Important Project of Common European Interest (IPCEI) on Microelectronics

Non-paper on Antitrust

Disclaimer: this non-paper has been drafted for the sole purpose of facilitating discussions within the Microelectronic IPCEI Working Group. This non-paper does not bind the Commission services and does not prejudge any future Commission assessment.

1. Introduction

(1) The current note is based on the summary information on the structure and functioning of the IPCEI as described so far in *the draft "Chapeau" Document "Connecting Europe's Microelectronic Industry to foster Digitization in Europe"* (the "Chapeau document" hereinafter).

(2) The Chapeau document contains general principles which shall govern the "IPCEI facilitation group". The precise form of the envisaged cooperation between undertakings is not obvious from the documents submitted. However, based on the information available so far, the current note presents general antitrust principles which might be useful for the assessment whether the projects related to IPCEI comply with EU Antitrust law.[1]

1.1. The IPCEI project

(3) The Important Project of Common European Interest on Microelectronics focuses on the strengthening of the European microelectronics industry. The latter project is referred hereafter as "the IPCEI".

(4) **The purpose** of the IPCEI is to provide a response to "Europe's innovation gap", notably within the Commission's "Europe 2020 strategy for smart, sustainable and inclusive growth". This is to be achieved through the development of innovative technology and components in five key technology fields[2].

---

[1] This note summarises the existing rules and guidance on EU antitrust law which could be relevant in the context of IPCEI based on the information available. Due to the variety of situations and possible behaviours which could incur in the context of IPCEI, the summary of existing rules is not exhaustive. For a more exhaustive overview of the EU antitrust rules, please see http://ec.europa.eu/competition/antitrust/legislation/legislation.html.

[2] (i) Energy efficient chips, (ii) power semiconductors, (iii) sensors, (iv) most advanced equipment and (v) special high end compound materials.

(5) **The method** for achieving this purpose is cooperation between many European undertakings. This cooperation is to be extended during the duration of the IPCEI. The cooperation will focus on research and development, as well as first industrial deployment of the technologies which will allow them to be tested. The IPCEI will not cover mass production and commercialisation to end-consumers. It appears from documents available at the time of drafting of the current note that it is likely to involve technology transfer and licensing.

1.2. Organisation of the IPCEI project

(6) It is currently foreseen that undertakings from France, Germany, the UK and Italy will participate in the IPCEI. These undertakings are active in different segments of the microelectronics value chain (very broadly speaking - from foundries to chip makers). Universities will also be involved, as one major aim of the IPCEI is to achieve "*positive spill-over effects in form of new knowledge, networking and cooperation opportunities, which reach far beyond the core partners and participating Member States addressing the microelectronics sector and other industrial sectors throughout the European Union*"[3].

(7) The **duration** of the project is variable, as activities do not take part at the same time and are interdependent on each other's fulfilment. The main **targeted applications** of the IPCEI are automotive and Internet of Things (IoT), as well as other small but quite important markets for Europe like Space, Avionics, and Security[4] (which includes a wide array of applications linked to the digitisation and interconnection in industrial sectors).

(8) The IPCEI will be governed by a body (called "IPCEI facilitation group") the purpose of which is to *"drive the overall progress of the technological fields <u>on a non-confidential basis</u>, to further develop the coherence of its model and to permanently interface with private and public stakeholders with the goal to highlight the IPCEI's role and impact via annual execution reports, publications and conferences in Europe. To demonstrate the effectiveness of the IPCEI setting and functioning, it could be envisaged to define and monitor selected Key Performance Indicators*[5]" (emphasis added).

