive and inclusive growth of regions and countries”.¹⁷⁸ Besides maintaining the objective on regional development, the guidelines should support also this twin transition.

As described in the intervention logic of the regional aid framework, one objective of regional aid is to ensure a level playing field. Living in a globalised world, more and more companies from third parties are seeking for constant market development and international expansion.

The results of the RAF external study provide only limited evidence on the relationship between maximum aid intensities and worldwide foreign direct investment and could not confirm a direct connection¹⁷⁹. However, it is clear that European regions will be more and more in competition with third countries and additional efforts on this aspect will be required in order to maintain a level playing field also on a global base.

Continuous development of the European business environment requires regular adaptations of the regional aid provisions and to the regional aid maps. The rules on sector exclusion are subject to changes notably to overcapacities and the results of the targeted consultation indicate a necessary re-assessment of notably the synthetic fibres and shipbuilding sectors due to changed market conditions related to overcapacity.

Coherence

To what extent are the State aid rules at stake coherent with other State aid rules and other EU policies?

The intervention logic of the regional aid framework- illustrates the important link between the coherence of regional aid rules with other EU policies that is necessary to perform a successful EU intervention.

The annual reporting of the European Court of Auditors tries to measure the compliance of EU funding with the State aid rules. In particular, the contribution of quantified State aid errors to the global estimated level of errors on the operations of the ESIF is measured based

¹⁷⁵ Communication from the Commission to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions – The European Green Deal, COM/2019/640 final.

¹⁷⁶ Communication from the Commission to the European Parliament, the European Council, the European Economic and Social Committee and the Committee of the Regions - Shaping Europe’s digital future, COM/2020/102 final.

¹⁷⁷ Commission Communication: A new Industrial Strategy for Europe.

¹⁷⁸ Science, Research and Innovation Performance of the EU in 2020 (SRIP 2020), p. 20.

¹⁷⁹ As in Section 6.1 of the RAF external study.

on qualitative feedback from Member States and figures of previous European Court of Auditors reports. Previous discussions of DG Competition with the European Court of Auditors lead to the conclusion of a positive development on the error rate, partly due to the positive effect of the revised GBER rules. As described in Table 7, the number of quantified State aid errors could be reduced for the period 2012 until 2016. For the reporting periods 2017 and 2018, no errors could be discovered, which suggests coherence of State aid rules with the cohesion policy.

Table 1: Development of the error rates of State aid rules in the context of the ESIF¹⁸⁰

European Court of Auditors annual reports	2012	2013	2014	2015	2016
No. of audited transactions	180	180	331	223	180
% of transactions with errors					
• Total	49%	57%	41%	32%	48%
• SA errors	3%	8.2%	4.2%	2.2%	6.1%
Number of quantified errors					
• Total	No info	40	53	33	25
• SA errors		5	3	3	0
Estimated error rate	6.8%	6.96%	5.7%	5.2%	4.8%
(lower/upper limits)	(3.7%-9.9%)	(3.7-10.1%)	(3%-9.2%)	(2.8%-7.6%)	(2.2%-7.4%)

In addition, the results of the RAF external study provide also a positive picture on the coherence of regional aid rules with the current legislation on structural funds. Based on the scoreboard information it appears that the provisions of the ESIF and the regional aid framework are often applied in parallel¹⁸¹. The survey of granting authorities and review of the existing legislation confirmed that the two sets of rules can be considered as complementary and have both clearly defined objectives and criteria for approval¹⁸². This

¹⁸⁰ Internal analysis of the European Court of Auditors annual reports 2012-2016.

¹⁸¹ See Section 7 of the RAF external study.

¹⁸² As in Sections 7.3 of the RAF external study.

result is also confirmed by the public consultation, where a relative percentage of 30.2% confirmed the coherence of the RAG with EU Cohesion and Regional aid policy¹⁸³.

The sector exclusion is considered as an important element of the regional aid framework to avoid any overlap or conflicts with other policy areas or State aid rules. Overall, stakeholders that responded to the targeted consultation considered the sector exclusion of the current rules as positive, called however for improved sector definitions and challenged the justification of the exclusion of the synthetic fibres and the shipbuilding sector due to lacking over capacity¹⁸⁴. Further uncertainty was raised by stakeholders on the current provisions related to the transport sector, in particular on the treatment of mobile assets.

¹⁸³ See answer 14.1.

¹⁸⁴ As response to question 7 of the targeted consultation, 21% of the respondents confirmed that the exclusion of the shipbuilding sector is no longer appropriate and justification, while only 12% agreed, and 67% held a neutral position or did not know the answer. In addition to the quantitative replies, several qualitative comments were received that questioned the appropriateness of the sector exclusion. For the synthetic fibres sector, 10% of the respondents consider the exclusion of this sector as no longer justified, while 67% were neutral or could not provide an answer, and 25% agreed with the appropriateness. However, again several qualitative comments to the consultation raise doubts about still existing over capacity, which is also in line with case practice.

VII. Railway Guidelines

Effectiveness

To what extent have the Railway Guidelines met their objective?

As a general remark, the majority of the replies received to the public consultation on the Fitness Check of the 2012 State aid modernisation package, Railway Guidelines and short-term export credit insurance¹⁸⁵ that ran from 17 April 2019 until 19 July 2019 (48.3%) considered that the Railway Guidelines only partially allowed the Commission focussing its scrutiny on cases having a significant impact on the internal market. Similarly, the majority of respondents considered that the Railway Guidelines stimulated the railway sector only to some extent (60.7%) and that they helped maintaining a competitive internal market to only some extent (55.2%).

However, the specific contributions submitted by Member States and in particular by sectorial stakeholders on the performance of the Railway Guidelines showed a general positive feedback. In general, respondents consider that the Railway Guidelines have been working reasonably well but that they have not kept entirely pace with the 4th Railway Package and to provide the incentives, which are necessary to encourage modal shift from road to rail. There was also a specific call for procedural simplification by most respondents as regards the measures available under Section 6 on State aid for the coordination of transport. At the same time, the toolbox made available by section 6 is the part of the guidelines that can be considered the most successful in terms of implementation by means of schemes which were introduced by Member States and in terms of results achieved.

The results from the public consultation have been confirmed by internal assessment, as detailed below per each relevant Section of the Railway Guidelines.

In terms of compliance, no problems were spotted. The monitoring of all seven monitored schemes was concluded positively, i.e. no irregularities were identified. Moreover, there have not been complaints concerning the implementation of approved schemes or on individual cases.

Rules on aid for the purchase of rolling stock in Section 3

The Commission received only three notifications for aid for the financing of rolling stock, all from Poland, which all resulted in approval decisions based on the Railway Guidelines. One case related to a EUR 94 million public financing of 20 trains to be used for commercial long-distance passenger transport¹⁸⁶. The other two cases concerned two succeeding schemes related to the financing of the modernisation and purchase of freight rolling stock to be used exclusively for intermodal transport.¹⁸⁷

¹⁸⁵ https://ec.europa.eu/info/law/better-regulation/initiatives/ares-2018-6623981/public-consultation_en

¹⁸⁶ SA 36486 (2013/NN) – Poland – Aid to PKP IC for the purchase of long-distance passenger rolling stock, OJ C 172 of 6 June 2014, p. 6.

¹⁸⁷ Case 546/2008 – Poland – Investment aid for the development of intermodal transport under Infrastructure and Environment Operational Programme, OJ C 203 of 28 August 2009, p. 1; SA 48093 (2017/N) – Poland – Aid for the implementation of intermodal transport projects under the Operational Program Infrastructure and Environment for the years 2014-2020, OJ C 3 of 5 January 2018, p. 3.

In this respect it has to be noted that 2/3 of the total of passenger transport services in the EU is provided under public service obligations under Regulation 1370/2007/EC (“the PSO Regulation”). The PSO Regulation exempts State funding for the purchase of rolling stock that is used for the discharge of public service obligations from the notification obligation. Massive public funding is provided for the purchase of rolling stock dedicated to those public transport services. However, as the PSO Regulation does not contain a reporting obligation for public support for such rolling stock Member States do not inform the Commission on the related public spending. Furthermore, the operational programs of the ESI funds, which have in the past offered vast possibilities for rolling stock financing, have never entailed self-standing notifications as such rolling stock is normally used for the discharge of public passenger transport services and therefore exempt from the notification requirement.

In addition, other significant sources of financing, notably from the EFSI¹⁸⁸, from the European Investment Bank¹⁸⁹ and from Eurofima¹⁹⁰, offer alternatives to traditional public funding and do not require a notification to the Commission under State aid rules.

These funding opportunities which do not necessarily entail State aid, combined with the block exemption for funding for rolling stock used for PSOs, might explain the low number of State aid notifications received by the Commission. This low number of notifications may therefore have limited the effectiveness of the Railway Guidelines. However this conclusion is mitigated by two factors: (i) there was no complaint related to the public financing of rolling stock (ii), the few notifications indicate that the market does not perceive a significant public funding need over and above what is funded under the PSO Regulation.

The block-exemption under the PSO Regulation concerns rolling stock for passenger transport. As only two notifications were received for aid to support the purchase of freight rolling stock at this stage there is no evidence that there was a need for specific rules for State aid to purchase freight rolling stock. However, the ambiguity of the Railway Guidelines in respect to the possibility of granting State aid for the purchase of freight rolling stock might have been a reason for the small number of notifications of such measures.

A few respondents to the public consultation pointed to the lack of clarity and limited scope of the rules concerning the purchase of rolling stock and called for their extension to the purchase, renewal and retrofitting of freight rolling stock.¹⁹¹ The introduction of rules to

¹⁸⁸ On 12.12.2019, EFSI funding of operations concerning rolling stock was approved in Italy and in the United Kingdom: A EUR 300 million project in Italy for the acquisition of 49 new trainsets and 250 new carriages that will be purchased by Trenitalia to provide regional passenger train services in different Italian regions; and a EUR 68 million project for the purchase of rolling stock for East Anglia railway passenger service franchise in the United Kingdom.

¹⁸⁹ From 2008 to 2019, the EIB total lending for rolling stock projects in Member States amounts to EUR 11.628 billion, with France and Germany absorbing 18% each of the grand total, followed by Spain 14%, Italy and the United Kingdom 10% each, Poland 9%, Netherlands 7%, Belgium 5%, Sweden 4%, Luxembourg 2% and Austria, Hungary, Lithuania, Slovenia, Czech Republic, Romania, Slovakia at or near 1%.

¹⁹⁰ Since 1956, Eurofima, a Swiss-based non-profit organisation with publicly owned rail companies as shareholders, has been providing funding for rolling stock to its shareholders. Since 2019 Eurofima funding is limited to finance rolling stock used in public passenger transport services and at the same time is available also to non-shareholders. Due to its structure and a double securitisation, Eurofima can offer financing at favourable conditions.

¹⁹¹ Ferrovie dello stato Italiane, Germany.

support freight rail traffic in limited geographical areas was also mentioned by one stakeholder.¹⁹²

Rules on debt cancellation of incumbents in Section 4

Section 4 allows for the cancellation of debt, which was incurred prior to 15 March 2001, or prior to the accession date in case of Member States joining later. Differently from the Rescue and Restructuring Guidelines, debt cancellation under section 4 of the Railway Guidelines does not require restructuring, if certain conditions are met. The Commission has approved two cases under this section, namely debt cancellation for the Bulgarian incumbent BDZ for EUR 114 million¹⁹³ and for the Croatian incumbent HZ Cargo for EUR 130 million¹⁹⁴. The Commission services did not have any further, even informal, contacts with Member States on debt cancellation beyond those cases.

In point 45 of the Railway Guidelines the Commission underlines that the level of indebtedness of many railway undertakings continues to give cause for concerns due to their level of indebtedness higher than acceptable for a commercial company. We note that this is still a current problem, as many operators suffer over-indebtedness and recurrent operational losses (notably in the freight sector). Sectorial literature on public budget contributions to the EU rail sector¹⁹⁵ observes a dramatic increase in debt of infrastructure managers over the last years and claims that in the long-run this could limit the financial flexibility of companies and require additional government support or restructuring incentives. However, it is underlined that despite the quality and the scope of available data on government contributions has increased in recent years, there are still large gaps in data for some countries: due to the complexity of the sector, a full coverage of data cannot be achieved. As a consequence, information on the total amount of government contributions as well as the breakdown of payments differ to a large extent between countries. The lack of literature in terms of cross-country comparison and from a time-series point of view does not help. However, it has been observed in the context of State aid investigations concerning aid granted to major incumbents' freight operators coupled with a review of the publicly available financial statements of other incumbent companies that over-indebtedness continues to be an issue. At the same time, very few rail companies (no incumbent company in particular) have left the market.

It is remarkable that only two (new) Member States made use of the possibility offered by the Railway Guidelines to relieve their incumbents from the burden of the past without the need of restructuring as requested under the Rescue & Restructuring Guidelines. Restructuring aid under the Rescue & Restructuring Guidelines requires an own contribution by the beneficiary and competition measures and therefore usually entails divestments and behavioural measures. The fact there were not many notifications does, however, not mean that Member States did not finance their incumbents. On the contrary, Member States may have provided

¹⁹² ERFA.

¹⁹³ SA. 31250 (2011/C) – State aid planned to be implemented by Bulgaria in favour of BDZ Holding EAD SA, BDZ Passenger EOOD and BDZ Cargo EOOD, Commission decision of 16 June 2017, OJ L 337 of 19 December 2017, p. 35.

¹⁹⁴ SA. 39877 – Aid to HZ Cargo – Commission decision of 19 June 2017, OJ C 237 of 21 July 2017, p. 2.

¹⁹⁵ Schäfer, J. & Götz, G. (2018). Public Budget Contributions to the European Rail Sector. *Review of Network Economics*, 16(2), pp. 89-123. Retrieved 19 Feb. 2020, from doi:10.1515/rne-2017-0044.

public financing either illegally or based on the assumption that it did not qualify as State aid, because it was done at market terms.

No major bankruptcy of a railway undertaking was noticed since the Railway Guidelines entered into force. However, the still high level of indebtedness, and the lack of notifications to the Commission of any corresponding public financing is potentially problematic and calls for EU action.

This problem is exacerbated by the COVID-19 pandemic, which has exposed all railway undertakings, especially those providing passenger transport services, to a sudden and massive collapse of commercial revenues, only partially compensated by public authorities.

Rules on restructuring of freight divisions of railway undertakings in Section 5

Section 5, which is based on the 2005 Commission decision regarding the public financing of Fret SNCF¹⁹⁶, allowed for the restructuring of freight divisions of railway undertakings, upon condition that Member States submitted their notifications by 31 December 2009. Three decisions were adopted to support the restructuring of freight subsidiaries, one relating to Belgian SNCB¹⁹⁷ and two relating to Bulgarian BDZ.¹⁹⁸ The Commission has not been in contact with other Member States on such issue.

In view of the intended objective to reduce the overall level of debts of railway undertakings, this section seems to have not worked properly given the persisting financial difficulties of many railway freight undertakings, see for example the recently adopted negative decision concerning the Romanian rail freight operator CFR Marfa¹⁹⁹.

The economic downturn triggered by the COVID-19 pandemic has affected all companies in the economic value chain, including freight railway undertakings. Despite some mitigating actions adopted by Member States, the financial situation of many freight divisions is worsening, as documented by stakeholders' associations like ERFA, CER, ALLRIAL through several letters sent to the Commission advocating for sector specific measures in response to the pandemic.

