C/2025/5024

16.9.2025

COMMUNICATION FROM THE COMMISSION

Approval of the content of a draft for a Commission Regulation on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements and a draft for Commission Guidelines on the application of Article 101 of the Treaty to technology transfer agreements

(C/2025/5024)

The Commission has approved the content of a draft for a Commission Regulation on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements and a draft for Commission Guidelines on the application of Article 101 of the Treaty to technology transfer agreements on 11 September 2025.

The draft for a Commission Regulation updates the current Technology Transfer Block Exemption Regulation, which exempts certain categories of technology transfer agreements from the prohibition laid down in Article 101(1) of the Treaty.

The draft for Commission Guidelines updates the current Commission Guidelines on the application of Article 101 of the Treaty to technology transfer agreements.

The Commission has approved the drafts with a view to publishing them for consultation.

The draft for a Commission Regulation and the draft for Commission Guidelines are attached as Annexes to this Communication.

The drafts are open to public consultation at:

https://competition-policy.ec.europa.eu/public-consultations_en

Following the public consultation, the drafts will be finalised, taking into account the feedback received, with a view to the adoption by the Commission of a revised Commission Regulation and revised Commission Guidelines.

ANNEX I

COMMISSION REGULATION (EU) …/…

of …

on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements

(Text with EEA relevance)

DRAFT

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation No 19/65/EEC of the Council of 2 March 1965 on application of Article 85(3) of the Treaty to certain categories of agreements and concerted practices ([1]), and in particular Article 1 thereof,

Having published a draft of this Regulation,

After consulting the Advisory Committee on Restrictive Practices and Dominant Positions,

Whereas:

(1) Regulation No 19/65/EEC empowers the Commission to apply Article 101(3) of the Treaty by regulation to certain categories of technology transfer agreements and corresponding concerted practices to which only two undertakings are party which fall within Article 101(1) of the Treaty.

(2) Pursuant to Regulation No 19/65/EEC, the Commission has, in particular, adopted Commission Regulation (EC) No 316/2014 ([2]). Regulation (EC) No 316/2014 defines categories of technology transfer agreements which the Commission regarded as normally satisfying the conditions laid down in Article 101(3) of the Treaty. In view of the overall positive experience with the application of that Regulation and the results of the evaluation of that Regulation, it is appropriate to adopt a new block exemption regulation.

(3) This Regulation should ensure the effective protection of competition and provide adequate legal security for undertakings. The pursuit of those objectives should take account of the need to simplify administrative supervision and the legislative framework to the greatest extent possible.

(4) Technology transfer agreements concern the licensing of technology rights. Such agreements will usually improve economic efficiency and be pro-competitive as they can reduce duplication of research and development, incentivise initial research and development, spur incremental innovation, facilitate the dissemination of technology and generate product market competition.

(5) The likelihood that such efficiency-enhancing and pro-competitive effects will outweigh any anti-competitive effects resulting from restrictions contained in technology transfer agreements depends on the degree of market power of the undertakings concerned and, therefore, on the extent to which those undertakings face competition from undertakings owning substitute technologies or undertakings producing substitute products.

(6) This Regulation should only apply to technology transfer agreements between a licensor and a licensee. It should cover such agreements even if the agreement contains conditions relating to more than one level of trade, for instance requiring the licensee to set up a particular distribution system and specifying the obligations the licensee must or may impose on resellers of the products produced under the licence. However, such conditions and obligations should comply with the competition rules applicable to supply and distribution agreements, as set out in Commission Regulation (EU) 2022/720 ([3]) and explained in the Commission Guidelines on Vertical Restraints ([4]). Supply and distribution agreements concluded between a licensee and buyers of its contract products should not be exempted by this Regulation.

([1]) OJ 36, 6.3.1965, p. 533/65.

([2]) Commission Regulation (EC) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty to categories of technology transfer agreements (OJ L 93, 28.3.2014, p. 17).

([3]) Commission Regulation (EU) 2022/720 of 10 May 2022 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 (OJ L 134, 11.05.2022, p. 4).

([4]) Communication from the Commission – Commission Notice: Guidelines on vertical restraints (OJ C 248, 30.6.2022, p. 1).

(7) This Regulation should only apply to agreements where the licensor permits the licensee and/or one or more of its sub-contractors to exploit the licensed technology rights, possibly after further research and development by the licensee and/or its sub-contractors, for the purpose of producing goods or services. It should not apply to licensing in the context of research and development agreements that are covered by Commission Regulation (EU) 2023/1066 ([5]) or to licensing in the context of specialisation agreements that are covered by Commission Regulation (EU) 2023/1067 ([6]). It should also not apply to agreements whose primary purpose is the mere resale or distribution of software, whether through physical or digital channels, as such agreements do not concern the licensing of technology for the purpose of production but are more akin to distribution agreements.

(8) This Regulation should not apply to agreements to set up technology pools, that is to say, agreements for the pooling of technologies with the purpose of licensing them to the contributors to the pool or to third parties, or to agreements whereby the pooled technologies are licensed out to those third parties. Nor should it apply to arrangements whereby potential licensees of technology agree to negotiate the terms of technology transfer agreements jointly (licensing negotiation groups).

(9) For the application of Article 101(3) of the Treaty by regulation, it is not necessary to define those technology transfer agreements that are capable of falling within Article 101(1) of the Treaty. In the individual assessment of agreements pursuant to Article 101(1), account has to be taken of several factors, and in particular the structure and the dynamics of the relevant technology and product markets.

(10) The benefit of the block exemption established by this Regulation should be limited to those agreements which can be assumed with sufficient certainty to satisfy the conditions of Article 101(3) of the Treaty. In order to attain the benefits and objectives of technology transfer, this Regulation should not only cover the transfer of technology as such but also other provisions contained in technology transfer agreements if, and to the extent that, those provisions are directly related to the production or sale of the contract products.

(11) For technology transfer agreements between competitors it can be presumed that, where the combined share of the relevant markets held by the parties does not exceed 20 % and the agreements do not contain certain severely anti-competitive restrictions, they generally lead to an improvement in production or distribution and allow consumers a fair share of the resulting benefits.

(12) For technology transfer agreements between non-competitors it can be presumed that, where the individual share of the relevant markets held by each of the parties does not exceed 30 % and the agreements do not contain certain severely anti-competitive restrictions, they generally lead to an improvement in production or distribution and allow consumers a fair share of the resulting benefits.

(13) Market shares on relevant technology markets should be calculated on the basis of the presence of the licensed technology rights on the relevant product and geographic markets where the contract products are sold, namely on the basis of the sales of contract products produced by the licensor and its licensees combined. Therefore, for the purposes of applying this Regulation, technologies that have not yet generated sales of contract products will be considered to hold zero market share.

(14) If the applicable market share threshold is exceeded on one or more product or technology markets, the block exemption should not apply to the agreement for the relevant markets concerned.

([5]) Commission Regulation (EU) No 2023/1066 of 1 June 2023 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements (OJ L 143, 02.06.2023, p. 9).

([6]) Commission Regulation (EU) No 2023/1067 of 1 June 2023 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements (OJ L 143, 02.06.2023, p. 20).

(15) There can be no presumption that, above those market share thresholds, technology transfer agreements fall within the scope of Article 101(1) of the Treaty. For instance, exclusive licensing agreements between non-competing undertakings often fall outside the scope of Article 101(1). There can also be no presumption that, above those market share thresholds, technology transfer agreements falling within the scope of Article 101(1) will not satisfy the conditions for exemption. However, it can also not be presumed that they will usually give rise to objective advantages of such a character and size as to compensate for the disadvantages which they create for competition.

(16) This Regulation should not exempt technology transfer agreements containing restrictions which are not indispensable to the improvement of production or distribution. In particular, technology transfer agreements containing certain severely anti-competitive restrictions, such as the fixing of prices charged to third parties, should be excluded from the benefit of the block exemption established by this Regulation, irrespective of the market shares of the undertakings concerned. Where an agreement contains such hardcore restrictions, the whole agreement should be excluded from the benefit of the block exemption.

(17) In order to protect incentives to innovate and the appropriate application of intellectual property rights, certain restrictions should be excluded from the benefit of the block exemption. In particular certain grant back obligations and non-challenge clauses should be excluded. Where such restrictions are included in a technology transfer agreement, only the restriction in question should be excluded from the benefit of the block exemption.

(18) The market share thresholds, the non-exemption of technology transfer agreements containing severely anti-competitive restrictions and the excluded restrictions provided for in this Regulation will normally ensure that the agreements to which the block exemption applies do not enable the participating undertakings to eliminate competition in respect of a substantial part of the products in question.

(19) This Regulation should indicate typical situations in which it may be considered appropriate to withdraw the benefit of the exemption established by this Regulation, pursuant to Article 29 of Council Regulation (EC) No 1/2003 ([7]).

(20) In order to strengthen supervision of parallel networks of technology transfer agreements which have similar restrictive effects and which cover more than 50 % of a given market, the Commission may by regulation declare this Regulation inapplicable to technology transfer agreements containing specific restrictions relating to the market concerned, thereby restoring the full application of Article 101 of the Treaty to such agreements,

HAS ADOPTED THIS REGULATION:

Article 1

Definitions

1. For the purposes of this Regulation, the following definitions shall apply:

(a) 'agreement' means an agreement, a decision of an association of undertakings or a concerted practice;

(b) 'technology rights' means know-how and the following rights, or a combination thereof, including applications for or applications for registration of those rights:

(i) patents,

(ii) utility models,

(iii) design rights,

(iv) topographies of semiconductor products,

([7]) 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 1, 4.1.2003, p. 1).

(v) supplementary protection certificates for medicinal products or other products for which such supplementary protection certificates may be obtained,

(vi) plant breeder's certificates and

(vii) software copyrights;

(c) 'technology transfer agreement' means:

(i) a technology rights licensing agreement entered into between two undertakings for the purpose of the production of contract products by the licensee and/or its sub-contractor(s),

(ii) an assignment of technology rights between two undertakings for the purpose of the production of contract products where part of the risk associated with the exploitation of the technology remains with the assignor;

(d) 'reciprocal agreement' means a technology transfer agreement where two undertakings grant each other, in the same or separate contracts, a technology rights licence, and where those licences concern competing technologies or can be used for the production of competing products;

(e) 'non-reciprocal agreement' means a technology transfer agreement where one undertaking grants another undertaking a technology rights licence, or where two undertakings grant each other such a licence but where those licences do not concern competing technologies and cannot be used for the production of competing products;

(f) 'product' means goods or a service, including both intermediary goods and services and final goods and services;

(g) 'contract product' means a product produced, directly or indirectly, on the basis of the licensed technology rights;

(h) 'intellectual property rights' includes industrial property rights, in particular patents and trademarks, copyright and neighbouring rights;

(i) 'know-how' means a package of practical information, resulting from experience and testing, which is:

(i) secret, that is to say, not generally known or easily accessible,

(ii) substantial, that is to say, significant and useful for the production of the contract products, and

(iii) identified, that is to say, described in a sufficiently comprehensive manner so as to make it possible to verify that it fulfils the criteria of secrecy and substantiality;

(j) 'relevant product market' means the market for the contract products and their substitutes, that is to say all those products which are regarded as interchangeable or substitutable by the buyer, by reason of the products' characteristics, their prices and their intended use;

(k) 'relevant technology market' means the market for the licensed technology rights and their substitutes, that is to say all those technology rights which are regarded as interchangeable or substitutable by the licensee, by reason of the technology rights' characteristics, the royalties payable in respect of those rights and their intended use;

(l) 'relevant geographic market' means the area in which the undertakings concerned are involved in the supply of and demand for products or the licensing of technology rights, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas;

(m) 'relevant market' means the combination of the relevant product or technology market with the relevant geographic market;

(n) 'competing undertakings' means undertakings which compete on the relevant market, that is to say:

(i) competing undertakings on the relevant market where the technology rights are licensed, that is to say, undertakings which license out competing technology rights (actual competitors on the relevant market);

(ii) competing undertakings on the relevant market where the contract products are sold, that is to say, undertakings which, in the absence of the technology transfer agreement, would both be active on the relevant market(s) on which the contract products are sold (actual competitors on the relevant market) or which, in the absence of the technology transfer agreement, would, on realistic grounds and not just as a mere theroretical possibility, be likely to undertake the necessary additional investments or to incur other necessary costs to enter the relevant market(s) within a timeframe that is sufficiently short to impose competitive pressure on undertakings that are already active on the relevant market (potential competitors on the relevant market);

(o) 'selective distribution system' means a distribution system where the licensor undertakes to license the production of the contract products, either directly or indirectly, only to licensees selected on the basis of specified criteria and where those licensees undertake not to sell the contract products to unauthorised distributors within the territory reserved by the licensor to operate that system;

(p) 'exclusive licence' means a licence under which the licensor itself is not permitted to produce on the basis of the licensed technology rights and is not permitted to license the licensed technology rights to third parties, in general or for a particular use or in a particular territory;

(q) 'exclusive territory' means a given territory within which only one undertaking is allowed to produce the contract products, but where it is nevertheless possible to allow another licensee to produce the contract products within that territory only for a particular customer where the second licence was granted in order to create an alternative source of supply for that customer;

(r) 'exclusive customer group' means a group of customers to which only one party to the technology transfer agreement is allowed to actively sell the contract products produced with the licensed technology;

(s) 'active sales' means actively targeting customers by visits, letters, emails, calls or other means of direct communication or through targeted advertising and promotion, offline or online, for instance by means of print or digital media, including online media, price comparison services or advertising on search engines targeting customers in particular territories or customer groups, operating a website with a top-level domain corresponding to particular territories, or offering on a website languages that are commonly used in particular territories, where such languages are different from the ones commonly used in the territory in which the buyer is established;

(t) 'passive sales' means sales made in response to unsolicited requests from individual customers, including delivery of goods or services to the customer, without the sale having been initiated by actively targeting the particular customer, customer group or territory, and including sales resulting from participating in public procurement or responding to private invitations to tender.

2. For the purposes of this Regulation, the terms 'undertaking', 'licensor' and 'licensee' shall include their respective connected undertakings.

'Connected undertakings' means:

(a) undertakings in which a party to the technology transfer agreement, directly or indirectly:

(i) has the power to exercise more than half the voting rights, or

(ii) has the power to appoint more than half the members of the supervisory board, board of management or bodies legally representing the undertaking, or

(iii) has the right to manage the undertaking's affairs;

(b) undertakings which directly or indirectly have, over a party to the technology transfer agreement, the rights or powers listed in point (a);

(c) undertakings in which an undertaking referred to in point (b) has, directly or indirectly, the rights or powers listed in point (a);

(d) undertakings in which a party to the technology transfer agreement together with one or more of the undertakings referred to in points (a), (b) or (c), or in which two or more of the latter undertakings, jointly have the rights or powers listed in point (a);

(e) undertakings in which the rights or the powers listed in point (a) are jointly held by:

(i) parties to the technology transfer agreement or their respective connected undertakings referred to in points (a) to (d), or

(ii) one or more of the parties to the technology transfer agreement or one or more of their connected undertakings referred to in points (a) to (d) and one or more third parties.

Article 2

Exemption

1. Pursuant to Article 101(3) of the Treaty and subject to the provisions of this Regulation, Article 101(1) of the Treaty shall not apply to technology transfer agreements.

2. The exemption provided for in paragraph 1 shall apply to the extent that technology transfer agreements contain restrictions of competition falling within the scope of Article 101(1) of the Treaty. The exemption shall apply for as long as the licensed technology rights have not expired, lapsed or been declared invalid or, in the case of know-how, for as long as the know-how remains secret. However, where know-how becomes publicly known as a result of action by the licensee, the exemption shall apply for the duration of the agreement.

3. The exemption provided for in paragraph 1 shall also apply to provisions in technology transfer agreements that relate to the purchase of products by the licensee or relate to the licensing or assignment of other intellectual property rights or know-how to the licensee if, and to the extent that, those provisions are directly related to the production or sale of the contract products.

Article 3

Market share thresholds

1. Where the undertakings party to the agreement are competing undertakings, the exemption provided for in Article 2 shall apply on condition that the combined market share of the parties does not exceed 20 % on the relevant market(s).

2. Where the undertakings party to the agreement are not competing undertakings, the exemption provided for in Article 2 shall apply on condition that the market share of each of the parties does not exceed 30 % on the relevant market(s).

Article 4

Hardcore restrictions

1. Where the undertakings party to the agreement are competing undertakings, the exemption provided for in Article 2 shall not apply to agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object any of the following:

(a) the restriction of a party's ability to determine its prices when selling products to third parties;

(b) the limitation of output, except limitations on the output of contract products imposed on the licensee in a non-reciprocal agreement or imposed on only one of the licensees in a reciprocal agreement;

(c) the allocation of markets or customers except:

(i) the obligation on the licensor and/or the licensee, in a non-reciprocal agreement, not to produce with the licensed technology rights within the exclusive territory reserved for the other party and/or not to sell the contract products actively and/or passively into the exclusive territory or to the exclusive customer group reserved for the other party,

(ii) the restriction, in a non-reciprocal agreement, of active sales of the contract products by the licensee into the exclusive territory or to the exclusive customer group allocated by the licensor to another licensee provided the latter was not a competing undertaking of the licensor at the time of the conclusion of its own licence,

(iii) the obligation on the licensee to produce the contract products only for its own use provided that the licensee is not restricted in selling the contract products actively and passively as spare parts for its own products,

(iv) the obligation on the licensee, in a non-reciprocal agreement, to produce the contract products only for a particular customer, where the licence was granted in order to create an alternative source of supply for that customer;

(d) the restriction of the licensee's ability to exploit its own technology rights or the restriction of the ability of any of the parties to the agreement to carry out research and development, unless such latter restriction is indispensable to prevent the disclosure of the licensed know-how to third parties.

2. Where the undertakings party to the agreement are not competing undertakings, the exemption provided for in Article 2 shall not apply to agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object any of the following:

(a) the restriction of a party's ability to determine its prices when selling products to third parties, without prejudice to the possibility of imposing a maximum sale price or recommending a sale price, provided that it does not amount to a fixed or minimum sale price as a result of pressure from, or incentives offered by, any of the parties;

(b) the restriction of the territory into which, or of the customers to whom, the licensee may passively sell the contract products, except:

(i) the restriction of passive sales into an exclusive territory or to an exclusive customer group reserved for the licensor,

(ii) the obligation to produce the contract products only for its own use provided that the licensee is not restricted in selling the contract products actively and passively as spare parts for its own products,

(iii) the obligation to produce the contract products only for a particular customer, where the licence was granted in order to create an alternative source of supply for that customer,

(iv) the restriction of sales to end-users by a licensee operating at the wholesale level of trade,

(v) the restriction of sales to unauthorised distributors located in a territory where the licensor operates a selective distribution system for the contract products;

(c) the restriction of active or passive sales to end-users by a licensee which is a member of a selective distribution system and which operates at the retail level, without prejudice to the possibility of prohibiting a member of the system from operating out of an unauthorised place of establishment.

3. Where the undertakings party to the agreement are not competing undertakings at the time of the conclusion of the agreement but become competing undertakings afterwards, paragraph 2 and not paragraph 1 shall apply for the full life of the agreement unless the agreement is subsequently amended in any material respect. Such an amendment includes the conclusion of a new technology transfer agreement between the parties concerning competing technology rights.

Article 5

Excluded restrictions

1. The exemption provided for in Article 2 shall not apply to any of the following obligations contained in technology transfer agreements:

(a) any direct or indirect obligation on the licensee to grant an exclusive licence or to assign rights, in whole or in part, to the licensor or to a third party designated by the licensor in respect of its own improvements to, or its own new applications of, the licensed technology;

(b) any direct or indirect obligation on a party not to challenge the validity of intellectual property rights which the other party holds in the Union, without prejudice to the possibility, in the case of an exclusive licence, of providing for termination of the technology transfer agreement in the event that the licensee challenges the validity of any of the licensed technology rights.