2. Framework for antitrust self-assessment and overview of some applicable rules

2.1. Preliminary remarks on antitrust rules and compliance

(9) The antitrust enforcement system in the EU has shifted from a notification system to a system where the companies concerned have to self-assess if they comply with the EU

[3] "Chapeau" Document.
[4] "Chapeau" Document.
[5] "Chapeau" Document.

antitrust rules.[6] It is the prime responsibility of undertakings to pro-actively comply with competition rules.[7] Companies are generally well placed to assess the legality of their actions in such a way as to enable them to take an informed decision on whether to go ahead with an agreement or practice and in what form.[8]

(10) The rules applicable to antitrust enforcement apply in specific settings, according to the facts and behaviour at hand and taking into account the factual, legal and economic context they take place in. Each case must be assessed on the basis of its own facts. The following overview of the existing framework is general, intended for information purposes only, and cannot be considered as exhaustive and has not taken into account the specific functioning of the IPCEI (which is not known in detail at this stage).[9]

2.2. Relevant framework for antitrust self-assessment

(11) **Article 101 TFEU** prohibits agreements between companies or decisions by associations of companies which by object or effect prevent, restrict or distort competition in the EU and which may affect trade between Member States. These include, for example, price-fixing or market-sharing cartels. Such anti-competitive agreements are prohibited regardless of whether they are concluded between companies that operate at the same level of the supply chain (horizontal agreements) or at different levels (vertical agreements)[10].

(12) In addition, Article 102 of the Treaty prohibits firms that hold a dominant position on a given market to abuse that position, for example by charging unfair prices, by limiting production, or by refusing to innovate to the prejudice of consumers. Article 102 applies to undertakings which hold a dominant position on one or more relevant markets. Such a position may be held by one undertaking (single dominance) or by two or more undertakings (collective dominance)[11].

(13) Regulation 1/2003 contains the general framework for the application of EU antitrust rules[12].

---

6 See Regulation 1/2003, Recital 2-8.

7 http://ec.europa.eu/competition/antitrust/compliance/index_en.html

8 See Commission Notice on informal guidance relating to novel questions concerning Articles 81 and 82 of the EC Treaty that arise in individual cases, OJ C 101/78, 27.4.2004, recital 3.

9 The note is also not a guidance letter in the meaning of the Commission Notice on informal guidance relating to novel questions concerning Articles 81 and 82 of the EC Treaty that arise in individual cases, OJ C 101/78, 27.4.2004. The latter notice does not apply to requests by Member States' governments or administrations.

10 See http://ec.europa.eu/competition/antitrust/procedures_101_en.html.

11 For more information on the concept of collective dominance, see i.a. the judgment of the Court of Justice of the EU in case C-413/06 P *Impala* of 10 July 2008.

12 Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 001, 4 January 2003.

(14) The Commission has issued extensive guidelines and notices with a view to further assist companies in their self-assessment. It appears at this stage, subject to the actual implementation of the IPCEI, that this IPCEI is mainly about horizontal cooperation (including information sharing, R&D agreements) and therefore the "Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements", hereinafter referred to as the "Horizontal Guidelines"[13] are a likely good starting point in assessing the compatibility of the respective co-operation agreements with Article 101. The general principles on horizontal cooperation (particularly as contained in the Horizontal Guidelines) are summarized in section 2.2.1. In addition, the guidelines on vertical agreement and technology transfer agreements could be relevant and are summarized in section 2.2.2 and 2.2.3 respectively.

(15) While it is at this stage uncertain what form exactly the cooperation between companies will take, other texts may also provide relevant antitrust related guidance for the implementation of the IPCEI[14]. The following sections provide an overview of these texts on a non-exhaustive basis.

(16) For more detailed information on the various potentially applicable rules, reference is made to the texts themselves.

2.2.1. General principles applicable to horizontal cooperation between competitors (Horizontal Guidelines)

(17) Competition policy fosters innovation and plays a role in promoting it. Efficiency-enhancing cooperation agreements between competitors, in particular research and development agreements, licensing agreements and standardisation cooperation, are essential for enhancing innovation and competitiveness in the EU. Greater prosperity results from innovation and from using resources better. Different EU guidelines recognise the benefits of innovation and help companies to design their cooperation projects in a way that is in compliance with competition law, in particular with antitrust rules.