Rules on aid for the coordination of transport in Section 6

Section 6 provides for three main forms of aid to support the coordination of transport and the modal shift of freight from road to rail: (a) (operating) aid to reduce the cost of rail infrastructure charges paid by railway undertakings; (b) (operating) aid for reducing the higher cost of transport incurred by rail compared to the cost of road transport, calculated on the basis of the avoided external costs generated as compared to road transport; (c) (investment) aid for promoting interoperability in the rail transport sector, including aid for

¹⁹⁶ N 386/2004. Commission decision of 2 March 2005, OJ C 172 of 12 July 2005, p. 1

¹⁹⁷ N 726/2009, Commission decision of 26 May 2010, OJ C 327 of 4 December 2010, p. 3.

¹⁹⁸ N 402/2010, Commission decision of 15 December 2010, OJ C 187 of 28 June 2011, p. 7, and SA.31250 already mentioned above.

¹⁹⁹ Commission decision of 24 February 2020 in case SA. 43549.

promoting greater safety, the removal of technical barriers and the reduction of noise pollution.²⁰⁰

Since the adoption of the Railway Guidelines, the Commission has received many notifications based on Section 6. To date, the decisions adopted amount to 64. The leading Member States to notify State aid under Section 6 are Italy (17), Austria and Germany (10 each), and to a lesser extent the Netherlands (6). Out of the 64 decisions, 13 decisions relate to the prolongation of schemes (at least once and up to four times), thus proving that schemes based on section 6 were successful. In fact, for a measure to be prolonged, the Railway Guidelines²⁰¹ require the Commission to re-examine it in the light of the results obtained. Those Member States that prolonged their measures reported a positive impact not only on the share of freight traffic shifted from road to rail, but also on the environment (through primary energy savings and reduction of emissions).^{202 203}

In Austria, three national schemes supporting modal shift have been prolonged up to three times.²⁰⁴ In Italy, seven regional schemes supporting modal shift have been prolonged up to three times.²⁰⁵ The same for the two main complementary national measures, the Ferrobonus

²⁰⁰ Investment aid for research and development in response to the needs of transport coordination is not taken into account because the Railway Guidelines cross-refer to the RDI Framework as the appropriate legal basis. In any event, the Commission never received any notification of similar measures.

²⁰¹ Point 97.

²⁰² In Austria, see for example case SA.48390 (2017/N) – *State aid scheme supporting rail freight transport in certain production forms 2018-2022*, which is the prolongation of the 5-year scheme SA.33993 (2011/N) – *Aid for the provision of certain combined transport services by rail in Austria* for an additional five years until 2022. The prolongation was underpinned by an evaluation report showing that the initial scheme effectively helped transferring traffic from road to rail, as well as avoiding an increasing trend in the number of lorry journeys as well as a significant amount of external costs.

²⁰³ In Italy, see for example case SA.54990 (2019/N) – *Aid in favour of rail freight transport in Emilia-Romagna region*, which represents the continuation of the regional action of modal shift of heavy traffic from the road to less polluting transport modes that was initiated in 2009. The scheme SA.54990 builds on the achievements obtained thanks to the incentives provided over 2010-2012 and over 2014-2016, approved by the Commission under case N 483/2009 and case SA.38152 respectively. The prolongation is based on two reports on the effects of the latest scheme approved in case SA.38152, one focusing on the results obtained in terms of modal shift and the other on the positive performance in respect to its environmental goals.

²⁰⁴ The scheme SA.48485 - *Programme supporting the development of connecting railways and transfer terminals in intermodal transport 2018 – 2022* - which was approved on 15 September 2017 is the prolongation of a scheme initially approved in 2012 in case SA.34985. The second scheme which was approved on 25 October 2017 in case SA.48390 concerns the aid scheme supporting rail freight transport in certain production forms 2018 – 2022. The third scheme concerns the third Prolongation of the ERP Transport Programme approved by on 25 July 2012 in case SA.33669.

²⁰⁵ In Friuli Venezia Giulia Region, the scheme SA.47779 - *Measures for the development of combined transport* is a prolongation until 2021 of the initial measure N 134/2001 (2003-2006), initially prolonged by N 575/2006 (2006-2009), then prolonged by N 645/2009 (2009-2015); the scheme SA.45606 - *Measures for the development of intermodality in Friuli Venezia Giulia Region* is a prolongation until 2021 of the initial measure N 436/2004 (2006-2009), first prolonged by N 643/2009 (2009-2015); the scheme N 644/2009 - *Aid for the setting up of rolling-motorway services* is the latest prolongation until 2015 of the initial measure N 335/2003 (2003-2006), first prolonged by N 574/2006 (2006-2009). In the Province of Trento, the scheme SA.55912 (2019/N) - *Prolongation of the State aid scheme for combined transport in the Province of Trento* is the prolongation until 2022 of SA.46806 (2017-2019); the scheme SA.52499 - *Extension of the Integrated Transport Scheme in the Province of Trento* is the prolongation until 2021 of the initial scheme SA.41033 (2015-2018). In the Province of Bolzano, the scheme SA.55606 - *Prolongation of the State aid scheme supporting combined transport in the Province of Bolzano* - is the prolongation until 2021 of the initial scheme SA.48858 (2017-2019). In the Emilia Romagna Region, the scheme SA.54990 - *Aid in favour of rail freight transport in Emilia-Romagna region* - is the continuation from 2020 to 2022 of the previous schemes SA.38152 (2014-2017) and N 483/2009 (2010-2012).

and the Rail freight scheme, addressing users of railway services/multimodal transport operators, and railway undertakings only, respectively.²⁰⁶

In particular, as highlighted by Eurostat data²⁰⁷, as well as in the Commission Report on the transport in EU of March 2019²⁰⁸, Austria has had an aggressive modal shift policy with a number of national subsidies, including support to combined transport and reduction of external costs. On the other hand, with a more fragmented logistics sector largely imputable to its geography and leading to a lower modal split than the EU average, Italy has recorded a steady growth from 9.2% in 2011 to 14.7% in 2016.

Although it is not possible to establish a causal link between these overall trends and the State aid measures implemented by Austria and Italy, the reports submitted by these countries to justify prolongations of their measures to enhance modal shift clearly show success stories. They also provide evidence of their positive impact on society not only in terms of freight volumes shifted from road to rail, but also in terms of avoided external costs to the benefit of the environment.

There have also been cross-border coordinated projects, which have demonstrated positive outcomes. In SA.51559 and SA.51714, France and Italy have continued to support the transitional service for a railway motorway in the Alpine region (AFA), which has been prolonged several times. AFA has demonstrated to have a positive impact on both the environment and road safety.²⁰⁹

Based on the above, it appears that Section 6 rules led to a consistent approach in those Member States granting such kind of support including to an improved compliance by Member States and contributed to establish a common practice of “good” aid to support the coordination of transport and to achieve the objectives of modal shift from road to rail as well as increased interoperability across Member States. This conclusion is not called into question by the COVID-19 pandemic. On the contrary, the pandemic has shown the key role of rail freight transport, which allows physical distancing without compromising the efficiency of the transport chain.

Rules on unlimited state guarantees in Section 7

Section 7 of the Railway Guidelines obliged Member States to abolish any unlimited guarantee to their railway undertakings by 22 July 2010. Soon after the deadline, the Commission took action to ensure that this obligation was complied with and contacted all Member States. In this context,

²⁰⁶ In Italy, the scheme SA.44627 - *Ferrobonus – incentive for rail transport (2016-2021)* - is the follow up of measure SA.32603 - *Subsidy scheme ‘Ferrobonus’ for combined transport* - applied over 2010-2011; the scheme SA.55025 - *Prolongation of Rail Freight Transport Scheme 2020-2022* - is the latest prolongation of the initial scheme SA.45482 (2015-2017), prolonged by SA.48759 (2018-2019).

²⁰⁷ Eurostat. Modal split of freight transport 2012-2017, https://ec.europa.eu/eurostat/statistics-explained/index.php/Freight_transport_statistics_-_modal_split#Modal_split_in_the_EU.

²⁰⁸ European Commission. Transport in the European Union Current Trends and Issues March 2019, p 46. Online: <https://ec.europa.eu/transport/sites/transport/files/2019-transport-in-the-eu-current-trends-and-issues.pdf>.

²⁰⁹ As confirmed in the submitted notification reports, the scheme allowed the transfer of heavy goods from road to rail thus avoiding almost 6,400 tonnes of CO2 per year.

- 7 Member States committed to ending existing guarantee schemes for their railway undertakings, namely Austria, Belgium, Finland, Luxembourg, Poland, Slovenia and Slovakia.
- 20 Member States indicated that their railway undertakings did not have such guarantees.

Efficiency

To which extent have the Railway Guidelines lead to lower the administrative burden for the public authorities and for the beneficiaries?

50% of the replies to the public consultation considered that the Railway Guidelines ensured only to some extent efficient public spending. Similarly, 43.3% of respondents considered that the Railway Guidelines reduced the administrative burden for the public authorities only partially, whereas 46.2% considered that the Railway Guidelines did not reduce the administrative burden for the beneficiaries at all.

Rules on aid for the purchase of rolling stock in Section 3

There is no indication that Member States perceive the State aid procedure as disproportionately burdensome. This is widely explained by the fact that aid to rolling stock assigned to public service contracts was block-exempted from notification. For the few notified cases, given the significant costs of rolling stock²¹⁰, the administrative costs linked to the notification procedure are negligible.

Rules on debt cancellation of incumbents in Section 4 / Rules on restructuring of freight divisions of railway undertakings in Section 5

Under both sections, the rules are / have been lenient compared to the general rules for the rescuing and restructuring of companies. In particular, the rules on debt cancellation are limited to the general State aid principles of necessity and aid being kept to the minimum and not further requirements are imposed. This lenient approach was considered appropriate not to say unavoidable when the Railway Guidelines were adopted in 2008 due to the specificities of the sector which do not allow for divestments and consequently own contribution. Despite that lenient approach, most Member States have not used that possibility to restructure railway undertakings and seem to have postponed the much-needed restructuring of many railway undertakings.

The COVID-19 outbreak has highlighted the need for specific rules to support the rail sector in the context of the pandemic. As in other sectors, railway undertakings have faced liquidity problems and the Railway Guidelines did not cater for the adequate solutions. However, differently from other sectors, railway undertakings entrusted with public service obligations have been paying a higher price following the entry into force of several mandatory safety measures like physical distancing or frequent decontamination of surfaces. Therefore, in view to address that serious problem, the Commission must apply the Temporary Framework in that sector, in particular the section on recapitalisation.

Rules on aid for the coordination of transport in Section 6

²¹⁰ Between EUR 2 and 5 million for a new locomotive, or EUR 20- 30 million for a high-speed train set.

All notifications have resulted in no objection decisions. The number of no objection decisions, representing the entirety of the cases assessed under Section 6, coupled with the rather limited time for adoption²¹¹, indicate that public authorities do understand the rules and consequently design their schemes in compliance with the rules. In the same vein, based on the high number of cases, covering all forms of aid (for infrastructure use, external costs, interoperability) the Commission has collected sufficient experience to define general compatibility criteria for State aid for the coordination transport pursuant to article 93 TFEU. This is all the more confirmed by the overall coherence of the Commission's compatibility assessment throughout the cases. Accordingly, it appears that there may be room for a block exemption, as reiterated by Member States on many occasions and in many different fora.

Member States strongly called for procedural simplification of State aid rules applicable to all measures supporting coordination of transport, for example during the negotiations on the revision of the Combined Transport Directive. In that context, the European Parliament included a recital and a new Article on State aid calling on the Commission to establish a block exemption for combined transport-related operations where the aid does not represent more than 35% of the entire operating (not investment) costs. A similar proposal was backed in 2018 by the Council,²¹² where a broad support for simplification of State aid procedures was reiterated by several Member States (Austria, Belgium, Croatia, Czechia, Greece, Italy, Poland and Slovenia).²¹³

Respondents to the public consultation (representing few but significant stakeholders of the railway sector and a few Member States) made additional suggestions, which are specific to the Railway Guidelines.

The respondents called for simplification and streamlining of existing compatibility rules for aid for the coordination of transport, notably:

- higher aid intensities, i.e. 100% of eligible costs as opposed to the current 50%,²¹⁴
- updated and more flexible rules on aid for ERTMS and ETCS to speed up interoperability;²¹⁵
- block exemption of aid measures for the coordination of transport;²¹⁶
- introduction of compatibility rules for aid for compliance with non-mandatory noise, safety and environmental standards;²¹⁷
- introduction of compatibility rules for aid to intermodal infrastructure;²¹⁸

²¹¹ 216 days on average from the (pre)notification to the decision date.

²¹² [Council progress report 7864/18](#) of 18 May 2018 on the Proposal for a Directive of the European Parliament and of the Council amending Directive 92/106/EEC on the establishment of common rules for certain types of combined transport of goods between Member States, footnotes 25 and 32.

²¹³ Member States also called for simplification in sector-specific projects like the [Alpine Space Programme](#) – European Territorial Cooperation 2014-2020 (INTERREG VB) funded by ERDF and national co-funding.

²¹⁴ European rail infrastructure managers - EIM; Community of European Railway and Infrastructure companies CER (representing inter alia most incumbent operators); Allrail (representing several new entrants in the rail passenger market); Austria; France; Ferrovie dello Stato Italiane.

²¹⁵ The Netherlands.

²¹⁶ EIM, CER, Allrail, ERFA (representing several new entrants in the rail freight market), Austria, The Netherlands, Ferrovie dello Stato Italiane.

²¹⁷ Allrail, ERFA.

²¹⁸ ERFA.

- introduction of financial incentives requiring that State aid granted directly to freight forwarders be conditional on the modal shift actually achieved;²¹⁹
- mandatory publication of beneficiaries/transparency of granted State aid.²²⁰

Rules on unlimited state guarantees in Section 7

By requiring the complete and unconditional abolition of unlimited State guarantees, the rules are clear and unambiguous and in line with general State aid policy, which is applicable across the sectors²²¹. The administrative costs for abolishing those guarantees are limited by nature.

Relevance

How well do the objectives of the Railway Guidelines still correspond to the needs within the EU?

As a general remark, the majority of the replies to the public consultation (around 60%) considered that “the objectives of the Railway Guidelines are not relevant” considering the changes in EU priorities and/or new market and technological developments.

Rules on aid for the purchase of rolling stock in Section 3

The very limited use of Section 3 of the Railway Guidelines by the Member States does not necessarily lead to the conclusion that these rules are not relevant anymore.

In assessing the compatibility of aid for rolling stock under Section 3, the Guidelines refer to the criteria defined for each of the following aid categories supported by the respective Guidelines applicable in 2008:

- aid for coordination of transport;
- aid for restructuring railway undertakings;
- aid for small and medium-sized enterprises;
- aid for environmental protection;
- aid to offset costs relating to public service obligations and in the framework of public service contracts;
- regional aid.

All objectives of public interests related to those aid categories remain relevant today. Most of them are self-standing but with the Green deal proposed by the current Commission (which turns environment protection into a cross-cutting policy), some of those objectives become increasingly entangled. For example, the aid for coordination of transport is justified by the necessity to protect the environment and - to this end - to support modal shift.

²¹⁹ ERFA.

²²⁰ Allrail, ERFA.

²²¹ See Commission Notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees, OJ C 155, 20.6.2008, p. 10–22: “This means that the guarantees must be linked to a specific financial transaction, for a fixed maximum amount and limited in time. In this connection the Commission considers in principle that unlimited guarantees are incompatible with Article [107] of the Treaty”

Two EU policies deserve a closer attention, since they correspond to two major sources of public spending in rolling stock: regulation of public service contracts for rail passenger transport services and regional policy.