2. Where the undertakings party to the agreement are not competing undertakings, the exemption provided for in Article 2 shall not apply to any direct or indirect obligation limiting the licensee's ability to exploit its own technology rights or limiting the ability of any of the parties to the agreement to carry out research and development, unless such latter restriction is indispensable to prevent the disclosure of the licensed know-how to third parties.

Article 6

Withdrawal in individual cases

1. The Commission may withdraw the benefit of this Regulation, pursuant to Article 29(1) of Regulation (EC) No 1/2003, where it finds in any particular case that a technology transfer agreement to which the exemption provided for in Article 2 of this Regulation applies nevertheless has effects which are incompatible with Article 101(3) of the Treaty, and in particular where:

(a) access of third parties' technologies to the market is restricted, for instance by the cumulative effect of parallel networks of similar restrictive agreements prohibiting licensees from using third parties' technologies;

(b) access of potential licensees to the market is restricted, for instance by the cumulative effect of parallel networks of similar restrictive agreements prohibiting licensors from licensing to other licensees or because the only technology owner licensing out relevant technology rights concludes an exclusive licence with a licensee that is already active on the product market on the basis of substitutable technology rights.

2. Where, in any particular case, a technology transfer agreement to which the exemption provided for in Article 2 of this Regulation applies has effects which are incompatible with Article 101(3) of the Treaty in the territory of a Member State, or in a part thereof, which has all the characteristics of a distinct geographic market, the competition authority of that Member State may withdraw the benefit of this Regulation, pursuant to Article 29(2) of Regulation (EC) No 1/2003, in respect of that territory, under the same circumstances as those set out in paragraph 1 of this Article.

Article 7

Disapplication of this Regulation

1. Pursuant to Article 1a of Regulation No 19/65/EEC, the Commission may by regulation declare that, where parallel networks of similar technology transfer agreements cover more than 50 % of a relevant market, this Regulation shall not apply to technology transfer agreements containing specific restrictions relating to that market.

2. A regulation pursuant to paragraph 1 shall not become applicable earlier than six months following its adoption.

Article 8

Application of the market share thresholds

For the purposes of applying the market share thresholds laid down in Article 3 the following rules shall apply:

(a) the market share shall be calculated on the basis of market sales value; if market sales value data are not available, estimates based on other reliable market information, including market sales volumes, may be used to establish the market share of the undertaking concerned;

(b) the market share shall be calculated on the basis of data relating to the preceding calendar year; if the preceding calendar year is not representative of the parties' position in the relevant market(s), the market share shall be calculated as an average of the parties' market shares for the 3 preceding calendar years;

(c) the market share held by the undertakings referred to Article 1(2), second subparagraph, point (e), shall be apportioned equally to each undertaking having the rights or the powers listed in Article 1(2), second subparagraph, point (a);

(d) the market share of a party active on a relevant technology market shall be calculated on the basis of the presence of that party's technology rights on the relevant market(s) (namely the product market(s) and the geographic market(s)) where the contract products are sold, that is, on the basis of the combined sales of that party and its licensees of products incorporating that party's licensed technology rights;

(e) if the market share referred to in Article 3(1) or (2) is initially not more than 20 % or 30 % respectively, but subsequently rises above those levels, the exemption provided for in Article 2 shall continue to apply for a period of three consecutive calendar years following the year in which the 20 % threshold or 30 % threshold was first exceeded.

Article 9

Relationship with other block exemption regulations

This Regulation shall not apply to licensing arrangements in research and development agreements which fall within the scope of Regulation (EU) 2023/1066 or in specialisation agreements which fall within the scope of Regulation (EU) 2023/1067.

Article 10

Transitional period

The prohibition laid down in Article 101(1) of the Treaty shall not apply from 1 May 2026 until 30 April 2027 to agreements already in force on 30 April 2026 which do not satisfy the conditions for exemption provided for in this Regulation but which, on 30 April 2026, satisfied the conditions for exemption provided for in Regulation (EU) No 316/2014.

Article 11

Period of validity

This Regulation shall enter into force on 1 May 2026.

It shall expire on 30 April 2038.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, …

For the Commission
The President
Ursula VON DER LEYEN

ANNEX II

COMMUNICATION FROM THE COMMISSION

Guidelines on the application of Article 101 of the Treaty of the Functioning of the European Union to technology transfer agreements

(Text with EEA relevance)

DRAFT

TABLE OF CONTENTS

1. INTRODUCTION 13
2. GENERAL PRINCIPLES 14
2.1. Article 101 of the Treaty and intellectual property rights 14
2.2. Concepts relevant to the application of Article 101 of the Treaty to technology transfer agreements 16
2.2.1. The concept of undertaking 16
2.2.2. Restriction of competition and the distinction between restrictions by object and restrictions by effect 16
2.2.3. The effects of technology transfer agreements 17
2.2.4. Market definition 19
2.2.5. The distinction between competitors and non-competitors 21
2.3. Agreements that generally fall outside the scope of Article 101(1) of the Treaty 23
3. APPLICATION OF THE TTBER 23
3.1. Legal effects of the TTBER 23
3.2. Scope and duration of the TTBER 24
3.2.1. The concept of technology transfer agreements 24
3.2.2. The concept of 'transfer' 27
3.2.3. Agreements between two parties 28
3.2.4. Agreements for the production of contract products 28
3.2.5. Duration 30
3.2.6. Relationship with other block exemption regulations 31
3.3. The market share thresholds of the TTBER 32
3.3.1. Market share thresholds 33
3.3.2. Calculating market shares for technology markets under the TTBER 33
3.4. Hardcore restrictions under the TTBER 36
3.4.1. General principles 36
3.4.2. Agreements between competitors 37
3.4.3. Agreements between non-competitors 42
3.5. Excluded restrictions 45
3.6. Withdrawal and disapplication of the block exemption 48
3.6.1. Withdrawal of the benefit of the block exemption 48
3.6.2. Disapplication of the TTBER 49

4. APPLICATION OF ARTICLE 101(1) AND (3) OF THE TREATY OUTSIDE THE SCOPE OF THE TTBER 50
4.1. The general framework of analysis 50
4.1.1. Relevant factors for the assessment under Article 101(1) of the Treaty 50
4.1.2. Relevant factors for the assessment under Article 101(3) of the Treaty 52
4.2. Application of Article 101 of the Treaty to various types of licensing restraints 54
4.2.1. Royalty obligations 54
4.2.2. Exclusive licensing and sales restrictions 55
4.2.3. Output restrictions 58
4.2.4. Field of use restrictions 59
4.2.5. Captive use restrictions 60
4.2.6. Tying and bundling 61
4.2.7. Non-compete obligations 62
4.3. Settlement agreements 63
4.4. Technology pools 65
4.4.1. The assessment of the creation and operation of technology pools 66
4.4.2. Assessment of individual restraints in agreements between the pool and its licensees 70
4.5. Licensing Negotiation Groups 71
4.5.1. Introduction 71
4.5.2. Assessment under Article 101(1) of the Treaty 72
4.5.3. Assessment under Article 101(3) of the Treaty 76

1. INTRODUCTION

1. These Guidelines set out the principles for the assessment of technology transfer agreements under Article 101 of the Treaty on the Functioning of the European Union (the Treaty) ([1]). Technology transfer agreements are agreements whereby a licensor authorises a licensee to use certain technology rights for the production of goods or services, as defined in Article 1(1), point (c) of Commission Regulation (EU) …/… of … on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements ('the TTBER') ([2]).

2. These Guidelines provide guidance on the application of the TTBER as well as on the application of Article 101 of the Treaty to technology transfer agreements that fall outside the scope of the TTBER. By issuing these Guidelines, the Commission aims to help undertakings to assess their technology transfer agreements under the Union's competition rules and thus to facilitate the use of such agreements. Technology transfer agreements enable the dissemination of technology and incentivise initial research and development, thereby promoting innovation ([3]). The dissemination of technology and innovation are key drivers of a competitive, resilient ([4]) and sustainable Union economy.

3. The principles set out in these Guidelines must be applied in the light of the particular facts of each case. This excludes a mechanical application. Examples provided in these Guidelines serve only as illustrations and are not intended to be exhaustive.

4. These Guidelines are without prejudice to the interpretation of Article 101 of the Treaty and the TTBER by the General Court and the Court of Justice of the European Union (together referred to as 'the Court of Justice of the European Union').

5. The TTBER and these Guidelines are without prejudice to the possible parallel application of Article 102 of the Treaty to technology transfer agreements ([5]).

6. These Guidelines are structured as follows:

   (a) Section 2.1 outlines the general principles governing the application of Article 101 of the Treaty to technology transfer agreements. Section 2.2 discusses concepts relevant to the assessment of these agreements under Article 101, including the positive and negative effects of intellectual property licensing on competition, the definition of the relevant market and the distinction between competitors and non-competitors; Section 2.3 discusses agreements that generally fall outside Article 101.

   (b) Section 3 provides guidance on the scope of the TTBER. It explains the definition of technology transfer agreements for the production of contract products, the relationship between the TTBER and other block exemption regulations, the market share thresholds set out in Article 3 of the TTBER, and the hardcore and excluded restrictions set out in Articles 4 and 5 of the TTBER.

([1]) These Guidelines replace 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, 28.3.2014, p. 3).

([2]) OJ L […]. The TTBER replaces 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, 28.3.2014, p. 17, ELI: http://data.europa.eu/eli/reg/2014/316/oj).

([3]) See the 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 Competitiveness Compass for the EU' (COM(2025) 30 final).

([4]) Resilience includes defence readiness, resilience of defence supply chains and of the internal market.

([5]) See, by analogy, the judgment of the Court of 21 December 2023, *European Superleague Company*, C-333/21, ECLI:EU:C:2023:1011, paragraph 119 and case law quoted therein. For an example in the field of technology transfer agreements see Commission decision of 20 December 2012 in Case AT.39230 – *Rio Tinto Alcan*.

(c) Section 4 outlines the Commission's enforcement policy in individual cases. To that end, it explains how technology transfer agreements that are not covered by the TTBER are assessed under Article 101(1) and (3) of the Treaty, and provides guidance on various types of restraints that are commonly found in technology transfer agreements and other agreements relating to technology rights.

2. GENERAL PRINCIPLES

2.1. *Article 101 of the Treaty and intellectual property rights*

7. The objective of Article 101 of the Treaty is to ensure that undertakings do not use agreements, decisions by associations of undertakings and concerted practices ([6]) to prevent, restrict or distort competition on the market to the detriment of consumers. Article 101 also pursues the objective of achieving an integrated internal market, which enhances competition in the Union.

8. Article 101 of the Treaty applies to agreements between undertakings that may affect trade between Member States ([7]) and that prevent, restrict or distort competition ([8]). It provides a legal framework to assess such agreements, which takes into account the distinction between anti-competitive and pro-competitive effects.

9. The assessment of agreements under Article 101 of the Treaty consists of two steps. The first step, under Article 101(1), is to assess whether the agreement has an anti-competitive object or produces actual or potential restrictive effects. The second step, which only becomes necessary if an agreement is found to restrict competition within the meaning of Article 101(1), is to assess whether the agreement generates efficiencies that meet the four conditions of the exception provided for in Article 101(3). Those conditions are that the agreement (i) must contribute to improving the production or distribution of products or to promoting technical or economic progress, while (ii) allowing consumers a fair share of the resulting benefits, without (iii) imposing restrictions that are not indispensable to the attainment of those objectives and without (iv) affording the participating undertakings the possibility of eliminating competition in respect of a substantial part of the products concerned ([9]). Pursuant to Article 2 of Regulation 1/2003, the burden of proving that an agreement restricts competition within the meaning of Article 101(1) rests on the competition authority or claimant alleging an infringement of Article 101, whereas the burden of proving that the four conditions of the Article 101(3) exception are fulfilled rests on the undertakings claiming the benefit of that exception.

10. Intellectual property laws confer exclusive rights on holders of patents, copyright, design rights, trademarks and other legally protected rights. The owner of intellectual property is entitled under intellectual property laws to prevent unauthorised use of its intellectual property and to exploit it, for example, by licensing it to third parties. With the exception of performance rights ([10]), once a product incorporating an intellectual property right has been put on the market inside the European Economic Area (EEA) by the holder or with its consent, the intellectual property right is exhausted, meaning that the holder can no longer use it to control the sale of the

([6]) In these Guidelines, unless indicated otherwise, the term 'agreement' includes concerted practices and decisions of associations of undertakings.

([7]) See Commission Guidelines on the effect on trade concept contained in Articles 81 and 82 of the Treaty (OJ C 101, 27.4.2004, p. 81).

([8]) In these Guidelines, the term 'restriction' includes the prevention and distortion of competition.

([9]) The conditions of Article 101(3) and the methodology for their application are further explained in the Commission Guidelines on the application of Article 81(3) of the Treaty (OJ C 101, 27.4.2004, p. 97).

([10]) This exception also applies to rental rights. See in this respect Article 1(2) of Directive 2006/115/EC of the European Parliament and of the Council of 12 December 2006 on rental right and lending right and on certain rights related to copyright in the field of intellectual property (OJ L 376, 27.12.2006, p. 28, ELI: http://data.europa.eu/eli/dir/2006/115/oj).

product (principle of Union exhaustion) ([11]). The right holder has no right under intellectual property laws to prevent sales by licensees or buyers of such products incorporating the licensed technology. The principle of Union exhaustion is in line with the essential function of intellectual property rights, which is to grant the holder the right to exclude others from exploiting its intellectual property without its consent.

11. The fact that intellectual property laws grant exclusive rights of exploitation does not imply that intellectual property rights are immune from the application of competition law. Article 101 of the Treaty is in particular applicable to agreements whereby the holder licenses another undertaking to exploit its intellectual property rights ([12]). Nor does it imply that there is an inherent conflict between intellectual property rights and the Union competition rules. Intellectual property rights promote innovation by incentivising undertakings to invest in researching and developing new or improved products and processes. So does competition by putting pressure on undertakings to innovate. Innovation constitutes an essential and dynamic component of an open and competitive market economy. Therefore, both intellectual property rights and competition are necessary to promote innovation and ensure that it is exploited competitively.

12. For the assessment of technology transfer agreements under Article 101 of the Treaty it must be kept in mind that the creation of intellectual property rights often entails substantial investment and that this is often a risky endeavour. In order not to reduce dynamic competition and to maintain the incentive to innovate, the innovator must not be unduly restricted in the exploitation of intellectual property rights that turn out to be valuable. For those reasons, the innovator should be free to seek appropriate remuneration for successful projects that is sufficient to maintain investment incentives, taking failed projects into account. Technology licensing may also require the licensee to make significant sunk investments (that is to say, that upon leaving that particular field of activity the investment cannot be used by the licensee for other activities or sold other than at a significant loss) in the licensed technology and production assets necessary to exploit it. Article 101 cannot be applied without considering such ex ante investments made by the parties and the risks relating thereto. The risk facing the parties and the sunk investment that must be committed may thus lead to an agreement falling outside Article 101(1) or fulfilling the conditions of Article 101(3), as the case may be, for the period of time required to recoup the investment.

([11]) This principle of Union exhaustion is for example enshrined in Article 15(1) of Directive (EU) 2015/2436 of the European Parliament and of the Council of 16 December 2015 to approximate the laws of the Member States relating to trade marks (OJ L 336, 23.12.2015, p. 1, ELI: http://data.europa.eu/eli/dir/2015/2436/oj), Article 15(1) of Regulation (EU) 2017/1001 of the European Parliament and of the Council of 14 June 2017 on the European Union trade mark (OJ L 154, 16.6.2017, p. 1, ELI: http://data.europa.eu/eli/reg/2017/1001/oj), Article 15 of Directive 98/71/EC of the European Parliament and of the Council of 13 October 1998 on the legal protection of designs (OJ L 289, 28.10.1998, p. 28, ELI: http://data.europa.eu/eli/dir/1998/71/oj), Article 21 of Council Regulation (EC) No 6/2002 of 12 December 2001 on European Union designs (OJ L 3, 5.1.2002, p. 1, ELI: http://data.europa.eu/eli/reg/2002/6/oj), Article 9(2) of Directive 2006/115/EC, cited in footnote 10, Article 4(2) of Directive 2001/29/EC of the European Parliament and of the Council of 22 May 2001 on the harmonisation of certain aspects of copyright and related rights in the information society (OJ L 167, 22.6.2001, p. 10, ELI: http://data.europa.eu/eli/dir/2001/29/oj), Article 4(2) of Directive 2009/24/EC of the European Parliament and of the Council of 23 April 2009 on the legal protection of computer programs (OJ L 111, 5.5.2009, p. 16, ELI: http://data.europa.eu/eli/dir/2009/24/oj), Article 5, point (c) of Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases (OJ L 77, 27.3.1996, p. 20, ELI: http://data.europa.eu/eli/dir/1996/9/oj), Article 5(5) of Council Directive 87/54/EEC of 16 December 1986 on the legal protection of topographies of semiconductor products (OJ L 24, 27.1.1987, p. 36, ELI: http://data.europa.eu/eli/dir/1987/54/oj), Article 16 of Council Regulation (EC) No 2100/94 of 27 July 1994 on Community plant variety rights (OJ L 227, 1.9.1994, p. 1, ELI: http://data.europa.eu/eli/reg/1994/2100/oj), Article 6 of Regulation (EU) No 1257/2012 of the European Parliament and of the Council of 17 December 2012 implementing enhanced cooperation in the area of the creation of unitary patent protection (OJ L 361, 31.12.2012, p. 1, ELI: http://data.europa.eu/eli/reg/2012/1257/oj). On software copyright see e.g. the judgments of the Court of 3 July 2012, *UsedSoft Gmbh v. Oracle International Corp.*, C-128/11, ECLI:EU:C:2012:407 and of 12 October 2016, *Ranks and Vasiļevičs*, C-166/15, ECLI:EU:C:2016:762.

([12]) See e.g. the judgment of the General Court of 27 September 2023, *Valve v Commission*, T-172/21, ECLI:EU:T:2023:587, paragraph 191.

13. The legal framework provided by Article 101 of the Treaty is sufficiently flexible to take into account the dynamic aspects of technology licensing. There is no presumption that intellectual property rights and licence agreements as such give rise to competition concerns. Most technology licensing agreements do not restrict competition. Indeed, technology licensing is generally pro-competitive, as it leads to the dissemination of technology and promotes innovation by licensors and licensees. Where technology licensing agreements do restrict competition, they often give rise to pro-competitive efficiencies that meet the conditions of Article 101(3) ([13]). The great majority of technology licensing agreements are therefore compatible with Article 101.

2.2. *Concepts relevant to the application of Article 101 of the Treaty to technology transfer agreements*

2.2.1. **The concept of undertaking**

14. Article 101(1) of the Treaty applies to undertakings and associations of undertakings. An undertaking is any entity of personal, tangible and intangible elements, engaged in an economic activity, irrespective of its legal status and the way in which it is financed.

2.2.2. **Restriction of competition and the distinction between restrictions by object and restrictions by effect**

15. Article 101(1) of the Treaty prohibits agreements which have as their object or effect the restriction of competition. Article 101(1) applies both to restrictions of competition between the parties to an agreement and to restrictions of competition between any of the parties and third parties.

16. The assessment of whether a technology transfer agreement restricts competition must be made within the actual context in which competition would occur in the absence of the agreement and any restrictions contained in it. In making this assessment, it is necessary to take account of the likely impact of the agreement on inter-technology competition (competition between undertakings using competing technologies) and on intra-technology competition (competition between undertakings using the same technology) ([14]). Article 101(1) of the Treaty prohibits restrictions of both inter-technology competition and intra-technology competition. It is therefore necessary to assess to what extent the agreement affects or is likely to affect those two aspects of competition on the market.