(18) **Horizontal co-operation can often lead to substantial economic benefits where it is a means of sharing risk, making cost savings, increasing investments, pooling know-how, enhancing product quality and variety and launching innovation faster**. However, horizontal co-operation can also lead to competition problems where it causes negative market effects with respect to prices, output, innovation or the variety and quality of

[13] Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements, JO C 11/1 of 14 January 2011.

[14] For a general overview of EU antitrust legislation, see http://ec.europa.eu/competition/antitrust/legislation/legislation.html.

products. The Horizontal Guidelines provide an analytical framework for the most common types of horizontal co-operation agreements with a view to determining their compatibility with Article 101 TFEU.[15] Other texts, such as Regulation 1217/2010 exempting certain categories of research and development agreements are also applicable, as the case may be.

(19) The Horizontal Guidelines only apply to the most common types of cooperation: research and development (R&D) agreements, production agreements, purchasing agreements, commercialisation agreements, standardisation agreements and information exchange. Agreements that are entered into between companies at a different level of the production or distribution chain (vertical agreements) are, in principle, dealt with in the Block Exemption Regulation on vertical restraints and the Guidelines on vertical restraints (*see section 2.2.2.1*). However, to the extent that vertical agreements are concluded between competitors, they must be assessed according to the principles applicable to horizontal agreements. Where horizontal agreements result in a concentration, the Merger Regulation[16] applies.

(20) The Horizontal Guidelines set out the criteria for assessing application of the competition rules under Article 101 TFEU. Article 101(1) TFEU is used to assess whether an agreement which is capable of affecting trade between European Union countries has an anti-competitive object or actual or potential restrictive effects on competition. If an agreement does restrict competition, Article 101(3) TFEU determines whether the pro-competitive benefits outweigh the restrictive effects on competition in certain circumstances.

2.2.1.1. General principles

(21) Article 101(1) TFEU prohibits agreements which have as their object or effect the restriction of competition. If an agreement has the object to restrict competition, that is to say that by its very nature it has the potential to restrict competition under Article 101(1) TFEU, then it is not necessary to examine the actual or potential effects of the agreement. If, however, a horizontal co-operation agreement does not restrict competition by object, actual and potential effects must be analysed to determine whether there are appreciable restrictive effects on competition. For there to be restrictive effects on competition under Article 101(1) TFEU, the agreement must have, or be likely to have an appreciable adverse impact on at least one of the parameters of competition on the market, such as price, output, product quality and variety, or

[15] The Horizontal Guidelines are without prejudice to the interpretation the Court of Justice of the European Union may give to the application of Article 101 to horizontal co-operation agreements.

[16] Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, OJ L 24 of 29 January 2004.

innovation. Such an assessment of restrictive effects must be made in relation to the actual legal and economic context in which competition would occur in the absence of the agreement (in the current case, the IPCEI).

(22) The analytical framework of the Horizontal Guidelines is based on the assessment of the nature of the agreement and on market power.

(23) The **nature** of an agreement relates to factors such as the area and objective of co-operation, the competitive relationship between the parties and the extent to which they combine their activities. These factors determine which kinds of possible competition concerns could potentially arise.

(24) **Market power** is the ability to profitably maintain prices above competitive levels for a period of time or to profitably maintain output in terms of product quantities, product quality and variety or innovation below competitive levels for a period of time. Market power can sometimes result from reduced competition between parties.

(25) The starting point for the analysis of market power under the Horizontal Guidelines is the position of the parties in the markets affected by the co-operation. To carry out this analysis, the relevant market(s) have to be defined, using the Commission's Notice on the definition of the relevant market[17], and the parties' combined market share. If the combined market share is low, horizontal co-operation is unlikely to produce restrictive effects. Given the variety of co-operation agreements and the different effects they may cause in different market situations, it is impossible to indicate a general market share threshold above which sufficient market power for causing restrictive effects can be assumed.

(26) Depending on the market position of the parties and the concentration in the market, other factors should be considered such as the stability of market shares over time, entry barriers, the likelihood of market entry, and the countervailing power of buyers or suppliers.