First, the regulation of public service contracts for rail passenger transport services has been significantly modified by the so-called “Market Pillar” of the 4th Railway Package. The latter imposes competitive tendering as the norm for public service contracts for domestic rail passenger services as of December 2019 (with a transition period ending in December 2023). The 4th Railway Package also provides that open access operators will be able to offer competing commercial services on domestic routes from 14 December 2020.

Therefore, competition will gradually take place between new entrants and former monopolists, both for commercial and non-commercial services. More than ever, this increased competition requires strict rules about the necessity and proportionality of public financing of rolling stock. Given the cost to procure and acquire the adequate rolling stock (both in terms of time and money), the already implicitly existing requirement that publicly financed rolling stock remains strictly limited to the public service contract to which the corresponding rolling stock is assigned needs to be strictly enforced.

As regards the interface of Section 3 with Regional policy, the EU funding, mostly by DG REGIO through ESIF within the various Operational Programmes may still be needed, as there is still a perceived difference in the age of the rolling stock between the founding EU Member States and the ones, which joined the EU since 2004.

As a consequence, the policy objectives underlying the financing of rolling stock as defined in Section 3 are still relevant but, as will be demonstrated in the Coherence section, the corresponding State aid provisions are not fully up-to-date to accompany the Green Deal, the ongoing liberalisation process as well as the modification of the other State aid Guidelines.

Rules on debt cancellation of incumbents in Section 4 / Rules on restructuring of freight divisions of railway undertakings in Section 5

Section 5 is not applicable any more. Section 4 addresses very old debt (of more than 12 years ago even in case of new Member States except Croatia which only acceded the EU in 2013). The only two Member States, which had recourse to that section, did it soon after accession. It seems unlikely that any Member State will still come forward to use the possibility of debt cancellation anymore.

That being said, the underlying problems of indebtedness and lack of restructuring are still very acute (see section Effectiveness), and their resolution can currently only be addressed under the 2014 Rescue and Restructuring Guidelines, which do not prove always appropriate as identified by the Commission in case SA.43127 on Polish Regional Railways. In particular, the compatibility criteria related to own contribution of the beneficiary, compensatory measures and compliance with the “one time last time principle” are not easily enforceable in the case of railway undertakings, whose significant network effects and “backbone” role must be taken into consideration.

Thus, the objectives of Sections 4 and 5 are still highly relevant, since the EU Single rail area needs real competition and continued rail transport services need to be ensured. As indicated

above, the COVID-19 pandemic has underlined the need for targeted State support to railway undertakings, many of which (public but also private) are increasingly indebted.

In the framework of the public consultation, only Ferrovie dello Stato Italiane provided an opinion on those two highly sensitive topics. Ferrovie dello Stato Italiane pointed to the fact that the applicable rules do not respond to the actual needs and problems in society. They called for a special regime for rail, in particular as regards the “one time, last time” principle and for specific measures to accompany the on-going liberalisation of the domestic passenger transport.

Rules on aid for the coordination of transport in section 6

Based on the positive effects of the well-established case practice described above, together with the positive feedbacks received by Member States and sectorial stakeholders to the public consultation, it appears that the original objectives of Section 6 rules still correspond to the needs of the EU, all the more in consideration of the overarching priority of the Green Deal and the growing role played by rail transport in the EU strategy to accelerate the shift to sustainable mobility.

However, the ongoing development of the rail freight market calls for the Commission’s flexibility in extending the scope of the Railway Guidelines, which is limited to the railway undertakings only, also to multimodal operators and logistics companies other than “railway undertakings”. The application by analogy of the Section 6 rules to such operators has occurred in many decisions and clearly points to the need for an update.

Some cases²²² have also pointed to the need of specific rules for the financing of the start-up phase of new freight services. The lack of compatibility rules for this type of measures has led to different approaches in the compatibility assessment by the Commission using either Article 93 or Article 107.3.c TFEU as legal basis. Some other cases, where the Commission’s assessment refers to the criteria set out under Chapter 6.1 of the Railway Guidelines, similarly point to the need for specific rules for the financing of infrastructure serving combined transport operations.²²³

Rules on unlimited state guarantees in section 7

The definitive abolition of the few, potentially remaining State guarantees was suspended with the adoption of the 4th Railway Package (see above Section on Effectiveness). They might however be fully abandoned with the mandatory competitive tendering of public service contracts to be fully complied with by end 2023.

²²² SA.31981 – Netherlands – *Start up aid to new combined transport services based on Twin hub railway network*; N 640/2008 -Germany- *Support of transport infrastructure in Saxony (Measure 3: start-up aid for new combined transport services)*; N449/2008 – Italy - *Interporto Campano S.p.A. - Combined road-rail transport for containers from the port of Naples*.

²²³ SA.34369 (13/C) (ex 12/N) – Czechia – *Construction and operation of public intermodal transport terminals*; SA.48485– Austria – *Programme supporting the development of connecting railways and transfer terminals in intermodal transport 2018 – 2022*; SA.49518 – United Kingdom – *Freight facilities grant scheme for 2018 – 2023*; SA.47779 – Italy - *Aid for the development of combined transport in Friuli Venezia Giulia Region*; SA.48483 – France – *Construction and upgrade of private rail sidings connecting freight terminal facilities (ITE)*; SA.46341– Germany – *Scheme on funding of transshipment for combined transport*; SA. 39962– Czechia – *Scheme for the modernisation and construction of CT terminals*; SA.35124 (2012/N) — Italy - *Investment Aid to Interporto Regionale della Puglia*.

Coherence

Are the provisions of the Railway Guidelines coherent with other State aid rules?

Internal coherence of SAM Guidelines and Railway Guidelines

When announcing its intention to modernise State aid control, the Commission stated that its objectives were “threefold: (i) to foster sustainable, smart and inclusive growth in a competitive internal market; (ii) to focus Commission ex ante scrutiny on cases with the biggest impact on internal market whilst strengthening the Member States cooperation in State aid enforcement; (iii) to streamline the rules and provide for faster decisions”.²²⁴

In order to contribute to the growth objective, the Commission identified and defined common principles applicable to the assessment of compatibility of all future State aid Guidelines adopted by the Commission; and reviewed and streamlined the State aid Guidelines, to make them consistent with those common principles. In order to achieve the prioritisation objective, the Council Enabling Regulation was reviewed to broaden the categories of aid that could be block exempted and the GBER was adopted

The Railway Guidelines were adopted in 2008, i.e. six years before the completion of the State aid modernisation. Therefore, they are not part of the modernisation exercise described above. This resulted in the State aid rules applicable to the railway sector to be outdated as compared to the rest of the modernised State aid rules in respect to the first two SAM objectives mentioned above. Comparing the Railway Guidelines with the entire State aid legal framework, it is noted that (i) the policy objectives pursued by the former are not up to date not only in respect to the EU current priorities but also to the state of play of the internal market; (ii) the compatibility rules in the Railway Guidelines need are not aligned with the modernised State aid rules; (iii) the lack of transparency and reporting obligations has been limiting the database for evaluation purposes and does not allow to fully assess the competitive situation in the sector as well as the impact of public support measures; and (iv) unlike other areas, there are no block exempted measures except those foreseen in Regulation 1307/2007 for the financing of passenger transport by rail, while there seems to be scope for procedural alleviation given the relatively high number of standardised no objection decisions.

This is also reflected in the feedback to the public consultation, where 65.2% of the respondents considered that the Railway Guidelines are only partially coherent with changes in EU legislation which have occurred since their adoption.

Railway Guidelines and compliance with specific State aid rules

As regards Section 3, the Section on Relevance has shown that the objectives of the Railway Guidelines are still coherent with other objectives pursued by other EU policies. However, all State aid Guidelines corresponding to those objectives which are referred to in point 33 of the Railway Guidelines have meanwhile either been repealed or significantly modified:

²²⁴ Communication from the Commission to the European Parliament, the Council, the European economic and social Committee and the Committee of the regions - EU State aid modernisation (SAM) (COM/2012/0209 final), paragraph 8.

- The 2001 State aid Guidelines on State aid to small and medium-sized enterprises have been repealed and replaced by specific provisions in the GBER;
- the PSO Regulation has been modified by the 4th Railway Package through the adoption of Regulation 2338/2016;
- the RAG, the Rescue and Restructuring Guidelines and the EEAG have been deeply overhauled in 2014 during the SAM process.

Therefore, coherence between the provisions of the Railway Guidelines and the other Guidelines has been fading. On substance, however, the application of that section does not contradict other EU policies²²⁵ and the rules in Section 3 are still coherent with other EU policies, despite their limited use by Member States for the reasons explained under Effectiveness.

As regards Sections 4 and 5, their provisions of those sections have de jure or de facto expired or are barely applicable (regarding the debt incurred before 2001 as explained above). Therefore, whilst they are no longer coherent with the other State aid Guidelines, they continue to be relevant.

As regards Section 6, the rules on aid for the coordination of transport of the Railway Guidelines have been extensively used by Member States to notify measures aiming to promote the modal shift of freight transport from road to rail or to promote interoperability.

Section 6 is the part of the Railway Guidelines, which is mostly aligned with the Green Deal and its priority to “*accelerate the shift to sustainable and smart mobility, by boosting multimodal transport; supporting digitalisation to enable smart traffic management systems, automated and connected multimodal mobility; and by internalising the environmental and health cost of transport*”.²²⁶

Moreover, Section 6 shows the highest complementarity and consistency of the Railway Guidelines with other EU policies and regulations with similar objectives, in that it well interacts with other EU interventions in achieving the shared goals of reducing road transport externalities and improving the use of rail and is coherent with EU legislation. EU policies have for years aimed at achieving sustainable growth. The EU 2020 Strategy²²⁷, endorsed in 2010, made it clear that the EU aims at smart, sustainable and inclusive growth. The EU 2020 Strategy flagship initiative aiming at a resource efficient and low-carbon economy²²⁸ focusses inter alia at decoupling economic growth from resource and energy use and reducing

²²⁵ For example, a large number of projects financed by ESI Funds (through the various Operational Programmes) supported the retrofitting or the purchase of new rolling stock to be used in the context of public service contracts for rail passenger transport in less developed areas, sometimes on lines forming part of the TEN-T network. During the 2007-2013 programming period, ERDF and CF co-financed projects on rolling stock for a total amount of EUR 1.68 billion (with the following approximate percentage breakdown: Poland 53%, Slovakia 20%, Czechia 9%, Romania 6%, Estonia 4%, Portugal 3%, Hungary 1.7%, Italy and Lithuania less than 1% each). The ongoing programming period 2014-2020 showed on 20 January 2020 provisional allocations amounting to total EUR 2.1 billion (with the following approximate percentage breakdown: Poland 44%, Hungary 14%, Czechia 13.5%, Slovakia 10%, Romania 8.7%, Italy 7%, Croatia 2.3%, and United Kingdom and Germany less than 1% each).

²²⁶ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions “The European Green Deal”, COM(2019) 640 final of 11.12.2019, par. 2.1.5.

²²⁷ COM (2010) 2020, EUROPE 2020 A Strategy for smart, sustainable and inclusive growth.

²²⁸ COM (2011) 21, A resource-efficient Europe –Flagship initiative under the Europe 2020 Strategy, 26 January 2011.

CO₂ emissions, objectives that are shared in the 2011 White Paper on Transport Policy as well as by the objectives of the Combined Transport Directive 92/106/EEC. As described above in relation to Effectiveness, Section 6 has helped Member States, in coherence with the EU 2020 Strategy and the EU transport policy, to shift road transport away from road to more sustainable modes of transport like rail and has thereby reduced the external costs to society.

As regards Section 7, its provisions are coherent with other State aid Guidelines, notably the above-mentioned Notice of the notion of aid or the 2008 Commission Notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees. It is also coherent with the more recent case-law of the Court of Justice (in particular the landmark 2012 General Court judgement on the implicit, unlimited State guarantee granted to La Poste²²⁹, as upheld by the Court of Justice in 2014²³⁰).

The *ad hoc* State aid rules adopted in the context of the current COVID-19 pandemic do not call into question the assessment made above.

Are the Railway Guidelines coherent with other EU policies?

External coherence

Rail transport is supported to various degrees by a number of EU financing instruments, including CEF, ESIF, Horizon 2020, EFSI and the EIB. As the Railway Guidelines' main general objective was to accompany the sectorial policy on the way towards full liberalisation of the rail sector and the completion of a Single European rail market where full interoperability is ensured, the Railway Guidelines are for the most part complementary with other EU financial interventions, in particular as regards the sections concerning aid for the purchase of rolling stock and aid for the coordination of transport.

The Railway Guidelines' rules on debt cancellation of incumbents in Section 4, restructuring of freight divisions of railway undertakings in Section 5 and unlimited guarantees in Section 7 were drafted in relation to specific sectorial needs contemporary to the time of adoption and closely linked to the degree of liberalisation at the time of their adoption, i.e. when the 3rd Railway Package had just been adopted. As demonstrated in the Section on Relevance, those needs have not fundamentally changed, even after the adoption of the 4th Railway Package.

Coherence with other initiatives aiming at reducing transport externalities²³¹

Different EU instruments in the field of transport, energy and environment legislation aim to reduce transport externalities and influence consumer behaviour to use more sustainable modes of transport and more energy-efficient and cleaner vehicles and products. Road transport is the main source of transport externalities and hence the policies for reducing the externalities focus on shifting freight towards more sustainable modes of transport away from road. All EU policies for modal shift point to the competitiveness of the rail sector as compared to road transport, and try to achieve it through (i) functioning markets in rail transport, (ii) the existence and interoperability of the rail infrastructure and (iii) the

²²⁹ Judgment of the General Court of 20 September 2012, *France vs Commission*, T-154/10, EU:T:2012:452.

²³⁰ Judgment of the Court of 3 April 2014, *France vs Commission*, C-559/12, EU:C:2014:217.

²³¹ This section is based on the findings of the Commission Staff Working Document Refit Ex-Post Evaluation of Combined Transport Directive 92/106/EEC Final Report, SWD(2016) 140 final of 20.4.2016.

internalisation of the external costs of transport. Furthermore, specific measures addressing the environmental impact of the transport sector also contribute to the common goal of reducing the transport sector externalities. The EU has been active in all the mentioned fields and Section 6 of the Railway Guidelines coherently aims at the same objectives as these actions.

Functioning markets in the rail transport have been pursued notably through the Railway Packages since 2001, aiming at the gradual full liberalisation of the railway sector. Liberalisation was both a prerequisite for the effectiveness of Section 6 of the Railway Guidelines as well as complementary to it for achieving the transport policy goals as established in the 2011 White Paper.

The existence and interoperability of the rail infrastructure have been ensured by continuous EU support to investments into rail and multimodal terminals. The funding for investments for freight transport services and in particular multimodal transport services is and has been an integral part of the Trans-European Transport Network (TEN-T) funding,²³² the Marco Polo programs²³³ as well as the Connecting Europe Facility (CEF).²³⁴

The support to EU transport infrastructure through the TEN-T projects has existed for 20 years, when support to rail infrastructure has been a clear priority.

The Marco Polo Programmes (2003 –2013) had a goal to reduce road congestion and to improve the environmental performance of the freight transport system in the EU by supporting intermodality with road legs as short as possible.²³⁵

From 2014 onwards, the CEF framework covers the support to multimodal transport, providing support for innovative and sustainable freight transport services and improving the efficiency of the European freight transport and logistics sectors, in line with the policy objectives of the 2011 White Paper.²³⁶

²³² Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union Guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU.