17. The concept of restrictions by object refers solely to certain types of coordination between undertakings which reveal a sufficient degree of harm to competition, such that it is unnecessary to assess their effects ([15]).

18. The concept of restrictions by effect refers to agreements that do not have an anti-competitive object, but for which it is demonstrated that they have actual or potential restrictive effects on competition that are appreciable ([16]). For an agreement to have restrictive effects on competition, it 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,

([13]) See the Guidelines on the application of Article 81(3) of the Treaty cited in footnote 9.

([14]) Competition between undertakings that use the same technology (intra-technology competition between licensees) constitutes an important complement to competition between undertakings that use competing technologies (inter-technology competition). For instance, intra-technology competition may lead to lower prices for the products incorporating the technology in question, which may not only produce direct and immediate benefits for consumers of these products, but also spur further competition between undertakings that use competing technologies. In the context of licensing, the fact that licensees are selling their own product must also be taken into account. They are not re-selling a product supplied by another undertaking. There may thus be greater scope for product differentiation and quality-based competition between licensees than in the case of vertical agreements for the resale of products.

([15]) See, for example, the judgment of the Court of 21 December 2023, *European Superleague Company*, C-333/21, ECLI:EU:C:2023:1011, paragraph 162 and case law cited.

([16]) For further guidance on the notion of restrictions by object and by effect, their respective analytical framework and relevant examples of those restrictions see e.g. the judgments of the Court of 21 December 2023, *European Superleague Company*, C-333/21, ECLI:EU:C:2023:1011, paragraphs 161 et seq. and of 5 December 2024, *Tallinna Kaubamaja Grupp and KIA Auto*, C-606/23, ECLI:EU:C:2024:1004, paragraphs 23 et seq.; see also the Commission Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal cooperation agreements ('Guidelines on Horizontal Agreements') (OJ C259, 21.7.2023, p. 1), paragraphs 22 et seq.

product quality, product variety or innovation. To demonstrate that an agreement restricts competition by effect, it is generally necessary to define the relevant market(s) and assess the effects of the agreement on market dynamics in the specific case. For instance, appreciable anti-competitive effects are more likely to occur where at least one of the parties to the agreement has or obtains some degree of market power ([17]).

19. Where undertakings engage in cooperation that does not fall within the prohibition laid down in Article 101(1)of the Treaty because it has neutral or positive effects on competition, a restriction of the commercial autonomy of one or more of the parties does not fall within that prohibition either provided that that restriction is objectively necessary to implement the cooperation and is proportionate to the objectives of the cooperation ('ancillary restraints') ([18]). To determine whether a restriction constitutes an ancillary restraint, it is necessary to examine whether the cooperation would be impossible to carry out in the absence of the restriction in question. The fact that the cooperation is simply more difficult to implement, or less profitable without the restriction concerned, does not make that restriction 'objectively necessary' and thus ancillary ([19]).

20. As explained in paragraph (9) of these Guidelines, an agreement which restricts competition within the meaning of Article 101(1) of the Treaty may still be compatible with Article 101 if the parties can show that the agreement fulfils the four cumulative conditions of Article 101(3).

2.2.3. **The effects of technology transfer agreements**

21. For the purpose of assessing technology transfer agreements under Article 101 of the Treaty, it is necessary to take into account all relevant parameters of competition, such as prices, output in terms of product quantities, product quality and variety, and innovation. Examples illustrating the possible effects of licensing agreements on these parameters are provided in the following Sections, distinguishing between positive and negative effects.

2.2.3.1. *Positive effects*

22. Technology transfer agreements may have substantial pro-competitive effects, and the vast majority of those agreements are indeed pro-competitive. Technology transfer agreements may promote innovation by allowing innovators to earn returns to cover at least part of their research and development ('R & D') costs.

23. Technology transfer agreements also lead to the dissemination of technologies, which may create value by reducing the production costs of the licensee or by enabling it to produce new or improved products. Efficiencies at the level of the licensee often stem from a combination of the licensor's technology with the assets and technologies of the licensee. Licensing often occurs because it is more efficient for the licensor to license the technology than to exploit it itself. This may particularly be the case where the licensee already has access to the necessary production assets. The agreement then allows the licensee to gain access to a technology that can be combined with those assets, allowing it to exploit new or improved technologies.

([17]) 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. The degree of market power normally required for a finding of an infringement under Article 101(1) is less than the degree of market power required for a finding of dominance under Article 102.

([18]) Judgments of the Court of 26 October 2023, *EDP - Energias de Portugal and Others*, C-331/21, ECLI:EU:C:2023:812, paragraphs 88 and seq., of 11 September 2014, *MasterCard v Commission*, C-382/12 P, ECLI:EU:C:2014:2201, paragraph 89, of 11 July 1985, *Remia and Others v Commission*, Case 42/84, EU:C:1985:327, paragraphs 19-20, of 28 January 1986, *Pronuptia*, Case 161/84, ECLI:EU:C:1986:41, paragraphs 15-17, of 15 December 1994, *Gøttrup-Klim*, C-250/92, ECLI:EU:C:1994:413, paragraph 35, and of 12 December 1995, *Oude Luttikhuis and Others*, C-399/93, ECLI:EU:C:1995:434, paragraphs 12-15.

([19]) Judgments of the Court of 26 October 2023, *EDP - Energias de Portugal and Others*, C-331/21, ECLI:EU:C:2023:812, paragraph 90 and of 11 September 2014, *MasterCard v Commission*, C-382/12 P, ECLI:EU:C:2014:2201, paragraph 91.

24. Another example of potentially efficiency-enhancing licensing is where the licensee already has a technology and the combination of that technology and the licensor's technology gives rise to synergies. When the two technologies are combined, the licensee may be able to attain a cost/output configuration that would not otherwise be possible.

25. Licence agreements may also give rise to efficiencies at the distribution stage, in the same way as vertical agreements for the distribution of goods and services. Such efficiencies can take the form of cost savings or the provision of valuable services to consumers. The positive effects of vertical agreements are described in the Commission Guidelines on vertical restraints ([20]) ('Vertical Guidelines').

26. Licensing may also serve the pro-competitive purpose of removing obstacles to the development and exploitation of the licensee's own technology. In particular in sectors where large numbers of patents are prevalent licensing often occurs in order to create design freedom by removing the risk of infringement claims by the licensor ([21]).

2.2.3.2. *Negative effects*

27. While technology transfer agreements are generally pro-competitive, in certain cases, undertakings may use them to pursue anti-competitive objectives that ultimately harm consumers.

28. The negative effects on the market which can result from restrictive technology transfer agreements include the following:

(a) reduction of inter-technology competition, including facilitation of collusion, both explicit and tacit;

(b) foreclosure of competitors by raising their costs, restricting their access to essential inputs or otherwise raising barriers to entry; and

(c) reduction of intra-technology competition.

29. The risk of reduced inter-technology competition is higher where reciprocal obligations are imposed ([22]). For instance, where competitors transfer competing technologies to each other and impose a reciprocal obligation to provide each other with future improvements of their respective technologies and where this agreement prevents either competitor from gaining a technological lead over the other, competition in innovation between the parties is restricted (see also paragraph (262)).

30. Technology transfer agreements between competitors can also facilitate collusion. The risk of collusion is higher in concentrated markets ([23]). Technology transfer agreements can facilitate collusion by increasing transparency in the market, by controlling certain behaviour and by raising barriers to entry. Collusion can also be facilitated by agreements that lead to a high degree of commonality of costs, because undertakings that have similar costs are more likely to have similar views on the terms of coordination ([24]).

([20]) OJ C 248, 30.6.2022, p. 1, paragraphs 12 *et seq*.

([21]) However, where such licensing agreements lead to the exit from the market by one of the parties, they may fall within the scope of Article 101(1).

([22]) An example would be where two undertakings established in different Member States cross-license competing technologies to each other and agree not to sell products in each other's home markets. Such an agreement restricts potential competition between them.

([23]) Collusion requires that the undertakings concerned have similar views on what is in their common interest and on how the co-ordination mechanisms function. For collusion to work, the undertakings must also be able to monitor each other's market behaviour and there must be adequate deterrents to ensure that there is an incentive not to depart from the common policy on the market, while entry barriers must be high enough to limit entry or expansion by outsiders.

([24]) See in this respect paragraph 21 of the Guidelines on Horizontal Agreements.

31. Collusion can also be facilitated by the exchange of commercially sensitive information between competitors during the implementation of a technology transfer agreement. The implementation of a licensing agreement may require the exchange of commercially sensitive information. Where the agreement does not itself fall within the prohibition laid down in Article 101(1) of the Treaty because it has neutral or positive effects on competition, an information exchange that is ancillary to that agreement does not fall within that prohibition either. That is the case if the information exchange is objectively necessary to implement the licensing agreement and is proportionate to the objectives thereof. Where the information exchange goes beyond what is objectively necessary to implement the agreement or is not proportionate to the objectives thereof, it should be assessed using the guidance provided in Chapter 6 of the Guidelines on Horizontal Agreements. If the information exchange falls within Article 101(1), it may still fulfil the conditions of Article 101(3).

32. Technology transfer agreements can also restrict inter-technology competition by creating barriers to entry or expansion by competitors. For instance, third parties may be foreclosed where incumbent licensors impose non-compete obligations on licensees to such an extent that an insufficient number of licensees are available to conclude licences with third parties and where entry at the level of licensees is difficult ([25]).

33. Technology transfer agreements can also restrict intra-technology competition. This may result for instance from the imposition on licensees of resale price maintenance or territorial or customer sales restrictions. Restrictions of intra-technology competition can facilitate collusion between licensees. They can also facilitate collusion between owners of competing technologies or reduce inter-technology competition by raising barriers to entry.

2.2.4. **Market definition**

34. The Commission's approach to defining the relevant market is set out in its Notice on the definition of the relevant market for the purposes of Union competition law ([26]) ('Market Definition Notice'). These Guidelines only address aspects of market definition that are of particular importance in the field of technology licensing.

35. Technology is an input, which is integrated either into a product or a production process. Technology licensing can therefore affect competition both upstream in input markets and downstream in output markets. For instance, an agreement between two parties which sell competing products downstream and which also cross-license technology rights relating to the production of those products upstream may restrict competition on the downstream goods or services market concerned. The cross-licensing may also restrict competition on the upstream market for technology and possibly also on other upstream input markets. For the purposes of assessing the competitive effects of licence agreements it may therefore be necessary to define the relevant product market(s) as well as the relevant technology market(s) ([27]).

([25]) Another example is the potential foreclosure of suppliers of substitutable technologies, which may occur when a licensor with significant market power bundles various components of a technology into a single licensing package—even though only part of the package is essential to produce a given product.

([26]) OJ C, C/2024/1645, 22.2.2024, ELI: http://data.europa.eu/eli/C/2024/1645/oj.

([27]) See, for example, Commission Decision of 17 November 2010 in Case No COMP/M.5675 - *Syngenta/Monsanto* where the Commission analysed the merger of two vertically integrated sunflower breeders by examining both (i) the upstream market for the trading (namely the exchange and licensing) of varieties (parental lines and hybrids) and (ii) the downstream market for the commercialisation of hybrids. In its Decision of 13 March 2009 in COMP/M.5406, *IPIC/MAN Ferrostaal AG*, the Commission defined besides a market for the production of high-grade melamine also an upstream technology market for the supply of melamine production technology. See also Commission decision of 8 June 1995 in Case No COMP/M.269, *Shell/Montecatini* and Commission Decision of 2 June 2023 in Case No COMP/M.10783 *EQT Future/AM Fresh/SNFL/IFG*, in which the Commission assessed a merger involving companies active in the table grape industry by examining the upstream market for the breeding and licensing of seedless protected table grape vine varieties, as well as the downstream markets for the production and distribution of table grapes.

36. The relevant product market comprises the contract products (incorporating the licensed technology) and products that are regarded by the buyers as interchangeable with or substitutable for the contract products, by reason of the products' characteristics, their prices and their intended use, taking into consideration the conditions of competition and the structure of supply and demand on the market. Contract products can belong to a final and/or an intermediate product market.

37. The relevant technology markets consist of the licensed technology rights and their substitutes, that is to say, other technology rights that are regarded by the licensees as interchangeable with or substitutable for the licensed technology rights, by reason of the technology rights' characteristics, their royalties and their intended use, taking into consideration the conditions of competition and the structure of supply and demand on the market. Starting from the technology that is marketed by the licensor, it is necessary to identify those other technologies to which licensees could switch in response to a deterioration in the conditions of supply of the licensor's technology relative to those of other technologies. An alternative approach is to look at the market for products incorporating the licensed technology rights (see paragraph (40)).

38. The term 'relevant market' used in Article 3 of the TTBER and defined in Article 1(1), point (m) thereof refers to the relevant product market and the relevant technology market in both their product and geographic dimension.

39. The 'relevant geographic market' is defined in Article 1(1), point (l) of the TTBER and comprises the area in which the undertakings concerned are involved in the supply of and demand for products or the licensing of technology, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas. The geographic dimension of the relevant technology market(s) can differ from the geographic dimension of the relevant product market(s).

40. Once relevant markets have been defined, market shares can be assigned to the various sources of competition in the market and used as an indication of the relative strength of market players. In the case of technology markets, one way to proceed is to calculate market shares on the basis of each technology's share of total licensing income from royalties, representing a technology's share of the market where competing technologies are licensed. However, this may often be a merely theoretical and not a practical way to proceed, due to a lack of clear information about royalty income. Another approach, which is the one used for the purpose of applying the safe harbour of the TTBER, is to calculate market shares on the technology market on the basis of sales of products incorporating the licensed technology on downstream product markets (for more detail, see paragraphs (110)-(115) of these Guidelines. In individual cases outside the safe harbour of the TTBER, it may be necessary, where practically possible, to apply both of the described approaches in order to assess the market position of the licensor more accurately, and to take into account other factors that give a good indication of the relative strength of the available technologies (for more detail on those factors, see paragraphs (184)-(193) of these Guidelines) ([28]).

41. Technology licensing agreements may affect competition in innovation ([29]). In analysing such effects, however, the Commission will normally confine itself to examining the impact of the agreement on competition within existing product and technology markets. Competition on such markets may be affected by agreements that delay the introduction of improved products or new products that over time will replace existing products. In such cases, innovation is a source of potential competition which must be taken into account when assessing the impact of the agreement on product markets and technology markets. In a limited number of cases, however, it may be

([28]) See e.g. Commission Decision of 20 December 2012, in Case AT.39230 – *Rio Tinto Alcan*, paragraphs 38-41. See also Commission Decision in Cases No COMP/M.5675 *Syngenta/Monsanto* and COMP/M.5406 *IPIC/MAN Ferrostaal AG* cited in footnote 27.

([29]) For instance, technology licensing agreements may affect the development of products or technologies that will (i) improve existing products or technologies; (ii) replace existing products or technologies, or that would (iii) create an entirely new demand. Technology licensing agreements may also affect (iv) early innovation efforts, namely R & D activities that are not closely related to a specific product or technology.

useful and necessary to also analyse the effects on competition in innovation separately. This is particularly the case for highly innovative markets characterised by frequent and significant research and development and where the agreement affects innovation aimed at creating new products or technologies ([30]). In such cases, it can be analysed whether after the agreement there will be a sufficient number of competing research and development projects left for effective competition in innovation to be maintained ([31]).

2.2.5. **The distinction between competitors and non-competitors**

42. In general, agreements between competitors pose a greater risk to competition than agreements between non-competitors ([32]).

43. In order to determine the competitive relationship between the parties to an agreement, it is necessary to examine whether the parties would have been actual or potential competitors in the absence of the agreement. If, without the agreement, the parties would not have been actual or potential competitors in any relevant market affected by the agreement, they are deemed to be non-competitors.

44. The parties are actual competitors on a market for the supply of products if prior to the agreement both are already active on the same relevant market.

45. A party is considered to be a potential competitor of the other party on a market for the supply of products if, absent the agreement, there would have existed real and concrete possibilities for the first party to enter the relevant market and compete with the other party that is established on that market ([33]). A finding of potential competition must be based on a body of consistent facts taking into account the structure of the market and the economic and legal context within which it operates. The hypothetical possibility of entry or the mere wish or desire of a party to enter is not sufficient ([34]). Conversely, it is not necessary to demonstrate with certainty that the undertaking will in fact enter the relevant market and that it will be capable of retaining its place there ([35]). For instance, entry is more likely if the licensee possesses assets that can easily be used to enter the market without incurring significant sunk costs, or if it has already developed plans, or otherwise started to invest, to enter the market.

46. In the specific context of intellectual property rights, it may be the case that one or both parties hold valid intellectual property rights that block the other party from operating in or entering the relevant market without infringing such technology rights. This is referred to as a 'blocking position'. In assessing the possible impact of a blocking position on their competitive relationship, the parties should consider the following factors:

(a) If both parties are already operating in the relevant market, it is very unlikely that they are in a blocking position, unless a final court judgment has confirmed the infringement and the validity of the intellectual property right. In the absence of such a judgment, the parties are generally considered actual competitors.

([30]) See e.g. paragraphs 90 et seq. of the Market Definition Notice, cited in footnote 26.

([31]) In this respect, these Guidelines provide a soft safe harbour for technology transfer agreements that fall outside the block exemption because the market share thresholds are exceeded: see paragraph (181).

([32]) See e.g. the considerations in paragraph 10 of the Vertical Guidelines, which apply *mutatis mutandis* to technology licensing.

([33]) See the judgment of the Court of 26 October 2023, *EDP – Energias de Portugal and Others*, C-331/21, ECLI:EU:C:2023:812, paragraph 61.

([34]) See, for example, the judgments of the Court of 26 October 2023, *EDP – Energias de Portugal and Others*, C-331/21, ECLI:EU:C:2023:812, paragraphs 60-63 and of 30 January 2020, *Generics (UK) and Others*, C-307/18, ECLI:EU:C:2020:52, paragraphs 36-39.

([35]) See, for example, judgments of the Court of 26 October 2023, *EDP – Energias de Portugal and Others*, C-331/21, ECLI:EU:C:2023:812, paragraph 62; of 30 January 2020, *Generics (UK) and Others*, C-307/18, ECLI:EU:C:2020:52, paragraphs 36 to 45; of 25 March 2021, *H. Lundbeck A/S and Lundbeck Ltd v European Commission*, C-591/16 P, ECLI:EU:C:2021:243, paragraphs 54 to 57; of 27 June 2024, *Commission v Servier and Others*, C-176/19 P, ECLI:EU:C:2024:549, paragraphs 100-101.

(b) If one of the parties is not yet operating in the market, but has already made substantial investments or has taken significant preparatory steps to enter the market, it is very likely that the parties are at least potential competitors ([36]). In the absence of such investments and steps, the parties, when addressing the question whether they are potential competitors, will have to base themselves on all the available evidence at the time, including the possibility that intellectual property rights are infringed, the validity of the rights in question and whether there are effective possibilities to work around existing intellectual property rights. Particularly convincing evidence of the existence of a blocking position is required where the parties have a common interest in claiming the existence of a blocking position in order to be qualified as non-competitors, for instance where the alleged blocking position concerns technologies that are technological substitutes (see paragraph (37)) or if there is a significant inducement from one or both parties to the other ([37]).

47. The parties are actual competitors on the technology market if they are either already both licensing out substitutable technology rights, or the licensee is already licensing out its technology rights and the licensor enters the technology market by granting a licence for competing technology rights to the licensee.

48. The parties are considered to be potential competitors on the technology market if they own substitutable technologies and the licensee is not licensing out its own technology, provided that it would be likely to do so in the event of a deterioration in the conditions of supply of the licensor's technology relative to those of other technologies ([38]). In the case of technology markets, it is generally more difficult to assess whether the parties are potential competitors. That is why, for the application of the TTBER, potential competition on the technology market is not taken into account (see paragraph (107) of these Guidelines) and the parties are treated as non-competitors.