2.2.1.2. Rules on exchange of information among competitors

(27) **Information exchange is a common feature of many competitive markets and may generate various types of efficiency gains. It may solve problems of information asymmetries, thereby making markets more efficient.** Moreover, companies may improve their internal efficiency through benchmarking against each other's best practices. Sharing of information may also help companies to save costs by reducing their inventories, enabling quicker delivery of perishable products to consumers, or

[17] Commission Notice on the definition of relevant market for the purposes of Community competition law, OJ C 372 of 9 December 1997.

dealing with unstable demand. Furthermore, information exchanges may directly benefit consumers by reducing their search costs and improving choice[18].

(28) However, the exchange of market information may also lead to restrictions of competition in particular in situations where it is liable to enable undertakings to be aware of market strategies of their competitors. The competitive outcome of information exchange depends on the characteristics of the market in which it takes place (such as concentration, transparency, stability, symmetry, complexity etc.) as well as on the type of information that is exchanged, which may modify the relevant market environment towards one liable to coordination[19].

(29) It should be noted that EU competition law does not deprive companies of the right to adapt themselves intelligently to the existing or anticipated conduct of their competitors. It does, however, preclude any direct or indirect contact between competitors, the object or effect of which is to create conditions of competition which do not correspond to the normal competitive conditions of the market in question, regard being had to the nature of the products or services offered, the size and number of the undertakings, and the volume of the said market. This precludes any direct or indirect contact between competitors, the object or effect of which is to influence conduct on the market of an actual or potential competitor, or to disclose to such competitor the course of conduct which they themselves have decided to adopt or contemplate adopting on the market, thereby facilitating a collusive outcome on the market. **Hence, information exchange may be prohibited if it reduces strategic uncertainty in the market thereby facilitating collusion, that is to say, if the data exchanged is strategic[20].**

(30) **Strategic information[21]**. Sharing of strategic information is more likely to produce restrictive effects on competition. Strategic information can be related to prices (for example, actual prices, discounts, increases, reductions or rebates), customer lists, production costs, quantities, turnovers, sales, capacities, qualities, marketing plans, risks, investments, technologies and R&D programmes and their results. If companies compete with regard to R&D it is the technology data that may be the most strategic for competition. The strategic usefulness of data also depends on its aggregation and age, as well as the market context and frequency of the exchange.

---

[18] See §57 of the Horizontal Guidelines.
[19] See §58 of the Horizontal Guidelines.
[20] See §61 of the Horizontal Guidelines.
[21] See §86 of the Horizontal Guidelines.

(31) **Market coverage**[22]. If the companies involved cover a sufficiently large part of the relevant market, the exchange of information between them is more likely to be problematic.

(32) **Aggregated or individualised data**[23]. Information exchange is less problematic where data is genuinely aggregated, that is where the recognition of individualised company level information is sufficiently difficult.

(33) **Age of data**[24]. The exchange of historic data is unlikely to lead to a collusive outcome as it is unlikely to be indicative of the competitors' future conduct or to provide a common understanding on the market. Whether data is genuinely historic depends on the specific characteristics of the relevant market.

(34) **Frequency of the information exchange**[25]. Frequent exchanges of information that facilitate both a better common understanding of the market and monitoring of deviations increase the risks of a collusive outcome.

(35) **Public or non-public information**[26]. In general, exchanges of genuinely public information are unlikely to constitute an infringement of Article 101 TFEU. Genuinely public information is information that is generally equally accessible (in terms of costs of access) to all competitors and customers. This element needs to be examined on a case-by-case basis.

(36) **Public or non-public exchange of information**[27]. The fact that information is exchanged in public may decrease the likelihood of a collusive outcome on the market to the extent that non-coordinating companies, potential competitors, as well as costumers may be able to constrain the potential restrictive effect on competition.

(37) **Efficiencies**[28]. In certain cases, information exchange could lead to efficiency gains which needs to be counter-balanced against any anti-competitive effects. For more details, see section **Error! Reference source not found.**.