²³³ Regulation (EC) No 1382/2003 of the European Parliament and of the Council of 22 July 2003 on the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo Programme); Regulation (EC) No 1692/2006 of the European Parliament and of the Council of 24 October 2006 establishing the second Marco Polo programme for the granting of Community financial assistance to improve the environmental performance of the freight transport system (Marco Polo II).

²³⁴ Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility, amending Regulation 913/2010/EU and repealing Regulations 680/2007/EC and 67/2010/EC.

²³⁵ With a budget of EUR 840 million, the Marco Polo programmes were focused on projects supporting modal shift and financed commercial actions in the freight transport and logistics markets. Between 2003 and 2012, in total 198 projects (with more than 700 companies participating) were financed shifting more than 4 million trucks (more than 65 billion tonne-kilometres of cargo) away from roads. The associated benefits have been calculated to be avoidance of more than 4.5 million tonnes of CO₂ emissions, and reducing traffic jams by about 64,000 km (<http://ec.europa.eu/transport/marcopolo/files/infographics-marco-polo-results.pdf>).

²³⁶ With an allocation of EUR 24.05 billion, the CEF transport accounts for approximately 80% of the total CEF envelope. Following the first three years of Calls, grants have been awarded to rail projects for the value EUR 15.7 billion (236 projects), accounting for almost 80% of the budget covering all transport sectors. In the context of the CEF transport priorities, ERTMS projects received 5% of the total funding (45 projects), multimodal projects 0.4% (26 projects), rail interoperability projects 0.2% (15 projects), rail freight noise projects 0.16 % (9 projects), and freight transport services projects 0.12 % (9 projects). CEF “Transport funding priorities for the purpose of the multiannual and annual work programmes” are defined in part VI of Annex I to Regulation (EU) No 1316/2013 of the European Parliament and of the Council of 11 December 2013 establishing the Connecting Europe Facility.

It follows that Section 6 of the Railway Guidelines is coherent with the financial support provided by the Union, which is complementary to the regulatory approach taken in the Combined Transport Directive and other legal measures supporting the policy aims of the Transport White paper.

The EU has also been supporting widely the internalisation of external costs. The main instrument for the internalisation of external costs of road transport is the Eurovignette Directive 1999/62/EC²³⁷. It provides a legal framework for road charging systems for HGV used on certain infrastructure and contains specific provisions on the calculation and allocation of infrastructure and environmental costs. It allows charging transport by lorries according to their environmental performance as well as charging hauliers for their vehicle's impact on air quality and noise levels. However, the Eurovignette Directive provides only a possibility but not an obligation to introduce such charging schemes. In case a Member State decides accordingly, State aid rules apply.

Last but not least, Interreg programmes co-financed by ESI Funds have pursued the modal shift, in particular in those cross border areas along relevant EU freight corridors where freight traffic is a threat for sensitive ecosystems like the alpine regions.²³⁸

It follows that Section 6 of the Railway Guidelines is not only coherent but also complementary to the EU measures for the internalisation of external costs, in that it helps better reflect the external costs of road transport in freight rates and contribute to raising the competitiveness of multimodal/combined transport services. Such complementarity is essentially based on the principle of subsidiarity that justifies EU-based programmes supporting modal shift and multimodality to the extent that (i) they address problems, which cannot be addressed by the Member States themselves and (ii) they achieve objectives, which are not possible to achieve at the national level. Before designing a new centrally managed Programme, the Commission checks the existing national schemes in order to ensure synergy and to avoid duplication between different funding instruments at the EU and the Member States level.^{239 240}

A clear example of subsidiarity in the framework of State aid rules is provided by the respect of cumulation rules by bordering Member States implementing support measures for the coordination of transport in the same geographical area, like the Brenner across Austria and Italy. The coordination of State aid for different sections of the same freight transport services could not be satisfactorily addressed at national level only and led the competent authorities of the two Member States (namely Tyrol, Trentino and South Tyrol) to set up an

²³⁷ Directive 1999/62/EC of the European Parliament and of the Council of 17 June 1999 on the charging of heavy goods vehicles for the use of certain infrastructure.

²³⁸ See for example the results of the [Alpine Innovation for Combined Transport Project \(AlpInnoCT\)](#) carried out in the framework of the [Alpine Space Programme](#) – European Territorial Cooperation 2014-2020 (INTERREG VB) funded by ERDF and national co-funding.

²³⁹ See for example the Commission's inventory of the national support schemes and relevant analysis in the [Ex ante evaluation report on Marco Polo II \(2007-2013\)](#), Chapter 5 'Analysis of European Added Value'.

²⁴⁰ Replies of the Commission to the [Special Report](#) of the ECA "Have the Marco Polo programmes been effective in shifting traffic off the road?", [COM\(2013\) 321 final of 27.5.2013](#).

Euregio²⁴¹ Working Group to ensure better cooperation between the relevant granting authorities.²⁴²

²⁴¹ Euregio Tyrol–South Tyrol–Trentino is a Euroregion formed by three different regional authorities in Austria and Italy: the Austrian region of Tyrol (i.e., North and East Tyrol) and the Italian autonomous provinces of Bolzano (South Tyrol or Alto Adige) and Trento (Trentino). Euroregions are cross-border territorial entities that brings together partners from two or more cross-border regions in different European countries to put in place common policies and projects in different areas in accordance with the specific features of each border area.

²⁴² See EC decision of 16.12.2019 in case SA.55606 (2019/N) – Italy- Prolongation of the State aid scheme supporting combined transport in the Province of Bolzano, recitals (17) and (18).

VIII. RDI Framework / relevant GBER RDI provisions

The current evaluation targeted specific State aid rules for RDI, i.e. mainly those that were introduced into the GBER in 2014 as new GBER measures (while they were necessarily subject to Commission's assessment under the previous rules). These are the RDI measures providing support for innovation clusters, process and organisational innovation and investment aid for research infrastructure, but also innovation support to SMEs, which, even if not newly introduced under the 2014 GBER, is instrumental to address SMEs needs. In addition, some elements of the other RDI measures, such as the experimental development definition, were also put to test in order to verify whether they are still fit for purpose i.e., whether these rules have contributed to increased public and private investments, as well as to increased RDI activities of industry/SMEs while addressing market failures, without unduly distorting competition in the internal market.

Effectiveness

Are the State aid rules for RDI, as introduced in 2014, meeting their objective?

Since the previous set of RDI 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 nano-electronics, advanced materials, industrial biotechnologies, and advanced manufacturing systems. Member States have also increasingly used the possibility to implement RDI aid without prior notification to and approval by the Commission, under the General Block Exemption Regulation (GBER). In total, RDI aid awarded under the previous rules amounted to an estimated EUR 62.4 billion.

As a result of the 2014 State aid modernisation (SAM) the changes introduced to the rules were to further allow the Commission to focus its ex ante control on measures with a significant impact on the internal market, while allowing Member States to implement, under their own responsibility, well targeted RDI measures expected to have only a limited impact on competition.²⁴³ It is noteworthy that 55% of interested stakeholders agreed that this result was achieved while 10% did not detect such an impact. This way, the rules were expected to reduce administrative burden for Member States and facilitate increased effective investments, both public and private, into RDI in Europe. Furthermore, the 2014 rules were to provide stronger incentives for public-private and private-private interactions leading to increased collaboration and knowledge transfer activities, thus facilitating the transition of knowledge and ideas to the market. Through these changes, the 2014 rules for State aid for research, development and innovation were also to support the EU's Europe 2020 strategy, of which one of the key targets is for R&D investments in the EU to reach 3% of GDP.

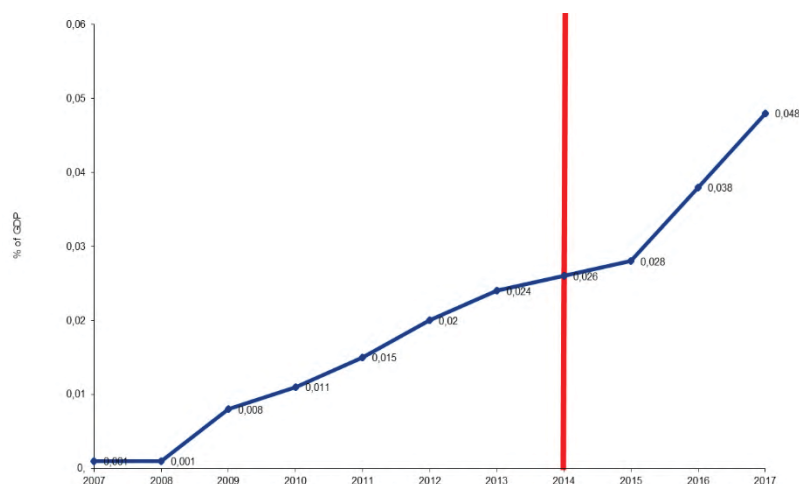
Approximately five years after their adoption, the State aid rules for RDI introduced in 2014 appear to have satisfactorily achieved their objective.

²⁴³ See *oxera*, ex post assessment of the impact of State aid on competition, pages V/VI, X, where based on an exemplary analysis of a Commission decision on R&D aid predating SAM, the contractor concluded that when the amount of aid was small relative to the market size (less than 1%), the aid was unlikely to have distorted competition; likewise, the absolute amount of aid is considered to be a factor to determine the potential effects on competition, *ibid*, pages 5/6.

This can be confirmed by the relevant State aid statistics showing that following the State Aid Modernisation in 2014, 96% of all RDI measures (more than 80% in value terms) in the Union in 2018 were implemented under the GBER (i.e. not requiring ex-ante approval by the Commission). Since the new rules entered into force, the Commission only had to take 8 decisions on individual State aid granted for RDI projects (including a decision approving a RDI scheme) involving a detailed assessment under the compatibility conditions set out in the RDI Framework. Thus, these statistics support the finding that the 2014 State aid rules for RDI, contributed to the SAM's goals to further facilitate RDI investments in Europe, reducing administrative burden for Member States and at the same time allow the Commission to focus its ex ante control on the most distortive cases.

It is also clear from the Scoreboard data that the new widened GBER²⁴⁴, has given Member States more autonomy in implementing RDI measures.

Figure 1: Evolution of aid for RDI granted under the GBER 2008 and GBER 2014 (% of GDP)²⁴⁵



According to the Scoreboard, RDI State aid expenditure increased steadily from EUR 10.5 billion in 2014 to EUR 11.27 billion in 2018, and 96% of all RDI measures (more than 80% in value terms) of the State aid to RDI has been disbursed under the GBER. The GBER extension carried out in the context of the 2014 SAM initiative has clearly contributed to this trend.

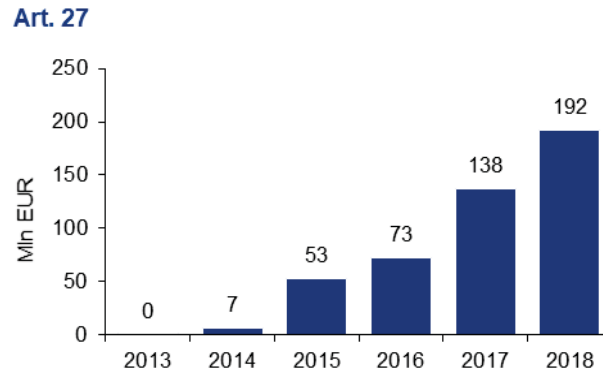
In particular, the positive evolution of State aid expenditure can be observed for measures targeted by the evaluation: support for experimental development activities, research infrastructures, innovation clusters, process and organisational innovation, innovation aid to SMEs. These measures have been considered key in further facilitating effective RDI investments, which would contribute to increasing EU competitiveness in line with the EU's Industrial and SME Strategy.

²⁴⁴ Since the SAM, GBER includes a wider range of RDI measures – such as aid for innovation clusters, aid for process and organisational innovation as well as a completely new aid measure targeting research infrastructures

²⁴⁵ RDI external study.

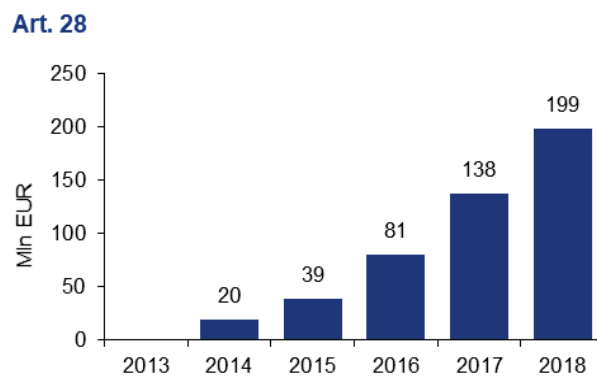
The State aid Scoreboard data show that the interventions targeting innovation clusters were overall effective, leading to a steady and continued increase in public State aid expenditure, from EUR 53.2 million in 2015 to EUR 192 million in 2018.

Figure 2: Evolution of aid for innovation clusters under Article 27 GBER (EUR million).²⁴⁶



State aid expenditure for measures targeting innovation aid for SMEs increased from EUR 39 million in 2015 to EUR 199 million in 2018.

Figure 3: Evolution of aid for innovation clusters under Article 28 GBER (EUR million).²⁴⁷



As outlined in the State Aid Scoreboard 2019, there was also a significant increase in public State aided investments implemented under aid for research infrastructures between 2015 and 2018 (from circa EUR 34 million in 2015 to circa EUR 143 million in 2017 to 240 million in 2018). This was a new provision introduced in the 2014 GBER setting out the conditions to provide State aid for research infrastructures. The evaluation found that overall the measure was effective in stimulating RDI investments for the given objective.

When assessing the effectiveness of these rules, particular attention was also paid to evaluating the effectiveness of the combined use of the GBER rules for support for innovation clusters and innovation aid to SMEs. The combined use of these two measures is considered of key importance, also EU policy wise, in stimulating RDI investments by SMEs. This was confirmed by the results of the RDI external study, whereby 70% of the respondents to the interviews agreed that State aid provided under both of the measures together is likely

²⁴⁶ RDI external study.

²⁴⁷ RDI external study.

to have had a positive effect on the evolution of private investments into innovation clusters (69.8%) and RDI activities of SMEs in innovation clusters (71.8%). Also, 56.5% of respondents agreed that the combined use of the two measures helped to increase public investments into innovation clusters and 65% found that it helped to increase public investments in RDI activities of SMEs.

The results of the RDI external study on the evaluation of the State aid rules for RDI also confirm that in general the rules implemented following SAM, have helped to increase collaborations between undertakings (SMEs and large enterprises) and between undertakings and research organisations²⁴⁸. The RDI external study revealed that a clear majority of stakeholders consider that the revised rules allowed for an increase in knowledge transfer activities between SMEs and large enterprises (approx. 54%) and between undertakings and research organisations (67%).

Moreover, according to the results from the interviews performed by an external contractor, more than 80% of the respondents confirmed that State aid was essential to carry out the evaluated RDI activities and helped companies and/or research organisations to receive adequate funding. At the same time, the RDI external study interview results confirmed the existence of market failures affecting investments into research infrastructures, innovation clusters, innovation activities of SMEs as well as RDI projects focused on experimental activities. These findings allow to consider that the evaluated rules targeted RDI investments addressing well-defined market failures²⁴⁹.