49. In some cases it may also be possible to conclude that while the licensor and the licensee produce competing products, they are non-competitors on the relevant product market and the relevant technology market because the licensed technology represents such a drastic innovation that the technology of the licensee has become obsolete or uncompetitive. In such cases, the licensor's technology either creates a new market or excludes the licensee's technology from the existing market. It is, however, often not possible to come to this conclusion at the time the agreement is concluded. It is usually only when the technology or the products incorporating it have been available to consumers for some time that it becomes apparent that the older technology has become obsolete or uncompetitive. For instance, when compact disc technology was developed and players and discs were put on the market, it was not obvious that this new technology would replace vinyl records. This only became apparent some years later. The parties will therefore be considered to be competitors if at the time of the conclusion of the agreement it is not obvious that the licensee's technology is obsolete or uncompetitive. However, given that both Article 101(1) and (3) of the Treaty must be applied in the light of the actual context in which the agreement occurs, the assessment is sensitive to material changes in the facts. The categorisation of the relationship between the parties may therefore change to a relationship of non-competitors if at a later point in time the licensee's technology becomes obsolete or uncompetitive on the market.

([36]) For instance, the parties are likely to be considered potential competitors on a relevant market for the supply of products where the licensee produces on the basis of its own technology in one geographic market and starts producing in another geographic market on the basis of a licensed competing technology. In such circumstances, it is likely that the licensee would have been able to enter the second geographic market on the basis of its own technology, unless such entry is precluded by objective factors, including the existence of blocking intellectual property rights.

([37]) See, to that effect, the judgments of the Court of 30 January 2020, *Generics (UK) and Others*, C-307/18, ECLI:EU:C:2020:52, paragraphs 54-56; of 27 June 2024, *Commission v Servier and Others*, C-176/19 P, ECLI:EU:C:2024:549, paragraphs 87-89, 103 and 131; of 27 June 2024, *Commission v Krka*, C-151/19 P, ECLI:EU:C:2024:546, paragraph 411.

([38]) For operational and practical purposes, that assessment typically focuses on reactions to price increases. For example, one method is to consider whether the licensee would be likely to start licensing out its own technology in response to a small but permanent increase in technology prices. However, the assessment can also take into account changes affecting other parameters of competition, such as product quality or the level of innovation.

50. In some cases, the parties may become competitors subsequent to the conclusion of the agreement because the licensee develops or acquires and starts exploiting a competing technology. In such cases, the fact that the parties were non-competitors at the time of conclusion of the agreement and that the agreement was concluded in that context must be taken into account. The Commission will therefore mainly focus on the impact of the agreement on the licensee's ability to exploit its own (competing) technology. For this reason, the list of hardcore restrictions applicable to agreements between competitors does not apply to such agreements unless the agreement is subsequently amended in any material respect after the parties have become competitors (see Article 4(3) of the TTBER).

51. The undertakings party to an agreement may also become competitors subsequent to the conclusion of the agreement where the licensee was already active on the relevant market where the contract products are sold before the conclusion of the agreement and the licensor subsequently enters that market either on the basis of the licensed technology rights or a new technology. In that case, the hardcore list applicable to agreements between non-competitors will again continue to apply for the full life of the agreement unless the agreement is subsequently amended in any material respect (see Article 4(3) of the TTBER). A material amendment includes the conclusion of a new technology transfer agreement between the parties concerning competing technology rights which can be used for the production of products competing with the contract products.

2.3. *Agreements that generally fall outside the scope of Article 101(1) of the Treaty*

52. Agreements that are not capable of appreciably affecting trade between Member States (lack of effect on trade) or which do not appreciably restrict competition (agreements of minor importance) fall outside the scope of Article 101(1) of the Treaty. The Commission has provided guidance on the lack of effect on trade in the Commission Guidelines on the effect on trade concept contained in Articles 81 and 82 of the EC Treaty ([39]) ('Effect on Trade Guidelines'), and on agreements of minor importance in the Commission Notice on agreements of minor importance which do not appreciably restrict competition under 101(1) of the Treaty on the Functioning of the European Union ([40]) ('De Minimis Notice'). Both the Effect on Trade Guidelines and the De Minimis Notice are particularly relevant for the assessment of technology transfer agreements between small and medium-sized enterprises ([41]).

3. APPLICATION OF THE TTBER

3.1. *Legal effects of the TTBER*

53. Technology transfer agreements that fulfil the conditions of the TTBER are exempted from the prohibition contained in Article 101(1) of the Treaty. Block-exempted agreements are legally valid and enforceable ([42]).

54. The block exemption provided by the TTBER is based on the presumption that - to the extent that they are caught by Article 101(1) of the Treaty - certain categories of technology transfer agreements generally fulfil the four conditions of Article 101(3) ([43]). The market share thresholds (Article 3 of the TTBER), the hardcore restrictions (Article 4 of the TTBER) and the excluded restrictions (Article 5 of the TTBER) are intended to ensure that only restrictive agreements that can reasonably be presumed to fulfil the four conditions of Article 101(3) are block-exempted.

([39]) OJ C 101, 27.4.2004, p. 81.
([40]) OJ C 291, 30.8.2014, p. 1.
([41]) For guidance on the definition of relevant markets and the calculation of market shares in the context of technology transfer agreements, see Section 2.2.4 of these Guidelines.
([42]) Block-exempted agreements can only be prohibited following a withdrawal of the block exemption by the Commission or the competition authorities of the Member States – see Section 3.6 of these Guidelines on withdrawal of the block exemption.
([43]) See paragraph (9).

55. As set out in Section 2 of these Guidelines, many technology transfer agreements fall outside Article 101(1) of the Treaty, either because they do not restrict competition at all, or because the restriction of competition is not appreciable ([44]). In any case, where a technology transfer agreement meets the conditions of the TTBER, there is no need to determine whether it falls within Article 101(1) ([45]).

56. Outside the scope of the block exemption, it is relevant to examine whether in the individual case the agreement restricts competition within the meaning of Article 101(1) of the Treaty and, if so, whether the conditions of Article 101(3) are fulfilled. There is no presumption that technology transfer agreements that fall outside the block exemption are caught by Article 101(1) or fail to satisfy the conditions of Article 101(3). In particular, the mere fact that the market shares of the parties exceed the market share thresholds set out in Article 3 of the TTBER is not a sufficient basis for finding that the agreement falls within Article 101(1). An individual assessment of the likely effects of the agreement is required.

3.2. *Scope and duration of the TTBER*

3.2.1. **The concept of technology transfer agreements**

57. The TTBER and these Guidelines cover agreements for the transfer of technology. In accordance with Article 1(1), point (b), of the TTBER, the concept of 'technology rights' covers know-how as well as patents, utility models, design rights, topographies of semiconductor products, supplementary protection certificates for medicinal products or other products for which such supplementary protection certificates may be obtained, plant breeder's certificates and software copyrights or a combination thereof as well as applications for those rights and for registration of those rights. The licensed technology rights should allow the licensee, with or without other input, to produce the contract products. The TTBER only applies in Member States where the licensor holds relevant technology rights. Otherwise, there are no technology rights to be transferred within the meaning of the TTBER.

58. Know-how is defined in Article 1(1), point (i), of the TTBER as a package of practical information, resulting from experience and testing, which is secret, substantial and identified:

(a) 'Secret' means that the know-how is not generally known or easily accessible.

(b) 'Substantial' means that the know-how includes information which is significant and useful for the production of the products covered by the licence agreement or the application of the process covered by the licence agreement. In other words, the information must significantly contribute to or facilitate the production of the contract products. In cases where the licensed know-how relates to a product as opposed to a process, this condition implies that the know-how is useful for the production of the contract product. This condition is not satisfied where the contract product can be produced on the basis of freely available technology. However, the condition does not require that the contract product is of higher value than products produced with freely available technology. In the case of process technologies, this condition implies that the know-how is useful in the sense that it can reasonably be expected at the date of conclusion of the agreement to be capable of significantly improving the competitive position of the licensee, for instance by reducing its production costs.

(c) 'Identified' means that it is possible to verify that the licensed know-how fulfils the criteria of secrecy and substantiality. This condition is satisfied where the licensed know-how is described in digital or paper form. However, in some cases this may not be reasonably possible. The licensed know-how may consist of practical knowledge possessed by the licensor's employees. For instance, the licensor's employees may possess secret and substantial knowledge about a certain production process which is passed on to the licensee in the form of training of the licensee's employees. In such cases, it is sufficient to describe in the agreement the general nature of the know-how and to list the employees that will be or have been involved in passing it on to the licensee.

([44]) See, for example, Section 2.4.

([45]) According to Article 3(2) of 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 1, 4.1.2003, p. 1, ELI: http://data.europa.eu/eli/reg/2003/1/oj), agreements which may affect trade between Member States but which are not prohibited by Article 101 cannot be prohibited by national competition law either.

3.2.1.1. *The application of Article 2(3) of the TTBER*

59. Provisions in technology transfer agreements relating to the purchase of products by the licensee are only covered by the TTBER if, and to the extent that, those provisions are directly related to the production or sale of the contract products. Therefore the TTBER does not apply to those parts of a technology transfer agreement relating to inputs or equipment that are used for purposes other than the production of the contract products. For instance, where milk is sold together with a licence of technology to produce cheese, only the milk used for the production of cheese with the licensed technology will be covered by the TTBER. Provisions in technology transfer agreements relating to the licensing of other types of intellectual property, such as trademarks and copyright, other than software copyright (on software copyright see paragraphs (57) and (86) of these Guidelines), are only covered by the TTBER if, and to the extent that, they are directly related to the production or sale of the contract products. This condition ensures that provisions covering other types of intellectual property rights are block-exempted to the extent that those other intellectual property rights serve to enable the licensee to better exploit the licensed technology rights. For instance, where a licensor authorises a licensee to use its trademark on the products incorporating the licensed technology, this trademark licence may allow the licensee to better exploit the licensed technology by allowing consumers to make an immediate link between the product and the characteristics imputed to it by the licensed technology rights. An obligation on the licensee to use the licensor's trademark may also promote the dissemination of technology by allowing the licensor to identify itself as the source of the underlying technology. The TTBER covers technology transfer agreements in this scenario even if the principal interest of the parties lies in the exploitation of the trademark rather than the technology ([46]).

3.2.1.2. *Licensing of intellectual property rights outside the scope of the TTBER*

60. The Commission will not extend the principles set out in the TTBER and these Guidelines to trademark licensing (except in the situation set out in paragraph (59) of these Guidelines). Trademark licensing often occurs in the context of distribution and resale of goods and services and is generally more akin to distribution agreements than technology licensing. Where a trademark licence is directly related to the use, sale or resale of goods and services and does not constitute the primary object of the agreement, the licence agreement is covered by Commission Regulation (EU) 720/2022 ([47]) ('the Vertical Agreements Block Exemption Regulation').

61. The TTBER does not cover licensing of copyright other than software copyright (except in the situation set out in paragraph (59) of these Guidelines). The Commission will, however, as a general rule apply the principles set out in the TTBER and these Guidelines when assessing the licensing of copyright for the production of contract products under Article 101 of the Treaty ([48]). Conversely, the Commission will not extend the principles of the TTBER and these Guidelines to copyright licensing in merchandising agreements. Those agreements typically involve the right holder licensing a brand, fictional character or public figure for the purpose of the manufacture and sale of products bearing that sign or character. Such agreements are often more akin to distribution agreements than technology transfer agreements ([49]).

([46]) For example, the TTBER could cover the technology transfer agreement assessed in Commission Decision 90/186/EEC of 23 March 1990 relating to a proceeding under Article 85 of the EEC Treaty (IV/32.736 – in *Moosehead/Whitbread*) (OJ L 100, 20.4.1990, p. 32, ELI: http://data.europa.eu/eli/dec/1990/186/oj), see in particular paragraph 16 of that Decision.

([47]) Commission Regulation (EU) 720/2022 of 10 May 2022 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 (OJ L 134, 11.5.2022, p. 4,, ELI: http://data.europa.eu/eli/reg/2022/720/oj).

([48]) In assessing whether to apply the principles set out in the TTBER and these Guidelines, the Commission will consider the specificities of the legal and economic context. As regards the application of Article 101 to copyright licences, see e.g. the judgments of the Court of 4 October 2011, *Football Association Premier League and Others*, C-403/08, ECLI:EU:C:2011:631, paragraphs 137-146 and of 9 December 2020, *Groupe Canal+ v Commission*, C-132/19 P, ECLI:EU:C:2020:1007.

([49]) See, for example, Commission Decisions of 25 March 2019 in case AT.40436 – *Ancillary sports merchandise*; of 9 July 2019 in case AT.40432 – *Character merchandise*; and of 30 January 2020 in case AT. 40433 – *Film merchandise*.

3.2.1.3. *Licensing of certain types of data*

Application of the principles of the TTBER and Guidelines

62. The TTBER does not cover the licensing of data, except where the data that is being licensed falls within the definition of know-how in Article 1(1), point (i), of the TTBER (see paragraph (58) of these Guidelines) or of one of the technology rights listed in Article 1(1), point (b), of the TTBER, or where the licensing of data takes place in a technology transfer agreement and meets the conditions of Article 2(3) of the TTBER ([50]).

63. The Commission will, however, generally apply the principles of the TTBER and these Guidelines when assessing, under Article 101 of the Treaty, data licensing agreements between two undertakings for the purpose of production of contract products where the licensed data concerns a database that is protected by copyright or by the *sui generis* right defined in Directive 96/9/EC.

64. The assessment of agreements for the licensing of such databases for the production of goods or services under Article 101 of the Treaty gives rise to similar considerations as the licensing of technology rights covered by the TTBER. The creation of databases protected by copyright or by the *sui generis* right may entail significant investments and their licensing usually has a pro-competitive nature. It promotes innovation by allowing database creators to earn returns to cover at least part of their R & D costs. It also leads to the dissemination of data protected by intellectual property rights, which may increase downstream innovation and create value by reducing the production costs of licensees or by enabling them to produce new or improved products ([51]).

65. However, similarly to technology transfer agreements, restrictions of competition in licensing agreements relating to databases protected by copyright or *sui generis* rights may produce anti-competitive effects in the market ([52]), especially in cases where one of the parties has market power. When assessing such restrictions, the Commission will generally apply the principles of the TTBER and these Guidelines. However, the licensing of data is a fast-evolving practice, and it cannot be excluded that certain restrictions of competition included in such licences are either not covered by these Guidelines or they produce effects on competition or consumers that are substantially different from those described in these Guidelines. In such cases, the Commission will assess the restrictions under Article 101 of the Treaty by applying general principles (see Section 2 of these Guidelines) to the facts of each case.

66. Where data licensing agreements concern data that is not protected by database *sui generis* rights or copyright in databases, the Commission will assess whether it is appropriate to apply the principles of the TTBER and these Guidelines based on the circumstances of each case. Data licensing agreements entered into for the purpose of producing goods or services may concern various types of data. Due to differences in the characteristics of the data, the relevant regulatory framework or the way in which the data are gathered or generated, the principles set out in the TTBER and these Guidelines (including the principles set out in the following paragraphs of this Section) may not be appropriate for assessing such agreements in all cases.

([50]) This will be the case where the licensing of data takes place in a technology transfer agreement; is directly related to the production or sale of the contract products and qualifies as the licensing or assignment of intellectual property rights or know-how to the licensee. The Commission considers that the last requirement is fulfilled where the data that is being licensed is protected by copyright or database sui generis rights as defined in Directive 96/9/EC on the legal protection of databases.

([51]) The pro-competitive effects on the downstream market where the licensee operates are linked to the purpose of the licence, namely the production of contract products. However, licensed databases can also be used by licensees for other purposes, including in anti-competitive ways to harm consumers (for example, for exploitative practices targeting particular (groups of) consumers). The guidance provided in this Section is limited to licensing agreements for the purpose of producing contract products.

([52]) Guidance on how to define markets can be found in the Market Definition Notice cited in footnote 26.

The exchange of commercially sensitive information

67. The exchange of commercially sensitive information between competitors, regardless of whether the exchange occurs directly or indirectly through a third party, may infringe Article 101 of the Treaty ([53]).

68. In the context of the licensing of databases protected by *sui generis* rights or copyright, the exchange of commercially sensitive information may occur: (i) if the subject of the licence itself, i.e. a database protected by *sui generis* rights or copyright, contains commercially sensitive information, and/or (ii) if, in order to implement the data licensing agreement, the parties exchange information – which is not part of the database itself – that is commercially sensitive.

69. When assessing the exchange of commercially sensitive information in data licensing agreements between competitors, the Commission will generally apply the principles set out in Chapter 6 of the Guidelines on Horizontal Agreements concerning information exchange. In particular, if the licensing of the database itself does not fall within the Article 101(1) of the Treaty prohibition because it has neutral or positive effects on competition, an information exchange that is ancillary to that agreement does not fall within that prohibition either. This will be the case if the exchange of commercially sensitive information is objectively necessary to implement the data licensing agreement and is proportionate to the objectives thereof.

70. Moreover, in many cases, the exchange of commercially sensitive information in the context of the licensing of databases does not restrict competition by object, in which case it will be necessary to assess whether the exchange has restrictive effects ([54]). For that assessment, the nature of the information exchanged, the characteristics of the exchange and the market characteristics are relevant, as well as any measures implemented by the parties to minimise the risk of competition law infringements ([55]).

71. Where competitors use data licensing agreements as a means to engage in exchanges of commercially sensitive information with the object of restricting competition, the Commission will not apply the principles of these Guidelines to assess the agreement under Article 101 of the Treaty.

Obligations imposed by other Union legislation

72. The guidance provided in these Guidelines is without prejudice to the application of Regulation (EU) 2016/679 of the European Parliament and Council (General Data Protection Regulation) ([56]) and other Union law applicable to the exchange of information.

73. Where the licensing of databases protected by *sui generis* rights or copyright is mandated by a data-sharing obligation imposed by Union legislation, the Commission will take such obligation into account when applying the principles of the TTBER and these Guidelines to the licensing agreement. To the extent that undertakings retain discretion on how to implement the relevant legislation, Article 101 of the Treaty continues to apply.

3.2.2. **The concept of 'transfer'**

74. The concept of 'transfer' implies that technology must flow from one undertaking to another. Such transfers normally take the form of licensing, whereby the licensor grants the licensee the right to use its technology rights against payment of royalties.

([53]) See Chapter 6 of the Guidelines on Horizontal Agreements; see also the judgment of the Court of 29 July 2024, *Banco BPN v BIC Português and Others*, C-298/22, ECLI:EU:C:2024:638, paragraphs 51 et seq.

([54]) See Section 6.2.7 of the Guidelines on Horizontal Agreements.

([55]) See Section 6.2.4.4 of the Guidelines on Horizontal Agreements.

([56]) Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1, ELI: http://data.europa.eu/eli/reg/2016/679/oj).

75. As set out in Article 1(1), point (c), of the TTBER, assignments where part of the risk associated with the exploitation of the technology rights remains with the assignor are also deemed to be technology transfer agreements. In particular, this is the case where the sum payable in consideration of the assignment is dependent on the turnover generated by the assignee from sales of products produced using the assigned technology, the quantity of such products produced or the number of operations carried out employing the technology.

76. An agreement whereby the licensor commits not to exercise its technology rights against the licensee can also be seen as a transfer of technology rights. Indeed, the essence of a pure patent licence is the right to operate inside the scope of the exclusive right of the patent. It follows that the TTBER also covers so-called non-assertion agreements, whereby the licensor permits the licensee to produce within the scope of the patent ([57]).

3.2.3. **Agreements between two parties**

77. In accordance with Article 1(1) point (c) of the TTBER, the block exemption only applies to technology transfer agreements 'between two undertakings'. Technology transfer agreements between more than two undertakings are not covered by the TTBER ([58]).