2.2.1.3. Research and Development ("R&D") agreements

(38) R&D agreements vary in form and scope. They range from outsourcing certain R&D activities to the joint improvement of existing technologies and co-operation concerning the research, development and marketing of completely new products. They may take

[22] See §§87-88 of the Horizontal Guidelines.
[23] See §89of the Horizontal Guidelines.
[24] See §90 of the Horizontal Guidelines.
[25] See §91 of the Horizontal Guidelines.
[26] See §§92-93of the Horizontal Guidelines.
[27] See §94 of the Horizontal Guidelines.
[28] See §96 *et seq.* of the Horizontal Guidelines.

the form of a co-operation agreement or of a jointly controlled company. R&D cooperation may affect competition in existing markets, but also competition in innovation and new product markets. This is the case where R&D co-operation concerns the development of new products or technology which either may – if emerging – one day replace existing ones or which are being developed for a new intended use and will therefore not replace existing products but create a completely new demand.

- *The R&D Block Exemption Regulation ("R&D BER")*

(39) The Horizontal Guidelines complement Regulation 1217/2010[29] which provides an exemption for agreements which contain provisions relating to the assignment or licensing of intellectual property rights in order to carry out the joint R&D, paid-for R&D or joint exploitation, so long as those provisions are not the primary object of such agreements, but are instead directly related to and necessary for their implementation. The regulation also block exempts the joint exploitation of the results of R&D carried out by the parties.

(40) To be exempted, the agreement must state that all the parties have full access to the final results of the R&D, including any resulting intellectual property rights and know-how, for the purposes of further R&D and exploitation. If the parties limit their rights of exploitation, access to the results for the purposes of exploitation may be limited accordingly. Note that the R&D BER provides for a specific exception applicable to academic bodies, research institutes or specialised companies which provide R&D as a service and are not active in the industrial exploitation of the results of the R&D[30].

(41) Where the agreement only provides for joint R&D or paid-for R&D, each party must have access to any pre-existing know-how of the other parties concerned, if this know-how is indispensable for the exploitation of the results. This exchange of pre-existing know-how may be compensated, but the compensation must not be so high as to effectively prevent such access.

(42) Any joint exploitation may only concern results which are protected by intellectual property rights or constitute know-how and which are indispensable for the manufacture of the contract products or the application of the contract technologies.

(43) Where the parties to the R&D agreement are not competing undertakings, the exemption provided for by the R&D BER is applicable for the duration of the R&D. Where the results are jointly exploited, the exemption continues to apply for seven years after the contract products or contract technologies are first put on the EU market.

---

[29] http://eur-lex.europa.eu/legal-content/EN/LSU/?uri=CELEX:32010R1217.

[30] See §140 of the Horizontal Guidelines.

(44) Where the parties are competing undertakings, the exemption is applicable only if, at the time the R&D agreement is entered into:

- *in the case of joint R&D agreements*, the combined market share of the parties does not exceed 25 % on the relevant product and technology markets;
- *in the case of paid-for R&D agreements*, the combined market share of the financing party and all the parties with which the financing parties has entered into R&D agreements, relating to the same contract products or contract technologies, does not exceed 25 % on the relevant product and technology markets.

(45) At the end of the seven years duration, the exemption continues to apply as long as the combined market share of the parties does not exceed 25 % on the relevant markets.

(46) The exemption does not apply to R&D agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object:

- the restriction of the freedom of the parties to carry out R&D in an unrelated field;
- the restriction of the freedom of the parties to pursue R&D in a related field after the completion of the R&D agreement concerned;
- the limitation of output or sales, with certain exceptions.

(47) The exemption does not apply to the following obligations contained in R&D agreements:

- the obligation not to challenge the validity of related intellectual property rights after completion of the R&D;
- the obligation not to grant licences to third parties to manufacture the contract products or to apply the contract technologies, unless the agreement provides for the exploitation of the results by at least one of the parties and such exploitation takes place in the internal market vis-à-vis third parties.