The RDI external study found also that above 80% of interviewees considered that State aid had no negative impact on competition. Only 14 out of 100 statements indicated that there might possibly be a negative effect caused by State aid. The RDI external study did not find any evidence suggesting that State aid provided for the evaluated measures had any material negative impact on competition or crowded out private investments. If at all, negative effects appear to be outweighed by positive ones in the view of the interviewed respondents.

However, the data considered in the evaluation in combination with the results of the interviews carried out by the external consultant indicated that there are still some clarifications sought on the interpretation of certain provisions. This concerns, in particular, certain aspects of the rules on research infrastructures, innovation clusters - including the interplay of those measures with innovation aid provisions -, as well as on process and organisational innovation. The detected lack of clarity concerning those provisions, expressed through several interpretation questions to the Commission and echoed in the RDI external study findings could bring about some undesired difficulties, such as unnecessary delays in the implementation of aid measures²⁵⁰.

²⁴⁸ Approximately 55% of stakeholders contacted in the context of the RDI external study took a positive view as to whether the rules have facilitated collaboration between SMEs and large enterprises, while 68% reply positively as concerns the rules' positive impact on collaboration between undertakings and research organisations.

²⁴⁹ Studies have confirmed (*oxera* and *Cincera and others*, Macroeconomic conditions and efficiency of public R&D) that public intervention is most effective where it focusses on addressing market failures (*oxera* study page 39 and *Cincera* study, pages 13, 15) rather than other policy considerations.

²⁵⁰ For example, this might had referred to the implementation of measures of non-economic character following the RDI Framework guidance on primary non-economic activities of the Research Organisations, or measures addressing the interplay between the rules on research infrastructure and innovation clusters.

With regard to innovation clusters, the RDI external study shows that the combination of aid to innovation clusters with innovation aid to SMEs, as well as other possible measures targeting cluster users is perceived as somewhat burdensome and thus might hinder SMEs uptake of RDI activities (according to the RDI external study, 66% of Member State authorities found it rather burdensome to grant State aid to the users of an innovation cluster mainly due to lack of understanding/clarity of the relevant provisions).

Along the same line, Member States called for a wider application of simplified cost options to calculate eligible indirect costs of research activities receiving support under State aid rules for RDI. In fact, the current Article 7 of the GBER only allows Member States to use simplified cost options in case the project or activity is at least partially financed through a Union fund, while this possibility is excluded for R&D projects funded through purely national resources. As actual indirect costs of R&D projects are often considered difficult or burdensome to verify and demonstrate²⁵¹, the use of a simplified cost option for indirect costs may provide a significant simplification for managing authorities. The evaluation, therefore, suggests that it may be appropriate to extend the application of the same simplified methodology for the calculation of indirect costs also to R&D projects funded entirely through purely national resources.

It also has to be acknowledged that R&D investments in the EU have not yet reached the 3% of GDP target and the EU is still lagging behind other global competitors in this regard. However, there are no indications from the evaluation's results that State aid rules for RDI have been obstructive in this respect. On the contrary, the evolution of State aid expenditures to RDI measures²⁵² since SAM in 2014, as cited above, demonstrates that the enlarged scope of the GBER rules for RDI could be interpreted as effectively serving the SAM agenda in enabling the Member States to effectively disburse their RDI public expenditures according to their national priorities.

Finally, it also has to be acknowledged that stakeholders have repeatedly emphasised the importance of keeping the rules stable, as this provides legal certainty and each change in the rules means a burdensome learning period for the RDI community (Member States, beneficiaries, associations, innovation agencies etc.), which might also have certain impact on the effective uptake and deployment of RDI measures in the EU.

Based on the above, it appears that in line with the SAM objective the State aid rules for RDI, which entered into force in 2014, have further facilitated (and there is no evidence pointing to the contrary) effective public and private RDI investments in Europe and incentivised collaboration activities between enterprises, as well as with research organisations. This objective has been achieved in a manner which addresses well-defined market failures limiting distortions to competition. At the same, there appears to be room to improve and simplify the rules to further enhance their effectiveness.

Efficiency

²⁵¹ See in general on simplified cost options the Commission guidance on Simplified Costs Options: Flat rate financing, Standard scales of unit costs, Lump sums concerning ESIF rules, page 6; on indirect costs: Study "Research for REGI committee – simplified cost options in practice", page 52.

²⁵² In 2014 the total amount of RDI State aid expenditures channelled through the GBER amounted to EUR 10.5 billion – in 2018 this amount has multiplied by more than 13 and reached EUR 140 billion

Are the State aid rules for RDI sufficiently clear?

The results of the public consultation indicated that a large majority of respondents took a positive view on the question of whether the State aid rules on RDI were clear and thus ensured efficient public expenditure²⁵³. In fact, almost 90% of those who have replied to the public consultation question whether the SAM package led to clearer rules for State aid for RDI (both under the Framework, as well as the GBER) took a positive view, while only 6% had a negative opinion.

The evaluation carried out by the external consultant focused on assessing the efficiency of State aid rules for RDI in two areas: State aid for experimental development projects and for innovation clusters. To address the issue of efficiency, clarity of the applicable definitions in these two areas was assessed to see the extent to which these measures enabled efficient implementation of RDI investments, while addressing the relevant market failures without unduly distorting competition. The reason for this targeted approach is that the definition of the innovation clusters was subject to many interpretation questions posed by Member States and other stakeholders, while the experimental development definition is perceived to be of significant importance for the efficient response of the undertakings to market challenges.

Both, the comments received in the context of the public consultation and the findings of the external study on the evaluation of the State aid rules for RDI revealed that Member States and other stakeholders experienced some difficulties in applying the definition of “innovation clusters”²⁵⁴.

Despite the changes, the innovation cluster definition under the State aid rules for RDI in force since 2014 is still considered to be too broad or unspecific, leaving room for interpretation, which might in turn lead to obstacles in the measure’s efficient implementation or to misapplication of the relevant rules by the Member States and/or lead to delays in a measure’s implementation. In addition, certain criteria were considered excessively formalistic, having led to unnecessary administrative burden. This might lead to obstacles in the measure’s efficient and timely implementation, or to misapplication of the relevant rules by the Member States.

Even though, according to the RDI external study, the definition of innovation cluster is judged to be clear by approx. 75% of the interviewees, only 35.6% of the Member State’s managing authorities consider it to be clear. The difficulties encountered by those other Member States in the interpretation and application of the definition of innovation clusters is also confirmed by the significant number of interpretation questions received by DG Competition in this respect.

With regard to the definition of experimental development projects, the RDI external study suggests that the definition has been perceived as sufficiently clear by a large majority of

²⁵³ In particular, more than 90% of those who responded to that question in relation to both the RDI Framework and the GBER had a positive view on the capability of these rules to allow for efficient public expenditure.

²⁵⁴ Article 2(92) GBER and section 1.3 (s) of the RDI Framework define innovation clusters as “structures or organised groups of independent parties (such as innovative start-ups, small, medium and large enterprises, as well as research and knowledge dissemination organisations, non-for-profit organisations and other related economic actors) designed to stimulate innovative activity by promoting sharing of facilities and exchange of knowledge and expertise and by contributing effectively to knowledge transfer, networking, information dissemination and collaboration among the undertakings and other organisations in the cluster”.

stakeholders interviewed. Of these, Member States authorities appeared especially satisfied, with 75% of positive replies against 21% holding negative opinions on the clarity of the definition. This finding is supported by the fact that almost no interpretation questions on the definition and scope of the experimental development have been submitted by the Member States²⁵⁵.

In conclusion, the fact that not all RDI related SA definitions are sufficiently clear, in particular the definition on innovation clusters, and that this is a view shared by a majority of Member States' authorities participating in the evaluation, may raise the risk that the relevant part of the RDI support implemented by Member States may have not been well targeted or even delayed, thus possibly leading to sub-optimal RDI investments into these particular activities in Europe.

Relevance

How well adapted (appropriate flexibility and safeguards) are the RDI rules to subsequent market developments and technological advances and how well do the objective of the RDI rules still correspond to the needs within the EU?

The results of the public consultation suggests that there is an overall positive view as concerns the appropriateness of the State aid rules for RDI to address recent markets and technology developments. At the same time, however, a significant majority of the respondents to the public consultation for RDI are only partially adapted to recent developments in markets and technology²⁵⁶.

To answer the evaluation questions in more detail the Fitness Check evaluation focused in particular on the relevance of the eligibility conditions (eligible activities, eligible beneficiaries, eligible costs and aid intensities) of the following measures in terms of being well-adapted to on-going market developments and contemporary market failures:

- Aid for innovation clusters,
- Aid for research infrastructures,
- Aid for process and organisational innovation, and
- Aid for RD projects, in particular as far as the experimental development phase is concerned.

These measures have been targeted by the evaluation since, on the basis of the feedback received from stakeholders prior to the evaluation, they seem to be most impacted by on-going market developments and technological advances and/or play a key role in incentivising technological advancements by the beneficiaries of support.

In general, the results of the public consultation suggest that there is an overall positive view as concerns the appropriateness of the above identified rules to address recent market and technology developments. At the same time, however, a significant majority of the

²⁵⁵ With the exception of confirmations sought on the applicability of the definition to shipbuilding industry and the possibility to sell the prototypes developed in an experimental development project.

²⁵⁶ In particular, more than 70% of those who have replied under the public consultation to that question in relation to the GBER and the RDI Framework indicated that the State aid rules for RDI are only partially adapted to recent developments and market needs, while approximately 20% indicated that the rules are still fully relevant.

respondents to the public consultation indicated that the State aid rules for RDI might be further improved to address recent developments in markets and technology²⁵⁷. These findings are further corroborated by the RDI external study and supported by feedback received from Member States during pre-notification contacts or from their interpretation questions posted through the eWiki platform.

At the same time, in the course of the evaluation no evidence was identified that would point to the rules not being well-targeted at contemporary market failures.

In the case of experimental development projects, the results of the RDI external study showed that the majority (75.7%) of the respondents found that the 2014 RDI State aid rules for experimental development have been well adapted to help addressing on-going market developments and contemporary market failures; similarly, 81.9% judged the eligibility criteria applicable to the experimental development definition to be well-designed. Also, the majority of respondents (72.5%) did not notice significant changes in the market failures with respect to experimental development. At the same time, it was noted by a minority of stakeholders that there may be need to clarify to what extent the existing rules on experimental development apply to IT/software development/digitalisation related activities, or to adapt the current rules to ensure that these areas, which play a crucial role in the twin transition of the EU economy, are fit to respond to current and future challenges. Therefore, while overall the definition of and the eligibility criteria applicable to experimental development activities are considered well-designed to address market failures without unduly distorting competition, some clarifications may be necessary.

The RDI external study findings based on interviews with diversified group of stakeholders also confirmed the need to further refine certain definitions, as well as compatibility conditions regarding research infrastructure, support for innovation clusters, and process/organisational innovation.

The RDI external study shows that the majority of the respondents – 52.9% of the interviewed Member State authorities and 73.3% of beneficiaries considered the scope of the definition and eligible activities regarding support for innovation clusters to be addressing on-going market developments. Interestingly this view was not shared by cluster operators or non-aided beneficiaries, of which more than 90% found the definition and eligible activities to be defined in an unproblematic manner.

The RDI external study findings based on interview responses of a diversified group of stakeholders also confirmed the need to further refine certain compatibility criteria to enhance market relevant combination of State aid for innovation clusters with innovation support to its users, in particular to SMEs. In particular, the evaluation evidenced that the criterion requiring that only costs of the separate “legal entity” operating a cluster be supported under the relevant GBER provision limits excessively the possibility to conceive alternative types of managing structures (for instance, partnerships not constituting a separate legal entity).

Also, the 10 year period limiting operational support for innovation clusters was criticised. In addition, with regard to the possibility to combine support to the innovation cluster operator

²⁵⁷ In particular, more than 70% of those who have replied to that question in relation to the GBER and the RDI Framework indicated that the State aid rules for RDI are only partially adapted to recent developments and market needs, while approximately 20% indicated that the rules are still fully relevant.

for its set-up, upgrade or operation, with support to users of the innovation cluster's services, the evaluation revealed a lack of clarity among the Member States and other stakeholders.

Therefore, in order to address the identified concerns regarding the required structure of the aided cluster and the possibilities to also provide aid to cluster users, it may be necessary to introduce limited clarifications in the RDI rules, on the basis of the Commission's practice.

There are also indications that Member State's granting authorities, as well as beneficiaries, need further guidance as to how to distinguish between economic and non-economic activities of both research infrastructures, as well as innovation clusters in order to be able to design measures well-targeted at the relevant market developments. More specifically, with regard to research infrastructures, the evaluation demonstrated that the notion of ancillary economic activities, including a mandatory monitoring period and claw-back mechanism²⁵⁸, is still perceived as unclear, burdensome and difficult to implement in practice. In particular, the results of the external study, as well as the significant number of interpretation questions addressed by the Member States in this respect, revealed uncertainties on the part of the aid granting authorities regarding the duration of the monitoring as well as on the functioning of the claw-back mechanism. In order to properly address these concerns, it may be necessary to clarify and simplify the practical implementation of this principle.

Based on case practice and interpretation questions from Member States, as well as feedback received from other Commission services working on the digital and RDI policy, the State aid rules for research infrastructures appear not to be sufficiently adapted to the future developments. In fact, the State aid rules for research infrastructures and their eligibility conditions do not cover the so-called "technology infrastructures" (also referred to as "test beds" or "living labs") and 'digital infrastructures or hubs'. These are a newly-emerging type of infrastructures, whose relevance has grown significantly lately, that are meant to provide research facilities, labs, high power computing or testing environment to the industry, and in particular SMEs (which typically do not have in-house testing facilities – for testing purposes on solutions or products close to the market)²⁵⁹. Due to high investment costs and an uncertain customer base, private investments for the construction of such infrastructures is difficult to secure and are not bankable. At the same time, due to the fact that they are predominantly used by the industry, technology and digital infrastructures would not be covered by the current definition of research infrastructures. By providing research facilities and testing environments to industry (especially SMEs), technology and digital infrastructures are considered as essential drivers to bring innovative products to market.²⁶⁰ In addition, they are expected to contribute to reinforcing Europe's industrial and strategic autonomy, by allowing for the development of strategically important key enabling technologies (such as new greener technologies, artificial intelligence and high performance computing), in line with the objectives of the Green Deal, the Industrial Strategy, as well as to enabling the twin transition towards a greener and digital EU economy.

²⁵⁸ Allowing to recover the already provided support in case the ancillarity threshold is exceeded and the aid cannot be found compatible.

²⁵⁹ By contrast, the State aid rules on research infrastructure only apply to "facilities, resources and related services that are used by the scientific community to conduct research in their respective fields [...]". See Article 2(91) of the GBER and point 15(ff) of the RDI Framework.

²⁶⁰ Staff Working Document 'Technology Infrastructures' of March 2019, page 6.

To address this identified gap, there appears to be the need for a targeted update of the RDI State aid rules by introducing rules dedicated to these infrastructures bearing in mind they would provide close to market services to industry.

The above assessment, supported by the RDI external study show that the distinction, provided in the State aid rules for RDI, between process innovation on the one hand and organisational innovation on the other hand, do not fully address relevant on-going market developments and are in addition not fully in line with the OECD's Oslo Manual definitions. It therefore seems that the relevant rules, in particular the definitions applicable, do not allow to address in a comprehensive manner on-going market developments and innovation challenges faced by companies, irrespective of their size. With regard to large enterprises, the conditions currently provided for process and organisational innovation aid measures are claimed to be too restrictive, which may limit the uptake of such measures by large undertakings, with a possible undesired effect on the global competitiveness of the European economy as a whole. However, it is to be noted that it is the general logic of the RDI State rules, which has not been contested, nor has evidence to the contrary been identified so far, that the closer to the market or bigger the size of the aid beneficiary, the lower State support should be provided for.