78. Agreements concluded between two undertakings fall within the scope of the TTBER even if the agreement stipulates conditions in relation to more than one level of trade. For instance, the TTBER applies to a technology transfer agreement concerning not only the production stage but also the distribution stage, stipulating the obligations that the licensee must or may impose on resellers of the products produced under the licence ([59]).

79. Agreements establishing technology pools and licensing out from technology pools are generally multi-party agreements and are therefore not covered by the TTBER ([60]). The notion of technology pools covers agreements whereby two or more parties agree to pool their respective technologies and license them as a package. The notion of technology pools also covers arrangements whereby two or more undertakings agree to license a third party and authorise it to license-on the package of technologies.

80. Licence agreements concluded between more than two undertakings often give rise to the same issues as licence agreements of the same nature concluded between two undertakings. In its individual assessment of licence agreements which are of the same nature as those covered by the block exemption but which are concluded between more than two undertakings, the Commission will apply by analogy the principles set out in the TTBER. However, technology pools and licensing out from technology pools are specifically dealt with in Section 4.4 of these Guidelines.

3.2.4. **Agreements for the production of contract products**

81. It follows from Article 1(1) point (c), of the TTBER that, to benefit from the block exemption, technology transfer agreements must be entered into 'for the purpose of the production of contract products', that is to say, products incorporating or produced with the licensed technology rights. The agreement must permit the licensee and/or its sub-contractor(s) to exploit the licensed technology for the purpose of producing goods or services (see also recital 7 of the TTBER).

([57]) The terms 'licensing' and 'licensed' used in these Guidelines also include non-assertion arrangements as long as a transfer of technology rights takes place as described in this Section.

([58]) Under Regulation No 19/65/EEC of the Council of 2 March 1965 on application of Article 85(3) of the Treaty to certain categories of agreements and concerted practices (OJ 36, 6.3.1965, p. 533, ELI: http://data.europa.eu/eli/reg/1965/19/oj), the Commission is not empowered to block-exempt technology transfer agreements concluded between more than two undertakings.

([59]) See recital 6 of the TTBER and further Section 3.2.6 of these Guidelines.

([60]) For more details, see paragraph (268).

82. Where the purpose of the agreement is not the production of contract products but, for instance, merely to block the development or commercialisation of a competing technology, the licence agreement is not covered by the TTBER and these Guidelines may not be appropriate for assessing the agreement. More generally, if the parties refrain from exploiting the licensed technology rights, no efficiency-enhancing activity takes place, in which case the very rationale of the block exemption is absent.

83. Exploitation of the licensed technology rights does not necessarily need to take the form of an integration of assets. Exploitation also occurs where the licence creates design freedom for the licensee, by allowing it to exploit its own technology without facing the risk of infringement claims by the licensor. In the case of licensing between competitors, the fact that the parties do not exploit the licensed technology may be an indication that the arrangement is a disguised cartel. For these reasons, the Commission will examine cases of non-exploitation very closely.

84. The TTBER applies to technology transfer agreements for the purpose of the production of contract products by the licensee and/or its sub-contractor(s). Therefore, the TTBER does not apply to (those parts of) technology transfer agreements that allow for sub-licensing. However, the Commission will apply by analogy the principles set out in the TTBER and these Guidelines to 'master licensing' agreements between a licensor and a licensee (that is to say an agreement whereby the licensor allows the licensee to sublicense the technology). Agreements between the licensee and sub-licensees for the production of contract products are covered by the TTBER.

85. The term 'contract products' encompasses goods and services produced with the licensed technology rights. That is the case both where the licensed technology is used in the production process and where it is incorporated into the product itself. In these Guidelines, the term 'products incorporating the licensed technology' covers both situations. The TTBER applies in all cases where technology rights are licensed for the purposes of producing goods and services. The framework of the TTBER and these Guidelines is based on the premise that there is a direct link between the licensed technology rights and a contract product. In cases where no such link exists, namely where the purpose of the agreement is not to enable the production of a contract product, the analytical framework provided by the TTBER and these Guidelines may not be appropriate.

86. The licensing of software copyright for the purpose of reselling or otherwise distributing the software, whether through physical or digital channels ([61]) is not considered to be 'production' within the meaning of the TTBER and thus is not covered by the TTBER and these Guidelines. Such licensing is instead covered by analogy by the Vertical Agreements Block Exemption Regulation and the Vertical Guidelines ([62]). For instance, the TTBER and these Guidelines do not cover the licensing of software copyright whereby the licensee is provided with a digital or physical copy of the software in order to offer the software to end users. Nor do they cover the licensing of software copyright and distribution of software by means of 'clickwrap' licences, that is, a set of conditions presented to the end user during software installation or online download which the user is deemed to have accepted by clicking an 'I agree' or equivalent button before proceeding, or the licensing of software copyright and distribution of software by means of online downloading or streaming.

87. However, where the licensed software is incorporated by the licensee into the contract product, this is not considered as mere reselling but production. For instance, the TTBER and these Guidelines cover the licensing of software copyright where the licensee is authorised to use the software by incorporating it into a device with which the software interacts. Similarly, where the licensed software is used as an input into the licensee's industrial processes or where the licensee adds significant value to the software through modification or further development, that is considered licensing for the purpose of production.

([61]) See e.g. the Commission decision of 20 January 2021 in case AT.40413 – *Focus Home*.
([62]) Cited in footnote 20.

88. The TTBER covers subcontracting, whereby the licensor licenses technology rights to the licensee who undertakes to produce certain products on the basis thereof exclusively for the licensor. Subcontracting may also involve the supply of equipment by the licensor to be used in the production of the goods and services covered by the agreement. For the latter type of subcontracting to be covered by the TTBER as part of a technology transfer agreement, the supplied equipment must be directly related to the production of the contract products. Subcontracting is also covered by the Commission Notice on subcontracting agreements ([63]). In accordance with that Notice, which remains applicable, subcontracting agreements whereby the subcontractor undertakes to produce certain products exclusively for the contractor generally fall outside Article 101(1) of the Treaty. Subcontracting agreements whereby the contractor determines the transfer price of the intermediate contract product between subcontractors in a value chain of subcontracting generally also fall outside Article 101(1) provided the contract products are exclusively produced for the contractor. However, other restrictions imposed on the subcontractor such as the obligation not to conduct or exploit its own research and development may fall within Article 101(1) ([64]).

89. The TTBER also applies to agreements whereby the licensee must carry out R & D work before obtaining a product or a process that is ready for commercial exploitation, provided that the object of the agreement is the production of an identified contract product, that is to say, a product produced with the licensed technology rights. Where the licensor is an academic body, research institute or SME, which, in each case, is not engaged in production activities, the identification of the product in the technology transfer agreement can be done in more general terms.

90. The TTBER and these Guidelines do not cover agreements whereby technology rights are licensed for the purpose of enabling the licensee to carry out further R & D in various fields, including further developing a product arising out of such R & D. If they fulfil the conditions specified therein, such agreements are covered by the Commission Regulation (EU) 2023/1066 ([65]) ('the R & D Block Exemption Regulation'), and are assessed under the framework of the relevant chapter of the Guidelines on Horizontal Agreements concerning research and development agreements ([66]). For instance, the TTBER and these Guidelines do not cover R & D sub-contracting, whereby the licensee undertakes to carry out research and development in the field of the licensed technology and to hand back the improved technology package to the licensor ([67]). Also, the mere licensing of a technological research tool for use in further research activity is more akin to R & D agreements from the perspective of the assessment under Article 101 of the Treaty. In evaluating such agreements, the Commission will, as a general rule, apply the principles set out in the R & D Block Exemption Regulation and the chapter of the Guidelines on Horizontal Agreements on research and development agreements.

3.2.5. **Duration**

91. The block exemption applies for as long as the licensed technology right has not expired, lapsed or been declared invalid. In the case of know-how, the block exemption applies as long as the licensed know-how remains secret, and stops applying when the know-how loses its secrecy, except where the know-how becomes publicly known as a result of action by the licensee, in which case the exemption applies for the duration of the agreement (see Article 2(2) of the TTBER).

([63]) Commission Notice of 18 December 1978 concerning its assessment of certain subcontracting agreements in relation to Article 85(1) of the EEC Treaty (OJ C 1, 3.1.1979, p. 2).

([64]) See paragraph 3 of Commission Notice on subcontracting agreements cited in footnote 63.

([65]) Commission Regulation (EU) 2023/1066 of 1 June 2023 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements (OJ L 143, 2.6.2023, p. 9, ELI: http://data.europa.eu/eli/reg/2023/1066/oj). See also Section 3.2.6.1 of these Guidelines.

([66]) See paragraphs 51 et seq. of the Guidelines on Horizontal Agreements.

([67]) However, this last example is covered by the R & D Block Exemption Regulation cited in footnote 65, see also Section 3.2.6.1. of the Guidelines.

92. The block exemption applies to each licensed technology right covered by the agreement and ceases to apply on the date of expiry, invalidity or the entry into the public domain of the last technology right within the meaning of the TTBER.

3.2.6. **Relationship with other block exemption regulations**

93. The TTBER covers agreements between two undertakings concerning the licensing of technology rights for the purpose of producing contract products. However, technology rights can also be an element of other types of agreements. In addition, the products incorporating the licensed technology are subsequently sold on the market. It is therefore necessary to address the interface between the TTBER and Commission Regulation (EU) 2023/1067 ([68]) ('the Specialisation Block Exemption Regulation'), the R & D Block Exemption Regulation ([69]) and the Vertical Agreements Block Exemption Regulation ([70]).

3.2.6.1. *The block exemption regulations on specialisation and R & D agreements*

94. Pursuant to Article 9 of the TTBER, the TTBER does not apply to licensing in the context of specialisation agreements that are covered by the Specialisation Block Exemption Regulation or to licensing in the context of R & D agreements that are covered by the R & D Block Exemption Regulation.

95. In accordance with Article 1(1) of the Specialisation Block Exemption Regulation, that Regulation covers specialisation agreements, whereby one or more parties agree to cease producing certain products and to buy them from another party, and joint production agreements, whereby two or more parties agree to produce certain products jointly. That Regulation extends to provisions concerning the assignment or use of intellectual property rights, provided that they do not constitute the primary object of the agreement, but are directly related to and necessary for its implementation.

96. Where undertakings establish a production joint venture and grant the joint venture a technology licence for the purpose of production, such licensing is covered by the Specialisation Block Exemption Regulation and not by the TTBER. However, where the joint venture engages in licensing of the technology to third parties, that activity is not linked to production by the joint venture and therefore is not covered by the Specialisation Block Exemption Regulation. Such licensing arrangements, which bring together the technologies of the parties, constitute technology pools, which are covered by Section 4.4 of these Guidelines.

97. The R & D Block Exemption Regulation covers agreements between two or more undertakings relating to joint or paid-for R & D and the joint exploitation of the results thereof. In accordance with Article 1(1), point (10), of that Regulation, R & D and the exploitation of the results thereof are carried out jointly where the work involved is carried out by a joint team, organisation or undertaking, jointly entrusted to a third party or allocated between the parties by way of specialisation in the context of R & D or specialisation in the context of exploitation (which includes production and distribution, including licensing).

98. It follows that the R & D Block Exemption Regulation covers licensing between the parties and by the parties to a joint entity in the context of an R & D agreement, and that such licensing is not covered by the TTBER. In the context of such agreements, the parties can also determine the conditions for licensing the results of the joint or paid-for R & D to third parties. However, since third party licensees are not party to the R & D agreement, the individual licence agreements concluded with third parties are not covered by the R & D Block Exemption Regulation. Those licence agreements can benefit from the block exemption provided in the TTBER if the conditions of the TTBER are met.

([68]) Commission Regulation (EU) 2023/1067 of 1 June 2023 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements (OJ L 143, 2.6.2023, p. 20, ELI: http://data.europa.eu/eli/reg/2023/1067/oj).

([69]) Cited in footnote 65.

([70]) Cited in footnote 47.

3.2.6.2. *The Vertical Agreements Block Exemption Regulation*

99. The Vertical Agreements Block Exemption Regulation ([71]) applies to agreements entered into between two or more undertakings, each operating, for the purposes of the agreement, at different levels of the production or distribution chain, and relating to the conditions under which the parties may purchase, sell or resell certain goods or services. It therefore covers supply and distribution agreements.

100. Given that the TTBER only covers agreements between two parties and that a licensee that sells products incorporating the licensed technology is a supplier for the purposes of the Vertical Agreements Block Exemption Regulation, those two block exemption regulations are closely related. Technology transfer agreements between a licensor and a licensee are covered by the TTBER, whereas agreements between a licensee and buyers of the contract products are covered by the Vertical Agreements Block Exemption Regulation.

101. The TTBER also exempts agreements between the licensor and the licensee where the agreement imposes obligations on the licensee as to the way in which it must sell the products incorporating the licensed technology. In particular, the licensor can require the licensee to establish a certain type of distribution system such as exclusive distribution or selective distribution. However, the distribution agreements concluded for the purposes of implementing such obligations are covered only by the Vertical Agreements Block Exemption Regulation. For example, the licensor can oblige the licensee to establish an exclusive distribution system to sell the contract products. However, to benefit from the Vertical Agreements Block Exemption Regulation, the licensee must in principle ensure that its distributors remain free to make passive sales into territories allocated to other exclusive distributors appointed by the licensee ([72]).

102. Furthermore, to benefit from the Vertical Agreements Block Exemption Regulation, distributors must in principle be free to sell both actively and passively into territories covered by the distribution systems of other suppliers, that is to say, other licensees producing their own products on the basis of the licensed technology rights. That is because, for the purposes of the Vertical Agreements Block Exemption Regulation, each licensee is a separate supplier. However, the reasons underlying the block exemption of active sales restrictions within a supplier's distribution system contained in that Regulation, may also apply where the products incorporating the licensed technology are sold by different licensees under a common brand belonging to the licensor. When the products incorporating the licensed technology are sold under a common brand identity, there may be the same efficiency reasons for applying the same types of restraints between licensees' distribution systems as within a single vertical distribution system. In such cases, the Commission would be unlikely to challenge restraints where, by analogy, the requirements of the Vertical Agreements Block Exemption Regulation are fulfilled. For a common brand identity to exist, the products must be sold and marketed under a common brand, capable of conveying quality and other relevant information to the consumer. It is not sufficient that, in addition to the licensees' brands, the product carries the licensor's brand, which identifies it as the source of the licensed technology.

3.3. ***The market share thresholds of the TTBER***

103. The legal safe harbour provided by the TTBER is subject to market share thresholds, which limit the scope of the block exemption to agreements that can generally be presumed to fulfil the conditions of Article 101(3) of the Treaty. The fact that a technology transfer agreement falls outside the safe harbour because the parties' market shares exceed the thresholds does not give rise to any presumption either that the agreement falls within Article 101(1) or that it does not fulfil the conditions of Article 101(3). Such agreements require an individual assessment under Article 101.

([71]) Cited in footnote 47.

([72]) See Article 4, points (b), (c) and (d) of the Vertical Agreements Block Exemption Regulation.

3.3.1. **Market share thresholds**

104. The market share threshold to be applied for the purpose of the safe harbour of the TTBER depends on whether the agreement is concluded between competitors or non-competitors.

105. The market share thresholds apply both to the relevant market(s) of the licensed technology rights and the relevant market(s) of the contract products. If the applicable market share threshold is exceeded on one or several product and technology market(s), the block exemption does not apply to the agreement for that relevant market(s). For instance, if the technology transfer agreement concerns two separate product markets, the block exemption may apply to one of the markets and not to the other.

106. In accordance with Article 3(1) of the TTBER, the safe harbour provided for in Article 2 of the TTBER applies to technology transfer agreements between competitors on condition that the combined market share of the parties does not exceed 20 % on any relevant market. The market share threshold of Article 3(1) of the TTBER is applicable if the parties are actual competitors or potential competitors on the product market(s), actual competitors on the technology market or both (for the distinction between competitors and non-competitors, see Section 2.2.5 of these Guidelines).

107. Potential competition on the technology market is not taken into account for the application of the market share threshold or the hardcore list relating to agreements between competitors. Outside the safe harbour of the TTBER, potential competition on the technology market is taken into account.

108. Where the undertakings party to the technology transfer agreement are not competitors, the market share threshold set out in Article 3(2) of the TTBER applies. This provides that the block exemption applies if the market share of each party does not exceed 30 % on the affected relevant technology and product markets.

109. Where the parties become competitors within the meaning of Article 3(1) of the TTBER at a later point in time, for instance where the licensee was already present, before the licensing, on the relevant market where the contract products are sold and the licensor subsequently becomes an actual or potential supplier on the same relevant market, the 20 % market share threshold will apply from the point in time when they became competitors. However, in that case, the hardcore list applicable to agreements between non-competitors will continue to apply for the full life of the agreement unless the agreement is subsequently amended in any material respect (see Article 4(3) of the TTBER and paragraph (51) of these Guidelines).

3.3.2. **Calculating market shares for technology markets under the TTBER**

110. Article 8, point (d), of the TTBER specifies the method that must be used to calculate market shares in the relevant technology markets for the purposes of applying the TTBER. Under this method, the market share of a party that is active as a licensor on a relevant technology market is calculated on the basis of the presence of that party's technology rights on the relevant market(s) (namely the product market(s) and the geographic market(s)) where the contract products are sold. In particular, the combined sales of that party and its licensees of products incorporating that party's technology rights are calculated as a share of all sales of competing products, irrespective of whether those competing products are produced with a technology that is being licensed. This method is applied to calculate the market shares of both the licensor and the licensee in cases where the licensee is itself active as a licensor on the relevant technology market.

111. This approach to calculating the market shares of the parties on relevant technology markets, based on their 'footprint' at the product level, has been chosen because of the practical difficulties of calculating market shares on technology markets using royalty income (see paragraph (40)). In addition to the general difficulty of obtaining reliable royalty income data, the actual royalty income may also seriously underestimate a technology's position on the market in the event that royalty payments are reduced as a result of cross-licensing or the supply of tied products. Basing the calculation of market shares on the technology market on the products produced with the relevant technology does not carry that risk. Such a footprint at the product level will in general reflect the market position of the technology well.

112. It follows from Article 3 and Article 8, point (d), of the TTBER that if the licensed technology has not generated sales of contract products in the preceding calendar year, for example because the technology is new and products incorporating the technology have not yet been commercialised, the technology is considered, for the purposes of applying the TTBER, to have a zero market share for that calendar year.

113. Ideally, products produced using in-house technologies that are not licensed out would be excluded from the product market for the purpose of calculating the footprint, as those in-house technologies are only an indirect constraint on the licensed technology. However, as it may be difficult in practice for a licensor and licensees to know whether other products in the same product market are produced with licensed or in-house technologies, the calculation of the technology market share, for the purposes of the TTBER, is based on the products produced with the licensed technology as a share of all products sold in that product market. This approach can be expected to reduce the calculated market share by including products produced with in-house technologies, but will nonetheless in general provide a good indicator of the market position of the licensed technology. First, it captures any potential competition from undertakings that are producing with their own technology and that are likely to start licensing in the event of a deterioration in the conditions of supply of the licensor's technology relative to those of other technologies (such as in a small but permanent increase in the licence fees charged by the licensor). Secondly, even where it is unlikely that other technology owners would start licensing, the licensor does not necessarily have market power on the technology market even if it has a high share of licensing income. If the downstream product market is competitive, competition at that level may effectively constrain the licensor. An increase in royalties upstream affects the costs of the licensee, which makes it less competitive and thereby may cause it to lose sales. A technology's market share on the product market also captures this element and is thus normally a good indicator of licensor market power on the technology market.