(48) The Horizontal Guidelines supplement the R&D BER by providing a more comprehensive analytical framework for R&D cooperation agreements falling outside the scope of said regulation[31]. Indeed, such agreements do not necessarily produce restrictive effects on competition. The Horizontal Guidelines also provide the main elements for assessing the

[31] See §§111-149 of the Horizontal Guidelines.

efficiencies brought about by R&D cooperation agreements which fall outside of the scope of the R&D BER.

2.2.1.4. Standardisation agreements[32]

(49) Standardisation agreements have as their primary objective the definition of technical or quality requirements with which current or future products, production processes, services or methods may comply. Standardisation agreements can cover various issues, such as standardisation of different grades or sizes of a particular product or technical specifications in product or services markets where compatibility and interoperability with other products or systems is essential.

(50) Standardisation agreements usually produce significant positive economic effects, for example by promoting economic interpenetration on the internal market and encouraging the development of new and improved products or markets and improved supply conditions. Standards thus normally increase competition and lower output and sales costs, benefiting economies as a whole. Standards may maintain and enhance quality, provide information and ensure interoperability and compatibility (thus increasing value for consumers). Standardisation agreement may nevertheless produce restrictive effects on competition by potentially restricting price competition and limiting or controlling production, markets, innovation or technical development.

(51) Standardisation agreements which do not restrict competition by object must be analysed in their legal and economic context with regard to their actual and likely effect on competition[33].

(52) In order for standardisation agreements to fall outside the scope of Article 101(1), several conditions must be met[34].

- First, the standard-setting process leading to the selection of the standard must guarantee **unrestricted participation** of competitors[35].

- Second, the standard-setting must be **transparent** in order to allow stakeholders to be effectively informed of upcoming, on-going and finalised standardisation in good time at each stage of the development of the standard[36].

- Third, access to a standard must be granted on fair, reasonable and non-discriminatory ("**FRAND**") terms[37].

---

32 See §§257-335 of the Horizontal Guidelines.
33 See §§257of the Horizontal Guidelines.
34 See §280 of the Horizontal Guidelines.
35 See §281 of the Horizontal Guidelines.
36 See §282 of the Horizontal Guidelines.

(53) In the case of a standard involving IPR, a clear and balanced IPR policy[38], adapted to the particular industry and the needs of the standard-setting organisation in question, increases the likelihood that the implementers of the standard will be granted effective access to the standards

2.2.1.5. *Other types of cooperation*

(54) The Horizontal Guidelines provide further guidance on **production** agreements[39] including **subcontracting** and **specialisation** agreements[40], **purchasing** agreements[41] as well as **commercialisation** agreements[42].

(55) The actual assessment of an agreement will depend on the specific legal and economic context in which it takes place.

2.2.2. Rules on vertical relationships

2.2.2.1. *Rules applicable to vertical agreements*

(56) The **Vertical Block Exemption Regulation** ("VBER") 330/2010[43]is based on the premise that certain types of vertical agreements can improve economic efficiency within a production or distribution chain by facilitating better coordination between the participating undertakings, leading to a reduction in the transaction and distribution costs of the parties and to an optimisation of their sales and investment levels. Such agreements will not be caught by antitrust rules. However, a restriction of competition may occur if the agreement contains restraints on the supplier or the buyer, for instance an obligation on the buyer not to purchase competing brands. These so called vertical restraints may not only have negative effects, but also positive effects. They may, for instance, help a manufacturer to enter a new market, or avoid the situation whereby one distributor "free rides" on the promotional efforts of another distributor, or allow a supplier to depreciate an investment made for a particular client. Whether a vertical agreement actually restricts competition and whether in that case the benefits outweigh

---

[37] See §283 of the Horizontal Guidelines. For FRAND commitments in particular, see §§287-291 of the Horizontal Guidelines.

[38] As specified in paragraphs 285 and 286 of the Horizontal Guidelines.

[39] See §§150-195 of the Horizontal Guidelines.

[40] On Specialisation agreements, see also Regulation 1218/2010 of 14 December 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements. This Regulation block exempts specialisation agreements (including joint production agreements), provided the agreement does not contain any hardcore restrictions of competition and the parties' combined market share does not exceed 20 %.