In addition, the results of the interviews carried out by the external consultant indicate that approximately 23% of respondents did not find support for process and organisation innovation necessary. At the same time, 80% did not find that the measure leads to negative effects on competition. This can be explained by the fact that the measure is currently targeted at support for SMEs and large enterprises can only benefit from it if they engage in collaboration activities with SMEs, the former benefiting from significantly smaller aid intensity (15%) in comparison to that established for SMEs (50%).

Based on the above, it appears that overall the State aid rules for RDI are well adapted to subsequent market developments and technological advances, and the objectives set by the evaluated measures covered by these rules correspond to the market needs faced by companies operating in the EU. The State aid rules for RDI maintain their central importance for the achievement of the objectives of key Commission policy initiatives, such as the Green Deal and the Industrial Strategy. As stated in the Green Deal Communication, “new technologies, sustainable solutions and disruptive innovation are critical to achieve the objective of the European Green Deal”²⁶¹, i.e. to enable a shift towards a climate neutral economy. The centrality of research and development to achieve the objective of transforming the EU industry into a more green and circular – and yet competitive one - is also recognised in the Industrial Strategy communication²⁶². Considering the significant public and private investments that will be necessary to achieve the ambitious goal of making Europe “the first climate-neutral continent by 2050”, targeted and time-bound State aid for RDI activities may play an important role to allow research and development into new and breakthrough, greener technologies and production processes to take place to the necessary extent. Moreover, State aid in the field of RDI may be beneficial to unlock investment into innovation, in particular by SMEs, with a view to fostering the competitiveness of the EU

²⁶¹ Green Deal Communication, section 2.2.3 “Mobilising research and fostering innovation”.

²⁶² Industrial Strategy Communication, section 2.2 “An industry that paves the way to climate-neutrality”.

industry and increasing the share of RD spending by EU companies, in line with EU Industrial²⁶³ and SME Strategy²⁶⁴.

However, there remain specific industry needs, which according to the evaluation results are unaddressed or insufficiently addressed by the current rules. These are in particular RDI related investments into technology and digital infrastructures and into some areas which are now considered as a priority under the Digital Strategy such as, for example, investments into Digital Innovation Hubs, High Performance Computing etc.²⁶⁵ Depending on the substance of the activity concerned, these shortcomings may need to be addressed either by introducing new rules (as for technology and digital infrastructures), or if the activities concerned are not implicitly or explicitly excluded from the scope of the application of the current RDI rules, by clarifying the existing rules where necessary, mostly for the sake of legal certainty.

Also, the evaluation clearly indicated that the existing rules are not sufficiently relevant in terms of addressing SMEs needs to access innovation clusters. As recognised in the SME Strategy communication, SMEs are “the backbone of the EU economy” and are “central to the EU’s twin transitions to a sustainable and digital economy”²⁶⁶, as they are capable of bringing innovative solutions to challenges like climate change, resource efficiency and social cohesion. In this context, public funding – including targeted and appropriately designed State aid rules – may allow SMEs to participate in ecosystems or collaborative environments whereby innovation can be spread throughout Europe (including regions lagging behind in terms of innovation), as well as for the provision of the necessary infrastructure. As explained above, clarifications as concerns the possibility to combine State aid to innovation cluster operators and relative users may need to be introduced in the current rules, to provide for additional legal certainty and facilitate SMEs’ access to clusters’ activities and services.

Coherence

Are the RDI State aid rules coherent with other EU policies ?

Concerning the coherence of RDI rules with rules governing EU centrally managed funds supporting research and development activities (namely Horizon 2020 when the evaluation was carried out), the public consultation and the RDI external study suggest that the existing rules do not allow for sufficient synergies between the two types of support. It should be noted, however, that the present assessment was carried out at the time when MFF related targeted revisions to the GBER were still in public consultation. The aim of the MFF GBER proposal was to further strengthen synergies between RDI State aid rules and EU support for RDI granted under the Horizon Framework programme (both under H2020 and future Horizon Europe). Certain amendments to the State aid rules for RDI were proposed in this regard to accommodate situations where State aid is combined with centrally managed funds under Horizon 2020 or Horizon Europe or replaces the latter (SME Seal-of-Excellence),

²⁶³ Industrial Strategy Communication, section 3.5 “Embedding a spirit of industrial innovation”.

²⁶⁴ SME Strategy Communication, Section 2 “Empowering SMEs to reap the benefits of the digital transition”.

²⁶⁵ Studies have confirmed (*oxera* and *Cincera and others*, Macroeconomic conditions and efficiency of public R&D) that public intervention is most effective where it focusses on addressing market failures (*oxera* study page 39 and *Cincera* study, pages 13, 15) rather than other policy considerations; the *Cincera* study, pages 6, 13, highlights also the importance of access to infrastructures for a thriving R&D environment, more specifically, an upstream process of R&I activities.

²⁶⁶ SME Strategy Communication, section 1 “Introduction”.

following the evaluation and selection of projects by the Commission (or independent external experts). This proposed targeted revision of the GBER in the RDI field was based on a detailed mapping exercise, which allowed to compare the areas where the RDI State aid rules and Horizon programme rules are misaligned and correct for this through this targeted amendment proposal to the GBER. This proposal is to further contribute to the coherence between State aid and Horizon programme rules as it addresses existing misalignments between the rules.

As far as coherence of the State aid rules for RDI with changes in EU legislation in major policy fields such as Research and Innovation, Cohesion and Regional policy or Entrepreneurship and SMEs, 25% of those who have replied to that question in relation to the GBER and the RDI Framework indicated that the State aid rules for RDI are fully coherent and less than 5% disagreed.

In addition, the State aid rules for RDI appear to be in line with several key policy initiatives recently launched by the Commission. First, the State aid rules for RDI appear to importantly serve the objectives of the European Green Deal, for whose achievement a significant amount of research and development into greener technologies and production processes is still necessary. Second, the one towards climate neutrality is not the only transition that the EU economy will face. In fact, as indicated in the Industrial Strategy Communication, the EU will undergo a “twin transition” towards a sustainable and digital economy. To attain those goals, important RDI activities will also be necessary, which may be supported with State aid under the relevant Articles of the GBER or the RDI Framework, where this is found to be necessary.²⁶⁷ This has become even more true and critical following the COVID-19 outbreak. Efficient and high quality investments in research, development, and innovation are expected to play a crucial role in achieving the collective and cohesive recovery from the current economic and health crisis.²⁶⁸ Up to date State aid rules for RDI reflecting current (and future) market and technology developments, thus will play a key role in enhancing Europe’s recovery process whilst safeguarding a level playing field within the Single Market and the European Research Area which itself is decisive for fostering innovation and competitiveness.

At the same time, to ensure that SMEs reap the benefit of the digital transition, the SME Strategy Communication recognised that innovation should be spread, with collaborative environments being created throughout the European regions. To enable SMEs’ participation into those innovative ecosystems, and their use of advanced disruptive technologies, such as blockchain and Artificial Intelligence (AI), Cloud and High Performance Computing (HPC), targeted and proportionate State aid may play an important role.

²⁶⁷ The SRIP report 2020, pages 258, 280, 512, 556, concludes that targeted updates of the regulatory framework in general are needed, encouraging innovation to support transition processes.

²⁶⁸ See also SRIP report 2020, page 12 on the coordinated EU response and the role of RDI.

IX. Rescue and Restructuring Guidelines

The Rescue and Restructuring Guidelines of 2014 are based on the 2004 Rescue and Restructuring Guidelines. However, the basic principles of the Rescue and Restructuring Guidelines were laid down long before, as the European Commission at least since the 1970s allowed State aid to undertakings in difficulty and earlier Guidelines were adopted and applied in 1994, 1997 and 1999.

Financial distress at the company level plays a signalling role in an economy, indicating that a firm is not making optimal use of its resources. While financial distress and consequent market exit plays a key role in ensuring an efficient allocation of resources, they can have negative economic consequences, which can justify public support. There is general consent that rescue and restructuring aid is distortive and detrimental to productivity and should be allowed only under strict conditions.

The overall objective of the EU policy for restructuring aid to the non-financial sector is to contribute to successful restructuring of undertakings, i.e. allow them to return to viable operation. In 2015 DG Competition commissioned the consortium formed by WIFO, SPI, Ecorys, ZEW and Idea Consult for an impact assessment²⁶⁹ to evaluate whether the rules on rescue and restructuring aid are effective in regard to this overall objective. The study was to evaluate the efficiency and effectiveness of DG Competition's ex-ante assessment of the restructuring plans submitted by the Member States. Overall, the counterfactual-based analysis of the study indicates that restructuring aid has achieved its aim, at least in part, of improving the viability of the aided companies.

The study also showed that despite the restructuring aid, not all aided companies were still on the market. The reasons that have contributed to companies not being active in the market were: unavailability of timely financing/ delayed disbursement of loans; declining profit margins and increasing losses; high labour costs and pressure from labour unions; increasing competition from producers in the emerging economies; contraction in business/ reduction in market size; and the global economic crisis.

Concerning the survival probability of aided firms compared to the survival probability without aid, the study found an absolute 14% to 18% difference in survival probability between restructuring aid receiving firms and the counterfactual group: depending on the chosen definition of survival, 82% to 86% of the aid-recipients but only 62% to 68% from the counterfactual group survived. The study stated that there was general agreement by the companies and the stakeholders interviewed that the outcome without the aid was likely to have been bankruptcy.

Concerning whether the aided firm achieve the main financial and operational targets (e.g. net profit, cash flows, return on capital, debt, employment) set in the restructuring plan endorsed by the Commission, within the envisaged timeframe, the case studies show that many times the aided company did not fully achieve the main financial and operational targets as set in the restructuring plan. The study found that delays in the

²⁶⁹ Ex-post evaluation of the impact of restructuring aid decisions on the viability of aided (non-financial) firms.

preparation of the restructuring plan at Member State level can negatively affect the outcome, for example rendering targets foreseen in the restructuring plan unrealistic. The final outcome or the ability to attain targets are also affected by the fact that restructuring measures are not fully implemented.

The study also showed that the restructuring plans and underlying assumptions sometimes tend to be too optimistic, for example in relation to the execution of measures (timing), ability to gain new work, market developments and the financial impact of measures. At the same time the actual market conditions were worse than anticipated in the scenarios, related to the impact of the global economic and financial crisis. The study showed that a clear and significant information asymmetry exists between the company on the one hand, and the granting authorities and the EC on the other, resulting in an “information dependency” (to the company’s advantage). This risk was emphasised by different stakeholder interests.

Concerning whether there is any evidence that the aid granted has created a major distortion of competition in the respective sector, the study identified no evidence of major distortion caused by the aid. While some companies show improved performance over competitors, their market share is not sufficient to constitute a major distortion. Further, in some cases, the compensatory measures were considered sufficient to prevent distortions.

Based on the findings the study formulated recommendations to make the restructurings plans endorsed in the Commission decision more efficient and effective.

Given that the number of cases under the 2014 Rescue and Restructuring Guidelines is limited, in particular as concerns compatible restructuring aid (only six cases), the case practice is not sufficient to evaluate all the changes to the eligibility and substantive conditions for compatible aid brought about in the 2014 modification of the Guidelines. Therefore, the present assessment focuses on one of its major changes, namely the definition of 'undertaking in difficulty' (UID), which determines which undertakings qualify as undertaking in difficulty.

Qualifying an undertaking as an UID determines not only whether it is eligible for rescue and restructuring aid, but also whether it can benefit from GBER or other types of aid, as companies in difficulty are in principle excluded from other types of aid. This is so because a firm in difficulty cannot be considered an appropriate vehicle for promoting other public policy objectives until such time as its viability is assured.

The modification of the definition of UID

The previous definition²⁷⁰ of an UID until 2014 stated that an undertaking was in difficulty if, (1) it could be subject of insolvency proceedings under domestic law, or (2) 50% of its registered capital disappeared (‘disappearing capital’) and ¼ of that over the preceding 12 months. The 2004 Rescue and Restructuring Guidelines also included so-called soft criteria (3), (point 11 of the 2004 Rescue and Restructuring Guidelines),

²⁷⁰ Points 9 to 13 of the 2004 Rescue and Restructuring Guidelines.

according to which “a firm may still be considered to be in difficulty, in particular where the usual signs of a firm being in difficulty are present...”.

The 2014 Rescue and Restructuring Guidelines modified the definition of an UID by (i) removing the soft criteria, (ii) modifying the definition and the calculation of the disappearing capital criterion, and (iii) introducing an additional quantifiable criterion²⁷¹ for determining if an undertaking is in difficulty. The insolvency criterion remained as this criterion is based on the legal regimes in place in the Member States based on their bankruptcy legislation and in particular, its application is not problematic.

(ii) According to the modified criteria of disappearing capital, an undertaking is in difficulty „where more than half of its subscribed share capital (share capital includes any share premium) has disappeared as a result of accumulated losses. This is the case when deduction of accumulated losses from reserves (and all other elements generally considered as part of the own funds of the company) leads to a negative cumulative amount that exceeds half of the subscribed share capital.”

(iii) According the additional UID criterion, an undertaking, other than an SME, is in difficulty, “where, for the past two years, (1) the undertaking’s book debt to equity ratio has been greater than 7.5²⁷², and (2) the undertaking’s EBITDA interest coverage ratio²⁷³ has been below 1.0.”

The objective of the SAM modification

Given the importance of this definition for State aid control, the objective of the modification was to provide the authorities of the Member States and the users of the Rescue and Restructuring Guidelines and the GBER with clearly quantifiable criteria in order to determine if an undertaking is in difficulty. UID are eligible for rescue and restructuring aid, but cannot received GBER aid²⁷⁴. This is in particular important, given the fact that the GBER is applied by Member States’ authorities directly.

Therefore, objective criteria were important, in particular as the scope of GBER aid increased as a result of SAM.

The assessment below indicates that while the UID criterion largely meets its objective to identify companies in difficulties correctly, it is not entirely clear and easy to apply for national authorities and guidance and/or technical clarification might be needed.

Effectiveness

To what extent are the criteria appropriate to properly identify UID?

²⁷¹ Point 20d of the 2014 Rescue and Restructuring Guidelines.

²⁷² Debt/equity is > 7.5, meaning that the debt of the company is 7.5 times of the equity.

²⁷³ EBITDA/interest expense < 1, meaning that the earnings of the company before the payment of interest, taxes and the consideration of the depreciation cost (non-monetary cost), is not sufficient even to pay the annual interest expense of the company.

²⁷⁴ There are only few exceptions to this rule: namely aid schemes to make good the damage caused by certain natural disasters article 4 (c) of the GBER; an SME within 7 years from its first commercial sale that qualifies for risk finance aid Art. 2 (18) of the GBER.

Respondents to the public consultation took the view that the modified definition of UID facilitates compliance with State Aid rule, though also suggests that there are elements to improve (42% of the respondents who knew the answer, said 'yes', while 40% said 'partially', and only 18% said 'no'). Moreover, To the question to what extent have State aid rules achieved the objective of identifying companies in difficulty by setting correct definition criteria²⁷⁵, 35 respondents (61.4%) replied 'to some extent only', 13 respondents said (13%) 'to a large extent' and 9 respondents replied 'not at all'. Concerning to what extent have the setting of correct definition for companies in difficulty achieved the objective of maintaining a competitive internal market²⁷⁶, 22 respondents (47.8%) replied 'to some extent only', 17 respondents (37%) replied 'to a large extent' and 7 respondents said 'not at all'. As regards the scope of the UID, some respondents also suggested that the definition does not fit for certain type of companies, in particular for start-ups, scale-ups, on companies developing new technology, and on Venture Capital financing.