114. To assess the market position of the licensed technology, the geographic dimension of the technology market must also be taken into acount. This might sometimes differ from the geographic dimension of the respective downstream product market. For the purpose of applying the TTBER, the geographic dimension of the relevant technology market is also determined by the product market(s). However, outside the TTBER safe harbour it may be appropriate to also consider a possibly wider geographic area, in which the licensor and licensees of competing technologies are active, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those areas.

115. Where the parties' market share(s) rise(s) above the relevant threshold of 20 % or 30 % during the life of the agreement, the safe harbour continues to apply for a period of three consecutive calendar years following the year in which the threshold was exceeded (see Article 8, point (e), of the TTBER).

Calculating market shares for product markets under the TTBER

116. The licensee's market share on the relevant markets where the contract products are sold is calculated on the basis of the licensee's sales of products incorporating the licensor's technology and competing products, that is to say, the total sales of the licensee on the product market in question. Where the licensor is also a supplier of products on the relevant market, its sales on the product market in question must also be taken into account. Sales made by other licensees are not taken into account for the purpose of calculating the licensee's or the licensor's market share on the relevant product market(s).

117. Market shares should be calculated on the basis of sales value data for the preceding calendar year, where such data are available. Such data normally provide a more accurate indication of the strength of a technology than volume data. However, where value-based data are not available, estimates based on other reliable market information may be used, including market sales volume data. In general, market shares must be calculated using sales data relating to the preceding calendar year. However, in cases where sales data relating to the preceding calendar year are not representative of the parties' position in the relevant market(s), market shares are calculated as an average of the parties' market shares for the three preceding calendar years (see Article 8, point (b), of the TTBER) ([73]).

([73]) See also paragraph 95 of the Guidelines on Horizontal Agreements.

118. The principles set out in this Section 3.3 can be illustrated by the following examples:

Examples concerning licensing between non-competitors

Example 1

Company A is specialised in developing bio-technological products and techniques and has developed a new product Xeran. It is not active as a producer of Xeran, for which it has neither the production nor the distribution facilities. Company B is one of the producers of competing products, produced with freely available non-proprietary technologies. In year 1, B sold EUR 25 million worth of products produced with the freely available technologies. In year 2, A gives a licence to B to produce Xeran. In that year B sells EUR 15 million produced with the help of the freely available technologies and EUR 15 million of Xeran. In year 3 and the following years B produces and sells only Xeran worth EUR 40 million annually. In addition in year 2, A also licenses to C. C was not active on that product market before. C produces and sells only Xeran: EUR 10 million in year 2 and EUR 15 million in year 3 and thereafter. The total market for Xeran and its substitutes where B and C are active is worth EUR 200 million in each year.

In year 2, the year in which the licence agreements are concluded, A's market share on the technology market is 0 % as, for the purpose of applying the TTBER, its market share has to be calculated on the basis of the total sales of Xeran in the preceding year. In year 3, A's market share on the technology market is 12,5 %, reflecting the value of Xeran produced by B and C in the preceding year 2. In year 4 and thereafter A's market share on the technology market is 27,5 %, reflecting the value of Xeran produced by B and C in the preceding year.

In year 2, B's market share on the product market is 12,5 %, reflecting B's EUR 25 million sales in year 1. In year 3, B's market share is 15 % because its sales have increased to EUR 30 million in year 2. In year 4 and thereafter B's market share is 20 %, as its sales are EUR 40 million annually. C's market share on the product market is 0 % in year 1 and 2,5 % in year 3 and 7,5 % thereafter.

As the licence agreements between A and B, and between A and C, are between non-competitors and the individual market shares of A, B and C are below 30 % each year, each agreement falls within the safe harbour of the TTBER.

Example 2

The situation is the same as in example 1, however now B and C are operating in different geographic markets. It is established that the total market of Xeran and its substitutes is worth EUR 100 million annually in each geographic market.

In this case, A's market share on the relevant technology markets has to be calculated on the basis of product sales data for each of the two geographic product markets separately. In the market where B is active, A's market share depends on the sale of Xeran by B. As in this example the total market is assumed to be EUR 100 million, that is to say, half the size of the market in example 1, the market share of A is 0 % in year 2, 15 % in year 3 and 40 % thereafter. B's market share is 25 % in year 2, 30 % in year 3 and 40 % thereafter. In years 2 and 3 the individual market shares of A and B do not exceed the 30 % threshold. The threshold is however exceeded from year 4 and this means that, in accordance with Article 8, point (e), of the TTBER, after year 7 the licence agreement between A and B can no longer benefit from the safe harbour but has to be assessed on an individual basis.

In the market where C is active, A's market share depends on the sales of Xeran by C. A's market share on the technology market, based on C's sales in the previous year, is therefore 0 % in year 2, 10 % in year 3 and 15 % thereafter. The market share of C on the product market is the same: 0 % in year 2, 10 % in year 3 and 15 % thereafter. The licence agreement between A and C therefore falls within the safe harbour for the whole period.

Examples concerning licensing between competitors

Example 3

Companies A and B are active on the same relevant product and geographic market for a certain chemical product. They also each own a patent on different technologies used to produce that product. In year 1, A and B sign a cross licence agreement licensing each other to use their respective technologies. In year 1, A and B produce only with their own technology and A sells EUR 15 million of the product and B sells EUR 20 million of the product. From year 2, they both use their own and the other's technology. From that year onward A sells EUR 10 million of the product produced with its own technology and EUR 10 million of the product produced with B's technology. From year 2, B sells EUR 15 million of the product produced with its own technology and EUR 10 million of the product produced with A's technology. The total market for the product and its substitutes is worth EUR 100 million in each year.

To assess the licence agreement under the TTBER, the market shares of A and B have to be calculated both on the technology market and the product market. The market share of A on the technology market depends on the amount of the product sold in the preceding year that was produced, by both A and B, with A's technology. In year 2, the market share of A on the technology market is therefore 15 %, reflecting its own production and sales of EUR 15 million in year 1. From year 3, A's market share on the technology market is 20 %, reflecting the EUR 20 million sales of the product produced with A's technology and produced and sold by A and B (EUR 10 million each). Similarly, in year 2 B's market share on the technology market is 20 % and thereafter 25 %.

The market shares of A and B on the product market depend on their respective sales of the product in the previous year, irrespective of the technology used. The market share of A on the product market is 15 % in year 2 and 20 % thereafter. The market share of B on the product market is 20 % in year 2 and 25 % thereafter.

As the agreement is between competitors, their combined market share, both on the technology and on the product market, has to be below the 20 % market share threshold in order to benefit from the TTBER safe harbour. It is clear that this is not the case here. The parties' combined market share on the technology market and on the product market is 35 % in year 2 and 45 % thereafter. This agreement between competitors will therefore have to be assessed on an individual basis.

3.4. *Hardcore restrictions under the TTBER*

3.4.1. **General principles**

119. Article 4 of the TTBER contains a list of hardcore restrictions. These are serious restrictions of competition which should in most cases be prohibited because of the harm that they cause to consumers. In exceptional cases, hardcore restrictions may fall outside Article 101(1) of the Treaty where they are objectively necessary for the conclusion of a technology transfer agreement ([74]) or for reasons of safety or health related to the dangerous nature of the product in question. Such exclusion of the application of Article 101(1) can only be made on the basis of objective factors external to the parties themselves and not the subjective views and characteristics of the parties. The question is not whether the parties in their particular situation would not have accepted to conclude a less restrictive agreement, but whether, given the nature of the agreement and the characteristics of the market, a less restrictive agreement would not have been concluded by undertakings in a similar setting.

120. It follows from Article 4(1) and (2) of the TTBER that, when a technology transfer agreement contains a hardcore restriction of competition, the whole agreement falls outside the block exemption. Moreover, the Commission considers that in the context of an individual assessment it is unlikely that hardcore restrictions will fulfil the four conditions of Article 101(3) of the Treaty.

([74]) See paragraph 18 of the Commission Guidelines on the application of Article 81(3) of the Treaty, cited in footnote 9.

121. Article 4 of the TTBER distinguishes between agreements between competitors and agreements between non-competitors.

3.4.2. **Agreements between competitors**

122. Article 4(1) of the TTBER lists the hardcore restrictions for technology transfer agreements between competitors. Article 4(1) provides that the block exemption does not apply to agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object any of the following:

(a) the restriction of a party's ability to determine its prices when selling products to third parties;

(b) the limitation of output, except limitations on the output of contract products imposed on the licensee in a non-reciprocal agreement or imposed on only one of the licensees in a reciprocal agreement;

(c) the allocation of markets or customers except:

(i) the obligation on the licensor and/or the licensee, in a non-reciprocal agreement, not to produce with the licensed technology rights within the exclusive territory reserved for the other party and/or not to sell the contract products, actively and/or passively, into the exclusive territory or to the exclusive customer group reserved for the other party;

(ii) the restriction, in a non-reciprocal agreement, of active sales of the contract products by the licensee into the exclusive territory or to the exclusive customer group allocated by the licensor to another licensee provided that the latter was not a competing undertaking of the licensor at the time of the conclusion of its own licence;

(iii) the obligation on the licensee to produce the contract products only for its own use provided that the licensee is not restricted in selling the contract products actively and passively as spare parts for its own products;

(iv) the obligation on the licensee, in a non-reciprocal agreement, to produce the contract products only for a particular customer, where the licence was granted in order to create an alternative source of supply for that customer;

(d) the restriction of the licensee's ability to exploit its own technology rights or the restriction of the ability of any of the parties to the agreement to carry out R & D, unless such latter restriction is indispensable to prevent the disclosure of the licensed know-how to third parties.

Distinction between reciprocal and non-reciprocal agreements between competitors

123. For certain hardcore restrictions, the TTBER makes a distinction between reciprocal and non-reciprocal agreements. The hardcore list is stricter for reciprocal agreements between competitors than for non-reciprocal agreements between competitors. Reciprocal agreements are cross-licensing agreements where the licensed technologies are competing technologies or can be used for the production of competing products. A non-reciprocal agreement is an agreement where only one of the parties is licensing its technology rights to the other party or where, in the case of cross-licensing, the licensed technology rights are not competing technologies and the rights licensed cannot be used for the production of competing products. An agreement is not reciprocal for the purposes of the TTBER merely because the agreement contains a grant-back obligation or because the licensee licenses back its own improvements of the licensed technology. Where a non-reciprocal agreement subsequently becomes a reciprocal agreement due to the conclusion of a second licence between the same parties, those parties may have to revise the first licence in order to avoid the agreement containing a hardcore restriction. In its assessment of such cases, the Commission will take into account the length of the period between the conclusion of the first and the second licence.

Price restrictions between competitors

124. The hardcore restriction contained in Article 4(1), point (a), of the TTBER concerns agreements between competitors that have as their object the fixing of prices for products sold to third parties, including the products incorporating the licensed technology. Price fixing between competitors generally constitutes a restriction of competition by object. Price fixing can take the form of an agreement on the exact price to be charged or on a price list with certain allowed maximum rebates. It is immaterial whether the agreement concerns fixed, minimum, maximum or recommended prices. Price fixing can also be implemented indirectly by applying disincentives to deviate from an agreed price level, for example, by providing that the royalty rate will increase if product prices are reduced below a certain level. However, an obligation on the licensee to pay a certain minimum royalty does not in itself amount to price fixing.

125. Where royalties are calculated on the basis of individual product sales, the amount of the royalty has a direct impact on the marginal cost of the product and thus a direct impact on product prices ([75]). Competitors can therefore use cross-licensing with reciprocal running royalties as a means of coordinating and/or increasing prices on downstream product markets ([76]). However, the Commission will only treat cross licences with reciprocal running royalties as price fixing in specific circumstances, such as where the agreement provides for the payment of royalties regardless of whether the technology is actually used, or where the agreement is devoid of any pro-competitive purpose and therefore does not constitute a bona fide licensing arrangement.

126. The hardcore restriction contained in Article 4(1), point (a), of the TTBER also covers agreements whereby royalties are calculated on the basis of all product sales irrespective of whether the licensed technology is being used. Such agreements also fall within the hardcore restriction set out in Article 4(1), point (d), of the TTBER relating to restrictions of the licensee's ability to use its own technology rights (see paragraph (141) of these Guidelines). In general, such agreements restrict competition since they raise the cost of using the licensee's own competing technology rights and restrict competition that existed in the absence of the agreement ([77]). This applies to both reciprocal and non-reciprocal arrangements.

127. Exceptionally, however, an agreement whereby royalties are calculated on the basis of all product sales may fulfil the conditions of Article 101(3) of the Treaty in an individual case where on the basis of objective factors it can be concluded that the restriction is indispensable for pro-competitive licensing to occur. This may be the case where, in the absence of the restraint, it would be impossible or unduly difficult to calculate and monitor the royalty payable by the licensee, for instance because the licensor's technology leaves no visible trace on the final product and practicable alternative monitoring methods are unavailable.

Output restrictions between competitors

128. The hardcore restriction set out in Article 4(1), point (b), of the TTBER concerns reciprocal output restrictions on the parties. An output restriction is a limitation on how much a party may produce and sell. Article 4(1), point (b), does not apply to output limitations on the licensee in a non-reciprocal agreement or output limitations on one of the licensees in a reciprocal agreement provided that the output limitation only concerns products produced with the licensed technology. Article 4(1), point (b), thus identifies as hardcore reciprocal output restrictions and output restrictions on the licensor in respect of its own technology. When competitors agree to impose reciprocal output limitations, the object and likely effect of the agreement is to reduce output in the market. The same is true of agreements that reduce the incentive of the parties to expand output, for example by applying reciprocal running royalties per unit which increase as output increases or by obliging each party to make payments if a certain level of output is exceeded.

([75]) See in this respect paragraph 98 of the Guidelines on the application of Article 81(3) of the Treaty cited in footnote 9.

([76]) That is also the case where one party grants a licence to the other party and accepts to buy a physical input from the licensee. The purchase price can serve the same function as the royalty.

([77]) See in this respect the judgment of the Court of 25 February 1986, *Windsurfing International*, C-193/83, ECLI:EU:C:1986:75, paragraph 67.

129. The more favourable treatment of non-reciprocal quantity limitations is based on the consideration that a one-way restriction does not necessarily lead to a lower output on the market, while the risk that the agreement is not a bona fide licensing arrangement is also lower when the restriction is non-reciprocal. When a licensee is willing to accept a one-way restriction, it is likely that the agreement leads to a real integration of complementary technologies or an efficiency-enhancing integration of the licensor's superior technology with the licensee's productive assets. Similarly, in a reciprocal agreement an output restriction on only one of the licensees is likely to reflect the higher value of the technology licensed by one of the parties and may serve to promote pro-competitive licensing.

Market and customer allocation between competitors

130. The hardcore restriction set out in Article 4(1), point (c), of the TTBER concerns the allocation of markets and customers. Agreements whereby competitors share markets and customers have as their object the restriction of competition. An agreement whereby competitors agree, in a reciprocal agreement, not to produce in certain territories or not to sell actively, passively, or both, into certain territories or to certain customers reserved for the other party, is a hardcore restriction. Thus, for instance reciprocal exclusive licensing between competitors is considered market sharing.

131. Article 4(1), point (c), of the TTBER applies irrespective of whether the licensee remains free to use its own technology rights. Once the licensee has tooled up to use the licensor's technology to produce a given product, it may be costly to maintain a separate production line using another technology in order to serve customers that are not affected by the restrictions. Moreover, given the anti-competitive potential of the restraints, the licensee may have little incentive to produce under its own technology. Such restrictions are also highly unlikely to be indispensable for pro-competitive licensing to occur.

132. Under Article 4(1), point, (c)(i), of the TTBER it is not a hardcore restriction for the licensor in a non-reciprocal agreement to grant the licensee an exclusive licence to produce on the basis of the licensed technology in a particular territory and thus agree not to produce itself the contract products in or supply the contract products from that territory. Such exclusive licences are block-exempted irrespective of the scope of the territory. If the licence is world-wide, the exclusivity implies that the licensor will abstain from entering or remaining on the market. The block exemption also applies if in a non-reciprocal agreement the licensee is not allowed to produce in an exclusive territory reserved for the licensor. The purpose of such agreements may be to give the licensor, the licensee, or both, an incentive to invest in and develop the licensed technology. The object of the agreement is therefore not necessarily to share markets.

133. In accordance with Article 4(1), point (c)(i), of the TTBER and for the same reason, the block exemption also applies to non-reciprocal agreements whereby the parties agree not to sell the contract products actively or passively into an exclusive territory or to an exclusive customer group reserved for the other party ([78]). 'Active' and 'passive' sales are defined in Article 1 of the TTBER ([79]). Restrictions of the ability of the licensee or licensor to sell actively, passively, or both, into the other party's territory or customer group are only block-exempted if that territory or customer group has been exclusively reserved to that other party. However, in some specific circumstances, agreements containing such sales restrictions may, in an individual case, also fulfil the conditions of Article 101(3) of the Treaty if the exclusivity is shared on an ad hoc basis, for instance if necessary to alleviate a

([78]) In certain circumstances, restrictions of passive sales by the licensor or licensees to end users may be void pursuant to Article 6(2) of Regulation (EU) 2018/302 of the European Parliament and of the Council of 28 February 2018 on addressing unjustified geo-blocking and other forms of discrimination based on customers' nationality, place of residence or place of establishment within the internal market and amending Regulations (EC) No 2006/2004 and (EU) 2017/2394 and Directive 2009/22/EC (OJ L 60I, 2.3.2018, p. 1, ELI: http://data.europa.eu/eli/reg/2018/302/oj) ('the Geo-blocking Regulation').

([79]) For further guidance on the concepts of 'active' and 'passive' sales, see paragraphs 211-215 of the Vertical Guidelines.

temporary shortage in the production of the licensor or licensee to which the territory or customer group is exclusively allocated. In such cases, the licensor or licensee is still likely to be sufficiently protected against active or passive sales, or both, to have the incentive to license its technology or invest in production using the licensed technology. Such restraints, even where restrictive of competition, would promote pro-competitive dissemination and integration of that technology into the production assets of the licensee.

134. By implication, the fact that the licensor appoints the licensee as its sole licensee in a particular territory, implying that third parties will not be licensed to produce on the basis of the licensor's technology in the territory in question, does not constitute a hardcore restriction either. In the case of such sole licences the block exemption applies irrespective of whether the agreement is reciprocal or not, given that the agreement does not affect the ability of the parties to fully exploit their own technology rights in their respective territories.

135. Article 4(1), point (c)(ii), of the TTBER excludes from the hardcore list, and thus block-exempts up to the market share threshold, restrictions in a non-reciprocal agreement on active sales of contract products by a licensee into a territory or to a customer group allocated by the licensor to another licensee. However, this presupposes that the protected licensee was not a competitor of the licensor when the agreement was concluded. It is not warranted to treat such restrictions in that situation as hardcore restrictions. By allowing the licensor to grant a licensee, who was not already on the relevant market, protection against active sales by licensees that are competitors of the licensor and which for that reason were already established on the market, such restrictions are likely to induce the licensee to exploit the licensed technology more efficiently. On the other hand, if the licensees were to agree between themselves not to sell actively or passively into certain territories or to certain customer groups, the agreement would amount to a cartel amongst the licensees. Given that such an agreement does not involve any transfer of technology it would in addition fall outside the scope of the TTBER.

136. Article 4(1), point (c)(iii), of the TTBER contains a further exception to the hardcore restriction in Article 4(1), point (c), namely captive use restrictions, that is to say, requirements whereby the licensee may produce the products incorporating the licensed technology only for its own use. Where the contract product is a component, the licensee can thus be obliged to produce that component only for incorporation into its own products and not to sell the components to other producers. The licensee must, however, be able to sell the components as spare parts for its own products and thus to supply third parties that perform after-sales services on those products. Captive use restrictions may be necessary to encourage the dissemination of technology, particularly between competitors, and are covered by the block exemption. Such restrictions are also dealt with in Section 4.2.5 of these Guidelines.