[41] See §§195-224 of the Horizontal Guidelines.

[42] See §§225-256 of the Horizontal Guidelines.

[43] Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices (Text with EEA relevance), OJ L 102 of 23 April 2010.

the anti-competitive effects will often depend on the market structure. The VBER provides a safe harbour for most vertical agreements which do not contain hardcore restrictions[44] in cases where the market share of both suppliers and buyers does not exceed 30%.

(57) The Commission's Guidelines on Vertical Restraints[45] provide a framework to help companies conduct their own case-by-case assessment of the compatibility of vertical agreements under European Union (EU) competition rules. They describe the method of analysis and the enforcement policy used by the Commission in individual cases concerning vertical agreements under Article 101 of the Treaty on the Functioning of the European Union (TFEU).

2.2.3. Rules applicable to licensing agreements for the transfer of technology

(58) Licensing helps to spread innovation and allows companies to offer new products and services. It also strengthens incentives for research and development by creating additional revenue streams to recoup costs. Licensing therefore plays an important part in economic growth and consumer welfare. In certain instances, however, it can also be used to harm competition, for instance if two competitors in a licensing agreement divide markets between them instead of competing with each other. Another example would be a licensing agreement that excludes the use of competing technologies in the market. These and other anticompetitive agreements are prohibited by Article 101 TFEU.

(59) The Commission's Technology Transfer Block Exemption ("TTBER")[46] regulation and the accompanying Guidelines[47] provide guidance for the assessment of technology transfer agreements through which a licensor permits a licensee to exploit patents, know-how or software for the production of goods and services. This set of rules are based on the principle that that licensing is in most cases pro-competitive or neutral.

(60) The TTBER applies only to bilateral agreements. The TTBER guidelines also cover multilateral agreements (for example patent pools).

(61) The TTBER only applies to research and development (R&D) agreements if the specific block exemption regulations on R&D agreements and on specialisation agreements are not applicable (*see sections 2.2.1.3 and 2.2.1.5*). Generally, depending on the specific

[44] Several hardcore restrictions are set out in the VBER. They concern (i) resale price maintenance, (ii) territorial restrictions, (iii) sales modalities within selective distribution networks, and (iv) the supply conditions for spare parts. See the text of the VBER for more information.

[45] Commission Notice – Guidelines on Vertical Restraints, SEC(2010) 411 final, 10 May 2010.

[46] Commission Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements, OJ L 93 of 28 March 2014.

[47] Communication from the Commission — Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, OJ C 89, 28 March 2014.

agreements, the TTBER exempts licensing agreements between companies that have limited market power (i.e. market share of under 20 % for agreements between competitors and 30 % for agreements between non-competitors), and that fulfil certain conditions. These are deemed to have no anti-competitive effects or that, if they do, the positive effects outweigh the negative ones and thus do not contravene EU antitrust rules.

(62) The technology transfer rules also provide guidance on patent pools. Patent pools can give companies cheaper and easier access to necessary intellectual property rights, such as standard essential patents, by establishing a one-stop-shop. Recognising the pro-competitive nature of certain patent pools, the creation of and licensing from patent pools benefits from a soft safe harbour if certain conditions are met:

- participation in the pool creation process is open to all interested technology rights owners;
- sufficient safeguards are adopted to ensure that only essential technologies (which therefore necessarily are also complements) are pooled;
- sufficient safeguards are adopted to ensure that exchange of sensitive information (such as pricing and output data) is restricted to what is necessary for the creation and operation of the pool;
- the pooled technologies are licensed into the pool on a non-exclusive basis;
- the pooled technologies are licensed out to all potential licensees on fair, reasonable and non-discriminatory ("FRAND") terms;
- the parties contributing technology to the pool and the licensees are free to challenge the validity and the essentiality of the pooled technologies, and;

(63) the parties contributing technology to the pool and the licensee remain free to develop competing products and technology.