DG Competition also carried out a detailed analysis of the UID criterion. The analysis are based on the 2017 and 2018 financial data of all companies in EU28 with (1) Standard and Poor's (S&P), with focus on ratings of BB+/BB/BB-, B+/B/B- and CCC+/CCC/CCC-, and (2) credit scores assigned by the CreditModel of S&P.

When the calibration and choice of the new quantifiable criterion, i.e. the combined debt to equity ratio and EBITDA interest coverage ratio, was made in 2010-2013, the original goal of the criterion was to capture firms that are assigned a CCC rating (or lower). The reason being that the historical default rates²⁷⁷ are high for CCC rated companies, indicating that they have liquidity problems, as they are not servicing their debt. Not servicing debt, in particular bank debt, often leads to the insolvency of the company.

First, DG Competition analysed the debt to equity, EBITDA interest coverage and disappearing capital ratios of companies in the above rating groups. Second, the DG Competition analysed what are the ratings and credit scores of companies, which fulfil the combined criterion of interest coverage and debt to equity ratio, and the disappearing capital criterion. Furthermore, it was also reviewed whether the companies subject to rescue and restructuring decisions were indeed companies in difficulty, and whether they met the financial criteria of UID.

a) The findings concerning the additional quantifiable criteria of the 2014 Rescue and Restructuring Guidelines: EBITDA interest coverage and debt to equity ratios

Interest coverage ratio

With regard to the interest coverage ratio the first analysis showed, that in each rating group (BB, B, and CCC) there are companies, whose ratios meet the criteria (have a coverage ratio below 1), meaning that their earnings from operation do not even cover the interest charges on their debt. However, only 9% (22 companies) of BB rated

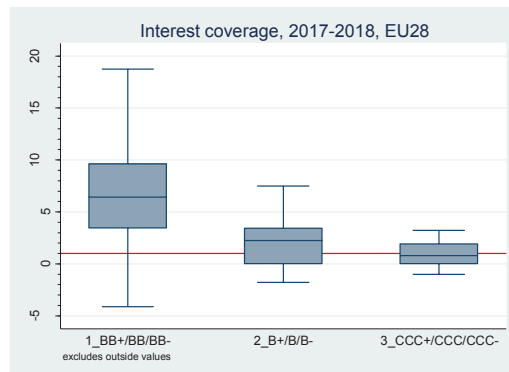
²⁷⁵ Public consultation question 5.10 a.

²⁷⁶ Public consultation question 5.10 b.

²⁷⁷ The default rate is the percentage of all outstanding loans that a lender has written off after a prolonged period of missed payments. A loan is typically declared in default if payment is 270 days late.

companies would fall into this category, while 91% (236 companies) of the companies with BB rating would earn more than their interest costs. Looking at companies with B rating the analysis found that 31% (86 companies) have a coverage ratio below 1, and 69% (184 companies) have a ratio above 1. For CCC ratings 50% (15 companies) have a ratio below 1 and 50% (15 companies) above 1. Graph 1 shows this result in a box plot²⁷⁸ graphs.

Figure 1: Box plot graph of interest coverage ratio



The red line in graph 1 shows the threshold for the criteria of EBITDA interest coverage ratio. Below the redline, i.e. below 1, the company meets the first part of the combined UID criterion relating to interest coverage ratio below 1. The graph shows that in each rating group, there are companies below the red line, and while the distribution of the ratio in the BB group is wide, in the CCC group the distribution of the ratio is concentrated close to the red line, meaning that the.

The above analysis confirms that the criterion captures mostly CCC rated companies, as DG COMP's originally intended, though, it is true that if the EBITDA interest coverage ratio is considered alone, companies with better ratings are captured as well. However, the UID criterion combines the EBITDA interest coverage ratio with the debt to equity ratio, and both of them should be met for two years. Therefore, it should be seen what are the ratings of companies, which have a debt to equity ratio above 7.5.

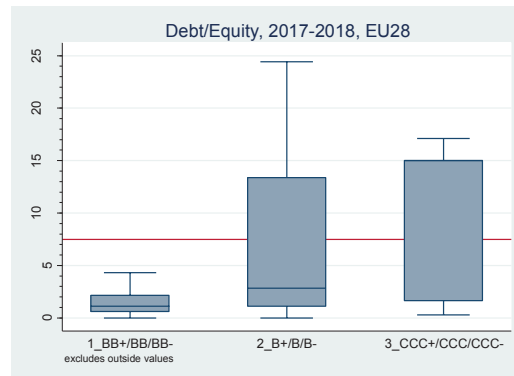
Debt to equity ratio

The debt to equity ratio, which is also called a leverage ratio shows the level of indebtedness. The UID criterion has a 7.5 threshold, meaning that it captures companies the debt of which is 7.5 times higher than their capital. The red line in graph 2 indicates this threshold of 7.5 for the debt to equity ratio. The graph shows that BB rated companies have a better debt to equity ratio than the criterion used for UID, however, there are a number of companies in the B rated group that have a debt, which is 7.5

²⁷⁸ A box plot is a common way to display distribution. The lower (upper) end of the box corresponds to the 25th (75th) percentile of the underlying distribution, while the box itself for 50 percentile. The median of the distribution is the horizontal line cutting the box in two parts.

times higher than their equity.²⁷⁹ Moreover, there are a number of CCC rated companies which have a ratio better than 7.5. More specifically, 21 (50%) CCC rated companies have a debt to equity ratio above 7.5, while the other half of the analysed companies have a ratio below. For B rated companies, 31%, i.e. 89 companies are above the 7.5 threshold.

Figure 2: Box plot graph of debt to equity ratio



Based on the above results if considered alone the debt to equity threshold of 7.5 would capture companies which have a better rating than CCC, i.e. companies which are not expected to default on their payments and are therefore not intended to be captured by the UID criterion.

EBITDA interest coverage ratio and debt to equity ratio combined

Given that both the EBITDA interest coverage ratio of 1, and the debt to equity ratio threshold of 7.5 alone would capture companies which are not expected to default on their payments, the two ratios combined should be analysed. DG Competition therefore analysed which ratings and credit scores are assigned to companies, which fulfil the combined criterion of interest coverage and debt to equity ratio of the Rescue and Restructuring Guidelines ('the combined ratios criteria'), i.e. point 20d of the 2014 Rescue and restructuring guidelines, for the two consecutive years, 2017 and 2018.

The analysis examined 1437 companies from EU28, US, Norway and Switzerland which have a credit rating, out of which 17 met the combined UID criterion. Out of the 17 companies, 6 was in the CCC rating group, while 9 in the B group, and 2 companies in the A group. However, as these ratings are purchased it may not be representative (i.e. better rating could be given than should be purely based on the financial data).

Therefore, DG Competition carried out the same analysis for companies, which are not rated by S&P, but have a credit score by S&P CreditModel based on their financial data. The analysis found that out of 4770 scored companies, 98 met the UID combined ratios

²⁷⁹ One complication arises if total equity is negative. A negative equity makes the leverage ratio negative. A negative equity figure complicates the interpretation of the leverage ratio since very high and negative equity leads to a negative, therefore low leverage ratio. However, having even negative equity leads to a low but negative leverage ratio. Having negative equity in addition to high debt is a clear sign of financial problems. For the box plot set for companies with negative equity the leverage ratio to some arbitrary high number of 15 which brings the interpretation of high (positive) leverage back in line.

criterion. Out of the 98 companies, 76 companies are in the ‘ccc’ credit score group²⁸⁰, while 20 companies in the ‘b’ credit score group and 2 companies in the ‘bb’ credit score group. There is no company with ‘a’ credit score.

So the analysis of DG Competition found that companies with higher ratings than CCC and better credit scores than ccc meet the combined criteria of EBITDA interest coverage ratio and debt to equity ratio, however, the majority of the companies would be CCC rated and ccc scored.

The analysis confirmed that the combined criteria can with high probability identify companies going out of business in the short and medium term.

b) The findings concerning the criterion of disappearing capital

The disappearing capital is a criterion, which was present in the 2004 Rescue and Restructuring Guidelines, however, slightly differently. The previous criterion required that ¼ of the share capital loss happened in the past 12 months, and the share capital did not have to include the share premium. Modified criterion sets no time frame and considers share premium part of the share capital

DG Competition performed an analysis of the equity situation of rated companies with A, BBB, BB, B and CCC ratings as of 31 December 2018 and 2017. In total, there are 2436 rated company the majority of them are well rated. Of these 2436 rated companies, 176 fulfil the lost capital condition FY2017 and FY2018. See table 1 below. Of that subset of firms, the largest group are companies rated B+ (15%), B (19%), B- (16%) and CCC+ (10%). The small subsample in the CCC group is likely not representative since the availability of a rating might depend on the decision to purchase a rating. It seems plausible that only firms which expect better ratings will purchase a rating.

Nevertheless, Table 1 shows that even better rated companies can be in situations where more than 50% of their share capital is lost and even for two consecutive years. This would suggest that this UID criterion captures rated companies which are normally not expected to go out of business. However, it is possible that the rating given by the rating agency is better than what the company should deserve based on its financial performance, and therefore the rating does not reflect the real financial situation of the company. For this reason the scored companies are analysed as well.

²⁸⁰ Credit scores follow the convention of ratings but use small letters instead of capital letters to distinct them from proper ratings.

Table 1: Number of companies meeting the UID criterion per rating group

S&P Rating group	No. of rated companies in the sample	No. of companies meeting UID criterion of disappearing capital	% of total no. of companies	% within rating group
AAA	15	1	0.6%	6.7%
AA+	31	0	0.0%	0.0%
AA	22	1	0.6%	4.5%
AA-	394	0	0.0%	0.0%
A+	110	0	0.0%	0.0%
A	165	1	0.6%	0.6%
A-	230	5	2.8%	2.2%
BBB+	236	6	3.4%	2.5%
BBB	265	7	4.0%	2.6%
BBB-	151	6	3.4%	4.0%
BB+	143	10	5.7%	7.0%
BB	180	10	5.7%	5.6%
BB-	139	15	8.5%	10.8%
B+	120	26	14.8%	21.7%
B	118	34	19.3%	28.8%
B-	75	29	16.5%	38.7%
CCC+	31	18	10.2%	58.1%
CCC	8	6	3.4%	75.0%
CCC	3	1	0.6%	33.3%
Total	2436	176	100.0%	

Table 2 below shows the same analysis for companies with credit scores (which are not prone to the same limitation regarding availability like credit ratings). Overall 8094 credit score estimates of companies could be retrieved at the end of 2018. Out of this, 732 companies met the UID condition for disappearing capital for two consecutive years. The majority of firms belong to ‘b’ scoring or worse. When compared to the sample universe within the scoring group, the disappearing capital criterion is met for more than 50% in case of companies having a ‘ccc’ score. For better scored companies that fraction steadily declines to 38% in ‘b-‘ and 18% for ‘b’ rated.

Therefore, the analysis indicates that the disappearing capital condition for UID is very good at capturing ‘ccc’ companies, however, it also captures a significant share of ‘b’ scored companies, for which the expected default rate is not high, so they are not expected to go out of business in the near future due to inability to pay.

Table 2: Credit scores of companies with 50% or more disappeared capital

S&P credit score	No. of companies with credit score in the sample	No. of companies meeting UID criterion of disappearing capital	% of total no. of companies	% within scoring group
aaa	0	0		
aa+	4	0		
aa	16	0		
aa-	28	0		
a+	78	0		
a	196	0		
a-	425	1	0.1%	0.2%
bbb+	968	5	0.7%	0.5%
bbb	1135	13	1.8%	1.1%
bbb-	836	17	2.3%	2.0%
bb+	630	20	2.7%	3.2%
bb	694	25	3.4%	3.6%
bb-	823	51	7.0%	6.2%
b+	834	96	13.1%	11.5%
b	573	105	14.3%	18.3%
b-	427	163	22.3%	38.2%
ccc+	296	161	22.0%	54.4%
ccc	131	75	10.2%	57.3%
ccc-	0	0		
Total	8094	732	100.0%	

The three analyses of the 50% disappearing capital criterion demonstrates that not only the expected group of CCC rated and ccc credit scored companies have equity position where more than 50% of their share capital is lost. Companies with better ratings also have such a capital position, though the default rate of higher rated companies is significantly lower, as Table 3 shows.

Table 3: Global corporate annual default rates by rating category ²⁸¹

(%)	AAA	AA	A	BBB	BB	B	CCC/C
2015	0.00	0.00	0.00	0.00	0.16	2.41	26.67
2016	0.00	0.00	0.00	0.06	0.47	3.74	33.33
2017	0.00	0.00	0.00	0.00	0.08	0.99	26.45
2018	0.00	0.00	0.00	0.00	0.00	0.98	27.18

Given the fact, that companies with better ratings are captured by the disappearing capital ratio even if two consecutive years are considered, the UID criterion of disappearing capital results in qualifying more companies as UID than intended. This is not problematic in case of eligibility for rescue and restructuring aid because detailed assessment is carried out of the financial position of the companies. However, as the UID criterion of disappearing capital is also used as an exclusion criterion from GBER aid, the application of the UID criterion can lead to exclusion in cases, where it is not intended.

The modification of the UID criterion of disappearing capital which includes the premium reserve in the share capital and the deletion of the 12 months period increased the number of companies meeting the UID criterion of disappearing capital.

²⁸¹ Source: S&P

c, Application of the criteria in rescue and restructuring decisions

DG Competition also reviewed whether the companies subject to rescue and restructuring decisions are indeed companies in difficulty, and whether they meet all financial criteria of UID.

The review found that the combined criterion of debt to equity ratio and the interest coverage ratio was never used as a criterion for determining whether the company qualified as an UID for the rescue and restructuring decisions. All the individual aid cases were based on the criterion of insolvency (6 cases) or on the criterion of the disappearing capital (8 cases), or in two cases on both.

DG Competition examined whether the companies, which benefitted from rescue and restructuring aid, met the combined criterion of debt to equity and interest coverage ratio. Only in 7 cases were the necessary financial data available in the decision or in the database Capital IQ. These 7 cases showed that 4 companies would have met this criterion, while 3 not.

Based on these limited observation points DG Competition notes, that companies are less likely to meet the combined criterion of the debt to equity and interest coverage ratios, because of their lower indebtedness than 7.5 times of their equity.

Overall, it has been shown that the UID criteria, in particular the disappearing capital criterion is overly conservative, as it captures companies with better rating and scoring than CCC and ccc, which are not expected to default on their payment, and therefore were not intended to be qualified as UID. This is not a problem for rescue and restructuring aid eligibility, however, this can cause that more undertakings are considered non-eligible for GBER aid, than intended by the Commission. Reintroducing the 12 months observation period in place prior to the 2014 modification and eliminating the inclusion of the share premium introduced by the 2014 modification could ease the overly conservative nature of this UID criterion.

Efficiency

To what extent are the criteria for "undertaking in difficulty" sufficiently clear and easy to apply?