137. Finally, Article 4(1), point (c)(iv), of the TTBER excludes from the hardcore list an obligation on the licensee in a non-reciprocal agreement to produce the contract products only for a particular customer with a view to creating an alternative source of supply for that customer. It is thus a condition for the application of Article 4(1), point(c)(iv), that the licence is limited to creating an alternative source of supply for a particular customer. It is not a condition, however, that only one such licence is granted. Article 4(1), point (c)(iv), also covers situations where more than one undertaking is licensed to supply the same specified customer. Article 4(1), point (c)(iv), applies regardless of the duration of the licence agreement. For instance, a one-off licence to fulfil the requirements of a project of a particular customer is covered by this exception. The potential of such agreements to share markets is limited where the licence is granted only for the purpose of supplying a particular customer. In such circumstances it can, in particular, not be assumed that the agreement will cause the licensee to cease exploiting its own technology.

138. Field of use restrictions in agreements between competitors that limit the licence to one or more product markets, technical fields of application or industrial sectors ([80]) are not hardcore restrictions. Such restrictions are block-exempted up to the market share threshold of 20 %, irrespective of whether the agreement is reciprocal or not. Such restrictions are not considered to have as their object the allocation of markets or customers. It is a condition for the application of the block exemption, however, that the field of use restrictions do not go beyond the scope of the licensed technologies. For instance, where licensees are also limited in the technical fields of application in which they can use their own technology rights, the agreement amounts to market sharing.

139. The block exemption applies irrespective of whether the field of use restriction is symmetrical or asymmetrical. An asymmetrical field of use restriction in a reciprocal licence agreement implies that each party is permitted to use the respective technologies that they license-in only for different fields of use. As long as the parties are unrestricted in the use of their own technologies, there is no assumption that the agreement leads the parties to abandon or refrain from entering the field(s) covered by the licence to the other party. Even if the licensees tool up to use the licensed technology within the licensed field of use, there may be no impact on assets used to produce outside the scope of the licence. It is important in this regard that the restriction relates to distinct product markets, industrial sectors or technical fields of application and not to customers, allocated by territory or by group, who purchase products falling within the same product market, industrial sector or technical field of application. The risk of market sharing is considered substantially greater in the latter case (see paragraph (131)). In addition, field of use restrictions may be necessary to promote pro-competitive licensing (see paragraph (233)).

Restrictions on the parties' ability to carry out research and development

140. The hardcore restriction of competition set out in Article 4(1), point (d), of the TTBER covers restrictions on either of the parties' ability to carry out R & D. Both parties must be free to carry out independent R & D. That rule applies irrespective of whether the restriction applies to a field covered by the licence or to other fields. However, the mere fact that the parties agree to provide each other with future improvements of their respective technologies does not amount to a restriction of independent R & D. The effect on competition of such agreements must be assessed in the light of the circumstances of the individual case. Article 4(1), point (d), also does not extend to restrictions of a party's ability to carry out R & D with third parties, where such a restriction is necessary to protect the licensor's know-how against disclosure. In order to be covered by the exception, the restrictions imposed to protect the licensor's know-how against disclosure must be necessary and proportionate to ensure such protection. For instance, where the agreement designates particular employees of the licensee to be trained in and responsible for the use of the licensed know-how, it may be sufficient to oblige the licensee not to allow those employees to be involved in R & D with third parties. Other safeguards may be equally appropriate.

Restrictions on the use of the licensee's own technology

141. In accordance with Article 4(1), point (d), of the TTBER, the licensee must also be unrestricted in the use of its own competing technology rights, provided that in doing so it does not make use of the technology rights licensed from the licensor. In relation to its own technology rights, the licensee must not be subject to limitations in terms of where it produces or sells, the technical fields of use or product markets within which it produces, how much it produces or sells or the price at which it sells. It must also not be obliged to pay royalties on products produced on the basis of its own technology rights (see paragraph (126) of these Guidelines). Moreover, the licensee must not be restricted in licensing its own technology rights to third parties. Where restrictions are imposed on the licensee's use of its own technology rights or its right to carry out R & D, the competitiveness of the licensee's technology is reduced. The effect of this is to reduce competition on existing product and technology markets and to reduce the licensee's incentive to invest in the development and improvement of its technology. Article 4(1),

([80]) See Section 4.2.4 of these Guidelines for more detail on field of use restrictions.

point (d), of the TTBER does not extend to restrictions on the licensee's use of third-party technology which competes with the licensed technology. Although such non-compete obligations may have foreclosure effects on third-party technologies (see Section 4.2.7 of these Guidelines), they usually do not have the effect of reducing the incentive of licensees to invest in the development and improvement of their own technologies.

3.4.3. **Agreements between non-competitors**

142. Article 4(2) of the TTBER lists the hardcore restrictions for licensing between non-competitors. Article 4(2) provides that the block exemption does not apply to agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object any of the following:

(a) the restriction of a party's ability to determine its prices when selling products to third parties, without prejudice to the possibility to impose a maximum sale price or recommend a sale price, provided that it does not amount to a fixed or minimum sale price as a result of pressure from, or incentives offered by, any of the parties;

(b) the restriction of the territory into which, or of the customers to whom, the licensee may passively sell the contract products, except:

(i) the restriction of passive sales into an exclusive territory or to an exclusive customer group reserved for the licensor;

(ii) the obligation to produce the contract products only for its own use provided that the licensee is not restricted in selling the contract products actively and passively as spare parts for its own products;

(iii) the obligation to produce the contract products only for a particular customer, where the licence was granted in order to create an alternative source of supply for that customer;

(iv) the restriction of sales to end users by a licensee operating at the wholesale level of trade;

(v) the restriction of sales to unauthorised distributors located in a territory where the licensor operates a selective distribution system for the contract products;

(c) the restriction of active or passive sales to end users by a licensee which is a member of a selective distribution system and which operates at the retail level, without prejudice to the possibility of prohibiting a member of the system from operating out of an unauthorised place of establishment.

Price fixing

143. The hardcore restriction set out in Article 4(2), point (a), of the TTBER concerns the fixing of prices charged when selling products to third parties. More specifically, that provision covers restrictions which have as their direct or indirect object the establishment of a fixed or a minimum selling price or a fixed or minimum price level to be observed by the licensor or the licensee when selling products to third parties. In the case of agreements that directly establish the selling price, the restriction is clear-cut. However, the fixing of selling prices can also be achieved through indirect means. Examples of the latter are agreements fixing margins, fixing the maximum level of discounts, linking the sales price to the sales prices of competitors, imposing minimum advertised prices, threats, intimidation, warnings, penalties, or contract terminations in relation to observance of a given price level. Direct or indirect means of achieving price fixing can be made more effective when combined with measures to identify price-cutting, such as the implementation of a price monitoring system ([81]), or the obligation on licensees to report price deviations. Similarly, direct or indirect price fixing can be made more effective when combined

([81]) However, on their own, price monitoring and price reporting do not amount to price fixing.

with measures that reduce the licensee's incentive to lower its selling price, such as the licensor obliging the licensee to apply a most-favoured-customer clause, that is to say, an obligation to grant a customer any more favourable terms granted to any other customer. The use of recommended selling prices or the imposition of maximum prices are not considered in themselves as leading to fixed or minimum selling prices. However, if the licensor combines such recommended prices or maximum prices with incentives to apply a certain price level or disincentives to lower the sale price, this can amount to price fixing.

Restrictions of the licensee's ability to make passive sales

144. Article 4(2), point (b), of the TTBER categorises as a hardcore restriction the restriction of the licensee's ability to make passive sales of products incorporating the licensed technology ([82]). Passive sales restrictions may be the result of direct obligations, such as the obligation not to sell to certain customers or to customers in certain territories or the obligation to refer orders from these customers to other licensees. Passive sales restrictions may also result from indirect measures aimed at inducing the licensee to refrain from making such sales, such as financial incentives and the implementation of a monitoring system aimed at verifying the effective destination of the contract products ([83]). Quantity limitations may be an indirect means to restrict passive sales. The Commission will not assume that quantity limitations as such serve this purpose. However, it will assume otherwise where quantity limitations are used to implement an underlying market partitioning agreement. Indications thereof include the adjustment of quantities over time to cover only local demand, the combination of quantity limitations and an obligation to sell minimum quantities in the territory, as well as minimum royalty obligations linked to sales in the territory, differentiated royalty rates depending on the destination of the products and the monitoring of the destination of products sold by individual licensees.

145. The general hardcore restriction covering passive sales by licensees is subject to a number of exceptions, which are covered in paragraphs (146) to (151). However, in certain circumstances, restrictions of the ability of the licensor or licensee to make passive sales to end users may be void pursuant to Article 6(2) of the Geo-blocking Regulation.

146. Exception 1: Article 4(2), point (b), of the TTBER does not cover sales restrictions (both active and passive) on the licensor ([84]). All sales restrictions on the licensor are block-exempted up to the market share threshold of 30 %. The same applies to all restrictions on active sales by the licensee, with the exception of what is said regarding active selling in paragraph (151) of these Guidelines. The block exemption of restrictions on active selling is based on the assumption that such restrictions promote investments, non-price competition and improvements in the quality of services provided by licensees, by solving free rider problems and hold-up problems. In the case of restrictions of active sales between licensees' territories or customer groups, it is not necessary that the protected licensee has been granted an exclusive territory or an exclusive customer group. The block exemption also applies to active sales restrictions where more than one licensee has been appointed for a particular territory or customer group. Efficiency-enhancing investment is likely to be promoted where a licensee can be sure that it will only face active sales competition from a limited number of licensees inside the territory and not also from licensees outside the territory.

([82]) This hardcore restriction applies to technology transfer agreements affecting trade within the Union. For guidance on technology transfer agreements affecting exports outside the Union, see paragraphs 100 et seq. of the Effect on Trade Guidelines.

([83]) Measures that allow the licensor to verify the destination of the licensed products, such as the threat or performance of audits to verify the licensee's compliance with other restrictions, are not in themselves restrictions of competition. However, they may be considered to form part of a hardcore restriction of passive sales when used by the licensor to control the destination of the supplied goods, for instance when used in conjunction with other practices. See, by analogy, the Commission decision of 30 January 2020 in Case AT.40433 – *Film merchandise*, paragraphs 65 and 66.

([84]) See also paragraph (145) regarding the Geo-blocking Regulation.

147. Exception 2: Restrictions on active and passive sales by licensees into an exclusive territory or to an exclusive customer group reserved for the licensor are not hardcore restrictions (see Article 4(2), point (b)(i) of the TTBER) and are therefore block-exempted ([85]). It is presumed that up to the market share threshold such restraints, where restrictive of competition, promote pro-competitive dissemination of technology and integration of such technology into the production assets of the licensee. For a territory or customer group to be reserved for the licensor, the licensor does not actually have to be producing with the licensed technology in the territory or for the customer group in question. A territory or customer group can also be reserved by the licensor for later exploitation.

148. Exception 3: Article 4(2), point (b)(ii), of the TTBER brings within the block exemption a restriction whereby the licensee is obliged to produce products incorporating the licensed technology only for its own (captive) use. Where the contract product is a component, the licensee can thus be obliged to use that product only for incorporation into its own products and can be obliged not to sell the product to other producers. The licensee must however be able to actively and passively sell the products as spare parts for its own products and must thus be able to supply third parties that perform after-sale services on these products. Captive use restrictions are also dealt with in Section 4.2.5.

149. Exception 4: As in the case of agreements between competitors (see paragraph (137) of these Guidelines) the block exemption also applies to agreements whereby the licensee is obliged to produce the contract products only for a particular customer in order to provide that customer with an alternative source of supply, regardless of the duration of the technology transfer agreement (see Article 4(2), point (b)(iii), of the TTBER). In the case of agreements between non-competitors, such restrictions are unlikely to be caught by Article 101(1) of the Treaty.

150. Exception 5: Article 4(2), point (b)(iv), of the TTBER brings within the block exemption an obligation on the licensee, where it operates at the wholesale level of trade, not to sell to end users and thus only to sell to retailers. Such an obligation allows the licensor to assign the licensee to the wholesale distribution function and normally falls outside Article 101(1) ([86]).

151. Exception 6: Finally Article 4(2), point (b)(v), of the TTBER brings within the block exemption a restriction on the licensee not to sell to unauthorised distributors. This exception allows the licensor to impose an obligation on the licensees to form part of a selective distribution system. In that case, however, the licensees must, according to Article 4(2), point (c), of the TTBER, be permitted to sell both actively and passively to end users, without prejudice to the possibility to restrict the licensee to a wholesale function as provided for in Article 4(2), point (b)(iv), of the TTBER (see paragraph (150) of these Guidelines). Within the territory where the licensor operates a selective distribution system, this system may not be combined with exclusive territories or exclusive customer groups where this would lead to a restriction of active or passive sales to end-users, as that would be a hardcore restriction under Article 4(2), point (c), of the TTBER. This is, however, without prejudice to the possibility of prohibiting a licensee from operating out of an unauthorised place of establishment.

152. Restrictions on passive sales by licensees into an exclusive territory or customer group allocated to another licensee are hardcore restrictions within the meaning of Article 4(2), point (b), of the TTBER. However, in specific circumstances, such restrictions may fall outside Article 101(1) of the Treaty for a limited duration if they are objectively necessary for the protected licensee to penetrate a new market ([87]). For example, this may apply where a licensee must make substantial investments to start up and develop a new market and the restrictions on passive sales by other licensees are limited to the period necessary for the licensee to recoup its investments. In most cases, this period will not exceed two years from the date on which the contract products are first put on the market in the exclusive territory by the licensee or first sold to its exclusive customer group.

([85]) See also paragraph (145) regarding the Geo-blocking Regulation.
([86]) See also paragraph (145) regarding the Geo-blocking Regulation.
([87]) See also paragraph (145) regarding the Geo-blocking Regulation.

3.5. *Excluded restrictions*

153. Article 5 of the TTBER lists three types of restrictions that are excluded from the block exemption to protect incentives to innovate. There is, however, no presumption that such restrictions fall within the scope of Article 101(1) of the Treaty or that they fail to satisfy the conditions of Article 101(3). The exclusion of these restrictions from the block exemption means only that they require an individual assessment under Article 101. The exclusion of a restriction from the block exemption pursuant to Article 5 of the TTBER is limited to that specific restriction, provided that it can be severed from the rest of the agreement. In that case, the remainder of the agreement continues to benefit from the block exemption.

Exclusive grant-backs

154. Article 5(1), point (a), of the TTBER concerns obligations imposing exclusive grant-backs, meaning an exclusive licence back to the licensor or a third party designated by the licensor for any improvements of the licensed technology made by the licensee or the assignment of rights to such improvements to the licensor or a third party designated by the licensor. An exclusive grant-back is defined as a grant-back which prevents the licensee (which in this case is the innovator and licensor of the improvement) from exploiting the improvement (either for its own production or for licensing out to third parties). It is likely to reduce the licensee's incentive to innovate since it hinders the licensee in exploiting the improvements, including licensing these improvements to third parties. This is the case both where the improvement concerns the same application as the licensed technology and where the licensee develops new applications of the licensed technology. In accordance with Article 5(1), point (a), of the TTBER, such obligations are not covered by the block exemption.

155. The application of Article 5(1), point (a), of the TTBER does not depend on whether or not the licensor pays consideration in return for acquiring the improvement or obtaining an exclusive licence. However, the existence and amount of such consideration – including whether it is calculated based on the value of the improvement – may be a relevant factor in the context of an individual assessment under Article 101 of the Treaty. When grant-backs are made against consideration, it is less likely that the obligation creates a disincentive for the licensee to innovate. For the individual assessment of exclusive grant-backs outside the block exemption, the market position of the licensor on the technology market is also a relevant factor. The stronger the position of the licensor, the more likely it is that exclusive grant-back obligations will have restrictive effects on competition in innovation. The stronger the position of the licensor's technology, the more important it is that the licensee can become an important source of innovation and future competition. The negative impact of grant-back obligations can also be increased where there are parallel networks of technology transfer agreements containing such obligations. When available technologies are controlled by a limited number of licensors that impose exclusive grant-back obligations on licensees, the risk of anti-competitive effects is greater than in situations where there are a number of technologies and only some of them are licensed on exclusive grant-back terms.

156. Non-exclusive grant-back obligations are covered by the safe harbour of the TTBER. This applies even where the obligations are non-reciprocal, that is to say, only imposed on the licensee, and the licensor is entitled to feed-on the improvements to other licensees. A non-reciprocal grant-back obligation may promote the dissemination of new technology by permitting the licensor to freely determine whether and to what extent to pass on the improvements made by the licensee to the licensor's other licensees. A feed-on clause may also promote the dissemination of technology, in particular when each licensee knows at the time of contracting that it will be on an equal footing with other licensees in terms of the improvements to the technology on the basis of which it is producing.

157. Outside the safe harbour, non-exclusive grant-back obligations may have negative effects on competition and innovation under specific circumstances. For instance, they may have negative effects on innovation in the case of cross licensing between competitors where a grant-back obligation on both parties is combined with an obligation on both parties to share improvements of its own technology with the other party. The sharing of all improvements between competitors may prevent each competitor from gaining a competitive lead over the other (see also paragraph (262)). The greater the market power of the licensor and the market coverage of its grant-back clauses, the more likely such clauses are to affect inter-technology competition and innovation.

No-challenge and termination clauses

158. The excluded restriction set out in Article 5(1), point (b), of the TTBER concerns no-challenge clauses, that is to say, direct or indirect obligations on a party not to challenge the validity of intellectual property rights that the other party holds in the Union, without prejudice to the possibility, in the case of an exclusive licence, for the licensor to terminate the technology transfer agreement in the event that the licensee challenges the validity of any of the licensed technology rights.

The reason for excluding no-challenge clauses from the block exemption is the fact that licensees are normally in the best position to assess whether or not an intellectual property right is invalid. In the interest of undistorted competition and in accordance with the principles underlying the protection of intellectual property, invalid intellectual property rights should be eliminated ([88]). Invalid intellectual property stifles innovation rather than promoting it. Article 101(1) of the Treaty is likely to apply to no-challenge clauses where the licensed technology right is valuable and therefore creates a competitive disadvantage for undertakings that are prevented from using it or are only able to use it against payment of royalties. In such cases, the conditions of Article 101(3) are unlikely to be fulfilled. As regards the assessment of no-challenge clauses in the context of settlement agreements, see paragraphs (263) and (264).

159. Generally, a clause obliging the licensee not to challenge the ownership of the technology rights does not constitute a restriction of competition within the meaning of Article 101(1) of the Treaty. Whether or not the licensor has the ownership of the technology rights, the use of the technology by the licensee and any other party is dependent on obtaining a licence in any event, and competition would thus generally not be affected ([89]).

160. Article 5(1), point (b), of the TTBER also excludes from the block exemption the right, in a non-exclusive licence, for the licensor to terminate the agreement in the event that the licensee challenges the validity of any of the licensed technology rights. Such a termination right can have the same effect as a no-challenge clause, in particular where switching away from the licensor's technology would result in a significant loss to the licensee (for example where the licensee has already invested in specific machines or tools which cannot be used for producing with another technology) or where the licensor's technology is a necessary input for the licensee's production. For example, in the context of standard-essential patents, a licensee producing a standard-compliant product will necessarily have to use all patents reading on the standard. In such a case, challenging the validity of the relevant patents may result in a significant loss if the technology transfer agreement is terminated. Where the licensor's technology is not standard-essential, but has a very significant market position, the disincentive to challenge may also be high considering the difficulty for the licensee to find a viable alternative technology to license-in. The question whether the licensee's loss of profit would be significant, and therefore act as a strong disincentive to challenge, would need to be assessed on a case by case basis.