As stated above, Member States largely support the idea to exclude economically unhealthy enterprises from State aid (other than rescue and restructuring aid):²⁸² “[we] fully support the concept of excluding failing firms from most forms of State aid with the exception of rescue and restructuring aid”.²⁸³

As far as case practice is concerned, DG Competition has not encountered problems in applying the UID criteria for the purposes of the Rescue and Restructuring Guidelines. With regard to the monitoring exercise, as regards rescue and restructuring schemes,

²⁸² “[Our authorities] are pleased with the specific Guidelines for rescue and restructuring aid and consider these guidelines essential for State aid practice.” Dutch position paper ; « Luxembourg fully supports the exclusion of economically unhealthy enterprises from state aid. » « We fully support the idea to exclude economic unhealthy enterprises from state aid” Flemish region.

²⁸³ Dutch position paper.

overall there was no indication that the granting authorities would have difficulty with identifying if an undertaking is in difficulty. As regards, however the monitoring exercise in general, the criterion of a firm in difficulty for the sake establishing eligibility is a relatively recurring irregularity type and DG Competition observed to a certain degree insufficient controls on the nature of aid beneficiaries.

However, some Member States expressed concerns that the practical application of this exclusion principle, in particular for determining whether a beneficiary is eligible for GBER aid might turn out to be difficult in certain instances.

In particular, respondents to the public consultation took the view that whilst the new definition of a company in difficulty facilitated the compliance with State Aid rules there may be elements to improve. More precisely, 42% of the respondents who expressed an opinion replied 'yes', while 40% said 'partially', and only 18% said 'no'. For public authorities these figures are in a similar magnitude.²⁸⁴

In addition, interpretation questions²⁸⁵ from Member States suggest that national authorities may have some practical difficulties in applying this criterion for the purposes of the GBER.²⁸⁶ The questions mainly relate to three areas of the application: (i) the calculation of the financial criteria, in particular the calculation of the 50% share capital lost²⁸⁷; (ii) the application of the UID criteria for a group of companies;²⁸⁸ and (iii) the application of the UID criteria for undertakings, which do not have a capital requirement under national law. These themes corroborate with the areas the respondents to the public consultation brought up.

Impact of the COVID-19 crisis

As regards the effects of the COVID19 crisis, the conditions for aid under the Temporary Framework are less stringent than under the Rescue and Restructuring Guidelines. Therefore, in the short term, it is possible that many Member States will provide aid under the Temporary Framework for undertakings in financial difficulty, if possible. However, the need for the rescue and restructuring aid could increase as a result of the crisis in the mid- to long-term. In particular, undertakings, which were in difficulty end of 2019 are not eligible for aid under the Temporary Framework (except for small and micro undertakings). Ultimately, at this stage, the COVID-19 crisis does not seem to have an impact on the conclusions of the Fitness Check with regard to Rescue and Restructuring Guidelines.

²⁸⁴ 42% yes, 40% partially and 18% no

²⁸⁵ Since the applicability of the new rules as of 1 July 2014, Member States have sent 61 questions

²⁸⁶ The overall majority of the questions refer to the definition and of the UID criteria from the viewpoint of eligibility for GBER aid (and not for rescue and restructuring aid).

²⁸⁷ These questions relate to how the financial criteria should be calculated and assessed, and in particular, to the assessment of the 50% capital lost (the disappearing capital). The questions suggest that it has not been entirely clear for certain Member States what is understood under reserve, own funds, and what should be added and what should be deducted.

²⁸⁸ On the basis of the questions it appears that certain member States encounter problems when applying the UID criteria in case of a group, in particular, whether the basis for the assessment: the entity level or the group level is appropriate. how to assess a single economic entity, how to perform the assessment at group level if there are no consolidate financial statements.

X. STEC

Effectiveness

To what extent have the objectives of STEC been reached?

Overall, it appears that STEC reached the intended purpose of ensuring that State aid does not distort competition in the internal market among private and public or publicly supported export-credit insurers as well as among exporters in different Member States (in trade within and outside the Union).

Furthermore, the limited number of only seven export-credit schemes notified since the entry into force of STEC in 2013 represents an indication that the private market is generally functioning well and Member States rarely see the need to intervene by notifying a scheme under one of the exemptions to the definition of marketable risks. This corresponds to recently published information stemming from the leading global export credit and investment insurance association Berne Union, according to which public credit insurance predominantly regards longer-term transactions²⁸⁹, leaving to a large extent the short-term business in marketable countries to be catered for by the private insurance market.²⁹⁰

Both the public consultation and the targeted consultation of stakeholders suggest that the STEC objectives have been reached. The five position papers submitted separately to the public consultation suggest that in principle STEC is functioning well.

The large majority of respondents to the targeted consultation (70% with respect to competition amongst insurers and 60% with respect to competition amongst exporters) found that STEC achieved its main objective of ensuring an adequate competition level between players in the short-term export-credit insurance market.

In the public consultation, the majority of respondents who expressed a view (58%) stated that the scope of STEC is adequate, while the majority of those who expressed a view (over 95%) were of the opinion that the STEC rules reduced, at least partially, the risk of subsidy race among Member States. Moreover, according to the majority of respondents who expressed a view, STEC reached the objective to allow for provision of short-term export-credit insurance in non-marketable countries while maintaining a competitive internal market.

The consultation activities also revealed some indication that the private insurers and Export Credit Agencies (“ECAs”) often focus on the different niches of the market. This finding is confirmed with the latest comments from the export credit insurance industry on the enhanced level of cooperation among ECAs and private insurance market, which is expected to increase in the future²⁹¹, and their *de facto* complementarity²⁹².

²⁸⁹ John Lorié: Public credit insurance benefits international trade. But How much? (Berne Union Newsletter, July 2019, p. 12).

²⁹⁰ Ferdinand Schipfer: ECAs and the aid community – two universes in close proximity (Berne Union Newsletter, May 2019, p. 9).

²⁹¹ Christina Westholm-Schröder: State of the market – cooperation for capital mobilisation – we have come a long way! (Berne Union Yearbook, 2019, p. 15-16).

²⁹² Vinco David: Economic development and protecting trade: the case for credit insurance (Berne Union Newsletter, April 2018, p. 4).

Finally, the above findings on the overall effectiveness of STEC rules are corroborated by the absence of formal complaints submitted to the Commission with respect to short-term export-credit insurance.

Efficiency

Have the costs associated with the implementation of STEC been adequate and proportionate with respect to the achievements and benefits of STEC?

The evaluation did not raise concerns with respect to the costs of the implementation of STEC.

Both the public consultation and the targeted consultation of stakeholders suggest that the costs associated with the implementation of STEC have been adequate and proportionate.

The majority of respondents to the targeted consultation (62%) did not express their opinion on the administrative burden linked to the implementation of STEC. However, the majority of those who replied (86%) considered the administrative burden to be somewhat reduced. The limited number of notifications under STEC could also be seen as pointing out to the efficiency of the STEC rules. In the public consultation, the majority of respondents who expressed a view (almost 90%) said STEC ensured efficient State expenditure.

Relevance

To what extent STEC addressed current needs and problems in the field of short-term export-credit insurance?

The results of the evaluation show that STEC is deemed relevant as it sets out a framework to address distortions of competition in the short-term export-credit insurance market. By defining clear limits for interventions of public and private insurance providers, it allows Member States to provide short-term export-credit insurance for specific commercial and political risks which are deemed non-marketable or, in certain cases, temporarily non-marketable. When it comes to temporarily non-marketable risks, seven Member States operated export-credit schemes approved by the Commission under STEC.

This relevance of STEC rules is amongst other reflected in results of a recent study conducted at the European level by Euler Hermes, according to which exporters using credit insurance are exporting on average to twice as many countries compared to exporters without such insurance²⁹³.

In response to the targeted consultation, seven Member States explicitly declared that they only provided insurance of short-term export-credit risks towards Greece during its exemption from the list of marketable risk countries.

Based on the information in the reports on the use of short-term export-credit insurance schemes operated under STEC, it can be observed that the total volumes of credit limits granted and turnover insured are not of a significant size. In terms of distortions of competition, those volumes are immaterial compared to the gross domestic product (GDP) of

²⁹³ COSEC: The importance of credit insurance for national SMEs (Berne Union Newsletter, September 2017, p. 19).

the Member States operating the schemes. For illustrative purposes, in the period concerned, the export turnover insured against temporarily non-marketable risks under STEC amounts from 0.0005% of GDP in Estonia to a maximum 0.1% of GDP in Croatia.

In the targeted consultation, a large number of respondents (75%) provided replies and comments on the category of temporarily non-marketable risks concerning SMEs with a total annual export turnover not exceeding EUR 2 million. According to the majority of the respondents that provided comments (75%), the threshold was determined a while ago and it would benefit from an adjustment, with the relevant number of those respondents (57%) pointing out to the fact that the threshold is too low. Among the comments provided in the targeted consultation, it is mostly Member States pointing out not being able to offer cover to SMEs with an annual export turnover higher than EUR 2 million. According to some of them, there are SMEs within that group whose export risks private insurers have little or no interest in covering, which is likely to harm their ability to finalise their transactions and ultimately their competitiveness vis-à-vis their foreign counterparts. In that sense, the suggestions for a new threshold range from EUR 4 million to EUR 10 million. At the same time, there is no evidence provided that would point to a private insurance market failure for risks of SMEs with an annual export turnover higher than EUR 2 million.

In the public consultation, the majority of respondents who expressed a view stated that STEC, at least partially, still corresponds to the current EU priorities (over 95%) and it is well adapted, at least partially, to recent developments in markets and technology (almost 90%). One issue raised in the position papers submitted separately to the public consultation concerns increased competition in the exports outside of EU (mainly focused in Asia). Not being subject to STEC, the non-EU export credit agencies seem to be able to insure much wider range of risks to non-EU exporters, which leads to a disadvantage of EU exporters when competing in those markets.

Following the sudden COVID19 outbreak in Europe and its economic impact, the Commission services launched an urgent public consultation in the week of 23 March 2020 as regards the availability of private short-term credit insurance for exports to marketable risk countries. Marketable risk countries are listed in the Annex of STEC and comprise all Member States and 9 further high-income OECD members. In principle, insurance of exports to those countries is considered marketable and therefore it should not benefit from direct or indirect public support. In the light of COVID19 outbreak and taking into account the input provided by stakeholders to the public consultation, short-term credit insurance for exports to all marketable risk countries was considered as temporarily non-marketable until end-2020. Member States can therefore directly or indirectly provide short-term export-credit insurance for exports to those countries, subject to the conditions set out in STEC. This reinforced the conclusion that STEC is adaptable to react to sudden changes in the economic environment and can be adjusted quickly to allow public support when needed.

In addition to this, several Member States have notified measures to support the real economy by providing reinsurance or guarantees, to private credit insurance companies to prevent them from lowering or cancelling their short-term insurance coverage for domestic and export trade credit. Those measures have only been initiated recently and are currently scheduled to expire at the end of 2020. The Commission has assessed them under Article 107(3)(b) of the Treaty in analogy to liquidity guarantees under the Temporary Framework for State aid measures to support the economy in the context of the coronavirus outbreak.

The Commission services are monitoring the situation, also in the context of a potential review of the Temporary Framework.

Coherence

To what extent have the elements of STEC been aligned with other EU policies and interventions?

STEC is coherent with other EU policies and instruments in the area of export finance. Regulation (EU) No 1233/2011 on the application of certain guidelines in the field of officially supported export credits fully transposes the terms set out in the OECD Arrangement on Officially Supported Export Credits into EU law. While STEC principles apply to export-credit insurance with a risk period of less than two years, OECD Arrangement covers all officially supported export credits with a repayment term of two years or more, thereby complementing the risk period covered in STEC. To the question in the public consultation whether STEC is coherent with changes in EU legislation which have occurred since its adoption, the majority of those who expressed a view (over 95%) stated yes, at least partially.

Is STEC coherent with other State aid rules?

Since STEC predates the SAM it was not reformed as part of that exercise. However, it reflects well the main objectives of the SAM, while taking into account the specificities of the area it covers.

Overview of the six evaluation reports received by the Commission

MS	Case No.	Legal basis	Title	Objective	Instrument	Methods	Summary of results
IT	SA.47180	GBER	SME investment aid scheme for purchase of new machinery and equipment	Investment aid to SMEs	Direct grant/ Interest rate subsidy	Propensity Score Matching (PSM) + Difference in difference (DiD)	The results suggest the effectiveness of the scheme in terms of increase in tangible and intangible fixed assets, together with an increase in production efficiency and quality improvement of products/services. Moreover, the number of employees has increased as a consequence of the intervention. Similar effects have been found for the turnover, which significantly grew because of the aid, while any indicators of business performance results to be not affected by the scheme.
UK	SA.40991	Guidelines	Enterprise Investment Scheme and Venture Capital Trust scheme	SME incl. risk capital	Provision of risk capital, Tax rate reduction	Propensity Score Matching (PSM) + Difference in difference (DiD)	The results indicate that the policy change seems to be associated with an increase in the amount invested by EIS investors. Moreover, the fixed effects approach suggests that EIS significantly increased the total assets in SMEs firms, while, on the contrary, this effect does not hold for VCT, with the negative lagged value of VCT indicating that VCT investment companies experienced significantly lower assets in the year after the investment. Finally, the EIS scheme improved access to finance by positively affecting companies' outcomes, i.e., employment, turnover, profitability, financial performance and growth.
DE	SA.41884	GBER	Sustaining the innovative capacity and competitiveness of SMEs	RDI	Direct grants	Propensity Score Matching (PSM) + Difference in difference (DiD)	The aid is associated with an increase on R&D employment intensity, measured both by R&D expenditure over turnover and by R&D personal expenditure on total employment. In particular, firms receiving the aid showed an increase in the level of employment intensity of approximately 4 to 6 percentage points higher with respect to similar firms not receiving any type of aids. Such an effect is consistent and robust across specifications. On the other hand, while the program seems to have a positive effect on R&D expenditure, this variable turns out to be imprecisely estimated, as these effects are not always statistically significant across different specifications.
UK	SA.41386	GBER	Research & Development (R&D) tax credits	RDI	Direct grant/ Interest rate subsidy; Tax advantage or tax exemption	Arellano Bond Estimator	The findings from this evaluation suggest that the scheme generates direct, indirect, and spillover effects benefitting not only businesses that claim under the R&D tax relief scheme for SMEs but the economy as a whole. As such, the scheme can be seen as satisfying its general and specific objectives. In addition, there is no evidence that the scheme distorts competition.
IT	SA.45184	GBER	Regional investments Aid	Regional aid	Tax advantage or tax exemption	Propensity Score Matching (PSM) + Difference in difference (DiD)	The findings from this evaluation indicate that tangible fixed assets and credit granted are positively affected by the aid measure, while there is a non-statistically significant effect on intangible assets and number of employees. However, it seems that for the latter variables a positive and significant effect is found in the second year, thereby suggesting that the aid might have an impact on some variables only in the long run.

FR	SA.44531	GBER	Assessment of the innovation tax credit	RDI	Tax advantage or tax exemption	Propensity Score Matching (PSM); Difference in difference (DiD); Instrumental Variables (IV)	<p>First, regarding economic development, results point to a greater increase in employment among the companies benefiting from the scheme, accompanied by an increase, at least in the short term, in the share of technical jobs. They observe a negative change in average salary after two years, but not significant after three years.</p> <p>Concerning the business innovation activity, there seems to be a stronger increase concerning the probability of filing a patent with the beneficiaries. The specific sector is also taken into account: for instance, restricting the focus to the companies of manufacturing industry, it is possible to appreciate an increase in the number of products produced by beneficiaries.</p>
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