161. In the scenarios described in paragraph (160), the licensee may be deterred from challenging the validity of the licensed technology right if it would risk the termination of the licensing agreement and thus face significant risks which go beyond its royalty obligations. However, it should also be noted that, outside the context of these scenarios, a termination clause will often not provide a significant disincentive to challenge and therefore not produce the same effect as a non-challenge clause.

162. The interest of strengthening the incentive of the licensor to license out by not being forced to continue dealing with a licensee that challenges the very subject matter of the licence agreement has to be balanced against the public interest in eliminating obstacles to economic activity that may arise where an intellectual property right was granted in error. In balancing those interests, it should be taken into account whether the licensee has fulfilled all its obligations under the agreement at the time of the challenge, in particular the obligation to pay the agreed royalties.

([88]) See the judgment of the Court of 25 February 1986, *Windsurfing International*, C-193/83, ECLI:EU:C:1986:75, paragraph 92.
([89]) See, by analogy, Commission Decision 90/186/EEC, paragraph 15 (discussing clauses that prevent the challenge of trademark ownership).

163. In the case of exclusive licensing, termination clauses are usually less likely on balance to have anti-competitive effects. Once the licence is granted, the licensor may find itself in a particular situation of dependency, as the licensee will be its only source of income as regards the licensed technology rights if royalties are dependent on production with the licensed technology rights, as may often be an efficient way to structure royalty payments. In that scenario, the incentives for innovation and licensing out could be undermined if, for example, the licensor were to be locked into an agreement with an exclusive licensee which no longer makes significant efforts to develop, produce and market the product (to be) produced with the licensed technology rights ([90]). That is why the TTBER block-exempts termination clauses in exclusive licensing agreements as long as the other conditions of the safe harbour are also fulfilled. Outside the safe harbour, a case by case assessment is necessary.

164. No-challenge and termination clauses that relate solely to know-how are not excluded from the block exemption. The Commission takes a more favourable view of these clauses, as it is likely to be very difficult or impossible for the licensor to recover the licensed know-how once it has been disclosed. In such cases, an obligation on the licensee not to challenge the licensed know-how may promote the dissemination of technology if it allows weaker licensors to grant licences to stronger licensees without fear of a challenge once the know-how has been absorbed by the licensee.

Limiting the licensee's use or development of its own technology (agreements between non-competitors)

165. In the case of agreements between non-competitors, Article 5(2) of the TTBER excludes from the block exemption any direct or indirect obligation limiting the licensee's ability to exploit its own technology rights or limiting the ability of the parties to the agreement to carry out R & D, unless that restriction is indispensable to prevent the disclosure of licensed know-how to third parties. The content of this condition is the same as that of Article 4(1), point (d), of the TTBER, which forms part of the hardcore list applicable to agreements between competitors, and is covered in paragraphs (140) and (141) of these Guidelines. However, in the case of agreements between non-competitors it cannot be considered that such restrictions generally have negative effects on competition, or that the conditions of Article 101(3) of the Treaty are generally not satisfied. An individual assessment under Article 101 is therefore required.

166. In the case of agreements between non-competitors, the licensee normally does not own a competing technology. However, there may be cases where, for the purposes of the TTBER, the parties are considered non-competitors despite the fact that the licensee does own a competing technology. This is the case where the licensee owns a technology but does not license it and the licensor is not an actual or potential supplier on the product market. For the purposes of the TTBER, in such circumstances, the parties are neither competitors on the technology market nor competitors on the downstream product market ([91]). In such cases, it is important to ensure that the licensee is not restricted in its ability to exploit its own technology and further develop it. This technology constitutes a competitive constraint in the market, which should be preserved. In such a situation, restrictions on the licensee's use of its own technology rights or on R & D are normally considered to restrict competition and not to satisfy the conditions of Article 101(3) of the Treaty. For instance, an obligation on the licensee to pay royalties not only on sales of products that it produces with the licensed technology but also on sales of products that it produces only with its own technology will generally limit the ability of the licensee to exploit its own technology and thus be excluded from the block exemption.

167. In cases where the licensee does not own a competing technology or is not already developing such a technology, a restriction on the ability of the parties to carry out independent R & D may restrict competition, for instance, where only a few technologies are available or the parties are an important (potential) source of innovation in the market. This is particularly so where the parties possess the necessary assets and skills to carry out further R & D. In that case, the conditions of Article 101(3) of the Treaty are unlikely to be fulfilled. In other cases where a

([90]) In the context of an agreement which is technically not an exclusive agreement, and where a termination clause is thus not covered by the block exemption, the licensor may, in a specific case, be in a similar situation of dependency in relation to a licensee with considerable buyer power. Such dependency will be taken into account in the individual assessment of the agreement under Article 101.

([91]) See paragraph (48) of these Guidelines.

number of technologies are available and where the parties do not possess special assets or skills, the restriction on R & D is likely either to fall outside Article 101(1) for lack of an appreciable restrictive effect or to satisfy the conditions of Article 101(3). The restraint may promote the dissemination of new technology, for instance, by inducing the licensee to focus on the exploitation and development of the licensed technology.

3.6. *Withdrawal and disapplication of the block exemption*

3.6.1. **Withdrawal of the benefit of the block exemption**

168. As stated in Article 6 of the TTBER, the Commission may, pursuant to Article 29(1) of Regulation (EC) No 1/2003, withdraw the benefit of the block exemption where it finds in a particular case that a technology transfer agreement to which the block exemption applies has effects that are incompatible with Article 101(3) of the Treaty. Pursuant to Article 29(2) of Regulation (EC) No 1/2003, the competition authorities of the Member States may similarly withdraw the benefit of the block exemption in respect of their national territory where a technology transfer agreement covered by the block exemption has effects that are incompatible with Article 101(3) in the territory of their Member State, or in a part thereof, that has the characteristics of a distinct geographic market.

169. The competition authority that proposes to withdraw the benefit of the block exemption bears the burden of proving that the agreement falls within the scope of Article 101(1) of the Treaty and does not fulfil one or more of the conditions of Article 101(3) ([92]). Given that withdrawal implies that the agreement in question restricts competition within the meaning of Article 101(1) and does not fulfil the conditions of Article 101(3), withdrawal is necessarily accompanied by a negative decision pursuant to Articles 5, 7 or 9 of Regulation (EC) No 1/2003. Withdrawal of the benefit of the block exemption only produces effects *ex nunc*, that is to say that it does not affect the exempted status of the agreement for the period preceding the date on which the withdrawal becomes effective.

170. In accordance with Article 6 of the TTBER, withdrawal may in particular be warranted in the following circumstances:

(a) access of third parties' technologies to the market is restricted, for instance by the cumulative effect of parallel networks of similar restrictive agreements prohibiting licensees from using third parties' technologies;

(b) access of potential licensees to the market is restricted, for instance by the cumulative effect of parallel networks of similar restrictive agreements prohibiting licensors from licensing to other licensees or because the only technology owner licensing out relevant technology rights concludes an exclusive licence with a licensee who is already active on the product market on the basis of substitutable technology rights. In order to qualify as relevant, the technology rights need to be both technically and commercially substitutable in order for the licensee to be active on the relevant product market.

171. Article 6(a) of the TTBER refers to the possibility of withdrawal of the benefit of the block exemption in cases where third-party licensors, including potential licensors, are foreclosed from relevant technology markets due to the cumulative effect of networks of technology transfer agreements that prohibit the licensees from exploiting competing technologies. Foreclosure of other licensors is likely to arise in cases where most of the undertakings on the market that could (efficiently) take a competing licence are prevented from doing so as a consequence of restrictive agreements and where potential licensees face relatively high barriers to entry. Article 6(b) of the TTBER refers to the possibility of withdrawal in cases where other licensees are foreclosed due to the cumulative effect of technology transfer agreements that prohibit licensors from licensing other licensees and thereby prevent potential licensees from gaining access to the necessary technology. The issue of foreclosure is examined in more detail in Sections 4.2.2 and 4.2.7.

([92]) The exception provided by Article 101(3) only applies where all four of the conditions of that Article are fulfilled, therefore the block exemption can be withdrawn where an agreement does not fulfil one or more of the four conditions.

172. Withdrawal of the benefit of the block exemption may also be warranted where:

(a) competition between licensors is restricted as a result of the imposition by a significant number of competing licensors of requirements for their licensees to extend to them more favourable conditions agreed with other licensors;

(b) customer access to the contract products is unduly limited as a result of restrictions of the ability of the licensor or licensees to make passive sales to an exclusive territory or exclusive customer group reserved for the licensor or a licensee;

(c) royalties in a relevant technology market are set at a supra-competitive level as a result of the cumulative effect of similar cross-licensing agreements between competing undertakings.

3.6.2. **Disapplication of the TTBER**

173. Article 7 of the TTBER enables the Commission to exclude from the scope of the TTBER, by means of regulation, parallel networks of similar agreements where the agreements cover more than 50 % of a relevant market. Such a measure is not addressed to individual undertakings but concerns all undertakings whose agreements are defined in the regulation declaring that the TTBER does not apply.

174. Whereas withdrawal of the benefit of the TTBER by the Commission under Article 6 implies the adoption of a decision pursuant to Articles 7 or 9 of Regulation (EC) No 1/2003, the effect of a Commission regulation pursuant to Article 7 of the TTBER declaring that the TTBER is not to apply is to remove the benefit of the TTBER and to restore the full application of Article 101(1) and (3) of the Treaty in respect of the restraints and the markets concerned. Following the adoption of a regulation declaring the TTBER not applicable for a particular market in respect of agreements containing certain restraints, undertakings must use the case law of the Court of Justice of the European Union, Commission decisions, notices and guidelines for guidance on the application of Article 101 to individual agreements. Where appropriate, the Commission will take a decision in an individual case, which can provide guidance to all the undertakings operating on the market concerned.

175. For the purpose of calculating the 50 % market coverage ratio, account must be taken of each individual network of technology transfer agreements containing restraints, or combinations of restraints, producing similar effects on the market.

176. Article 7 of the TTBER does not entail an obligation on the part of the Commission to act where the 50 % market coverage ratio is exceeded. In general, the adoption of a regulation pursuant to Article 7 is appropriate when it is likely that access to the relevant market or competition in that market is appreciably restricted. In assessing the need to apply Article 7, the Commission will consider whether individual withdrawal would be a more appropriate remedy. This may depend, in particular, on the number of competing undertakings contributing to a cumulative effect on a market or the number of affected geographic markets within the Union.

177. Any regulation adopted under Article 7 of the TTBER must clearly set out its scope. Therefore, the Commission must first define the relevant product and geographic market(s) and, secondly, identify the type of licensing restraint in respect of which the TTBER will no longer apply. As regards the latter aspect, the Commission may modulate the scope of the regulation according to the competition concern which it intends to address. For instance, while all parallel networks of non-compete arrangements will be taken into account for the purpose of establishing the 50 % market coverage ratio, the Commission may nevertheless restrict the scope of the regulation only to non-compete obligations exceeding a certain duration. Where appropriate, the Commission may also provide guidance by specifying the market share level which, in the specific market context, may be regarded as insufficient to bring about a significant contribution by an individual undertaking to the cumulative effect. In general, when the market share of the products incorporating a technology licensed by an individual licensor does not exceed 5 %, the agreement or network of agreements covering that technology is not considered to contribute significantly to a cumulative foreclosure effect ([93]).

([93]) See in this respect paragraph 10 of the De Minimis Notice, cited in footnote 40 of these Guidelines.

178. The transitional period of not less than six months that the Commission must set under Article 7(2) of the TTBER is intended to allow the undertakings concerned to adapt their agreements to take account of the regulation declaring that the TTBER does not apply.

179. A regulation declaring that the TTBER does not apply will not affect the block-exempted status of the agreements concerned for the period preceding its entry into force.

4. APPLICATION OF ARTICLE 101(1) AND (3) OF THE TREATY OUTSIDE THE SCOPE OF THE TTBER

4.1. *The general framework of analysis*

180. Agreements that fall outside the block exemption, for example because the market share thresholds are exceeded, or the agreement involves more than two parties, are not subject to any presumption of illegality. Such agreements require an individual assessment under Article 101 of the Treaty. Agreements which either do not restrict competition within the meaning of Article 101(1) or which fulfil the conditions of Article 101(3) are valid and enforceable.

Safe harbour where there are sufficient independently controlled technologies

181. In order to promote predictability beyond the application of the TTBER and to confine detailed analysis to cases that are likely to present real competition concerns, the Commission takes the view that outside the area of hardcore restrictions, Article 101 of the Treaty is unlikely to be infringed where there are four or more independently controlled technologies in addition to the technologies controlled by the parties to the agreement that are substitutable for the licensed technology at a comparable cost to the user. In assessing whether the technologies are substitutable, the relative commercial strength of the technologies in question must be taken into account. The competitive constraint imposed by a technology is limited if it does not constitute a commercially viable alternative to the licensed technology. For instance, if due to network effects in the market, consumers have a strong preference for products incorporating the licensed technology, other technologies already on the market or likely to come to the market within a reasonable period of time may not constitute a real alternative and may therefore impose only a limited competitive constraint.

182. The fact that an agreement falls outside the safe harbour set out in paragraph (181) of these Guidelines does not imply that it falls within Article 101(1) of the Treaty and, if so, that the conditions of Article 101(3) are not satisfied. Such agreements require an individual assessment, based on the principles set out in these Guidelines.

4.1.1. **Relevant factors for the assessment under Article 101(1) of the Treaty**

183. Provided that the agreement does not contain restrictions by object, it is necessary to assess whether it has the effect of restricting competition ([94]). Examples of possible restrictive effects can be found in Section 2.2.3 of these Guidelines.

184. In assessing whether an agreement creates an appreciable restriction of competition, it is necessary to take due account of the way in which competition operates on the market in question. The following factors are particularly relevant in this respect:

(a) the nature of the agreement;

(b) the market position of the parties;

(c) the market position of competitors;

(d) the market position of buyers on the relevant markets;

(e) entry barriers;

(f) the dynamics of the market.

([94]) See paragraph (18).

185. The importance of individual factors may vary from case to case and depends on all other factors. For instance, a high market share of the parties is usually a good indicator of market power, but in the case of low entry barriers it may not be indicative of market power. It is therefore not possible to provide firm rules on the importance of the individual factors.

186. Technology transfer agreements can take many shapes and forms. It is therefore important to analyse the nature of the agreement in terms of the competitive relationship between the parties and the restraints that it contains. In the latter regard, it is necessary to go beyond the express terms of the agreement. The existence of implicit restraints may be derived from the way in which the agreement has been implemented by the parties and from the incentives that they face.

187. The market position of the parties, including any undertakings *de facto* or *de jure* controlled by the parties, provides an indication of the degree of market power, if any, possessed by the licensor, the licensee or both. The higher their market share, the greater their market power is likely to be. That is particularly so where the market share reflects cost advantages or other competitive advantages vis-à-vis competitors. Those competitive advantages may for instance result from being a first mover in the market, from holding standard-essential patents or from having superior technology. However, market shares are always only one factor in assessing market positions. For instance, in the case of technology markets, market shares may not always be a good indicator of the relative strength of the technology in question and market share figures may differ considerably depending on the various possible calculation methods.

188. Market shares and possible competitive advantages and disadvantages are also used to assess the market position of competitors. The stronger the actual competitors and the greater their number, the lower the risk that the parties will be able to exercise market power. However, if the number of competitors is rather small and their market position (size, costs, R & D potential, etc.) is rather similar, this market structure may increase the risk of collusion.

189. The market position of buyers provides an indication of whether or not one or more buyers possess buyer power. The first indicator of buyer power is the market share of the buyer on the purchase market. That share reflects the importance of its demand for possible suppliers. Other indicators focus on the position of the buyer on its resale market, including characteristics such as a wide geographic spread of its outlets, and its brand image amongst final consumers. In some circumstances, buyer power may prevent the licensor or the licensee from exercising market power on the market and thereby solve a competition problem that would otherwise have existed. This is particularly so when strong buyers have the capacity and the incentive to bring new sources of supply on to the market in the case of a small but permanent increase in relative prices. Where the strong buyers merely extract favourable terms from the supplier or simply pass on any price increase to their customers, the position of the buyers is not such as to prevent the exercise of market power by the licensee on the product market and therefore not such as to solve the competition problem on that market ([95]).

190. Entry barriers are measured by the extent to which incumbent companies can increase their price above the competitive level without attracting new entry. In the absence of entry barriers, easy and quick entry would render price increases unprofitable. As a general rule, entry barriers can be considered low when effective market entry, sufficient to prevent or erode the exercise of market power, is likely to occur within one or two years.

191. Entry barriers may result from a wide variety of factors, such as economies of scale and scope (including network effects of multi-sided businesses), government regulations, especially where they establish exclusive rights, State aid, import tariffs, intellectual property rights, ownership of resources where the supply is limited due to, for instance, natural limitations, essential facilities, a first mover advantage or brand loyalty of consumers created by strong advertising over a period of time. Restrictive agreements entered into by undertakings may also work as an

([95]) See the judgment of 7 October 1999, *Irish Sugar*, T-228/97, ECLI:EU:T:1999:246, paragraph 101.

entry barrier by making access more difficult and foreclosing (potential) competitors. Entry barriers may exist at any stage of the R & D, production and distribution process. The question whether any of these factors should be described as entry barriers depends particularly on whether they entail sunk costs. Sunk costs are those costs which have to be incurred to enter or be active on a market but which are lost when the market is exited. The more costs are sunk, the more potential entrants have to weigh the risks of entering the market, and the more credibly incumbents can threaten that they will match new competition, as sunk costs make it costly for incumbents to leave the market. In general, entry requires sunk costs, sometimes minor and sometimes major. Therefore, actual competition is in general more effective and will weigh more heavily in the assessment of a case than potential competition.

192. It is also necessary to take into account the dynamics of the relevant markets. In some dynamic markets the potential negative effects of particular restraints may be less problematic, as inter-technology competition from dynamic and innovative rivals may act as a sufficient constraint. However, in other cases, restraints may afford an incumbent in a dynamic market a lasting competitive advantage and hence result in long-term negative effects for competition. That may be the case where a restraint prevents rivals from benefiting from network effects, or where a market is prone to tipping.

193. In the assessment of particular restraints, other factors may have to be taken into account. Such factors include cumulative effects, that is to say, the coverage of the market by similar agreements, the duration of the agreements, the regulatory environment, and behaviour that may indicate or facilitate collusion, such as price leadership, pre-announced price changes and discussions on the 'right' price, price rigidity in response to excess capacity, price discrimination and past collusive behaviour.

4.1.2. **Relevant factors for the assessment under Article 101(3) of the Treaty**

194. Technology transfer agreements that restrict competition can also produce pro-competitive effects in the form of efficiencies that outweigh their anti-competitive effects. The assessment of pro-competitive effects is carried out in the framework of Article 101(3) of the Treaty, which provides an exception from the prohibition set out in Article 101(1). For that exception to be applicable, the technology transfer agreement must fulfil the four conditions set out in Article 101(3) (see paragraph (9) of these Guidelines). An undertaking that relies on Article 101(3) must demonstrate, by means of convincing arguments and evidence, that the four conditions of that Article are satisfied ([96]).

195. The assessment of restrictive agreements under Article 101(3) of the Treaty is made within the actual context in which they occur ([97]) and on the basis of the facts existing at any given point in time. The assessment is therefore sensitive to material changes in the facts. The exception rule of Article 101(3) applies as long as the four conditions are fulfilled and ceases to apply when that is no longer the case ([98]). However, when applying Article 101(3), it is necessary to take into account the initial sunk investments made by any of the parties and the time needed and the restraints required to commit and recoup an efficiency-enhancing investment. Article 101 cannot be applied without considering the *ex ante* investment and the risks relating thereto. The risk facing the parties and the sunk investment that must be committed to implement the agreement can thus lead to the agreement falling outside Article 101(1) or fulfilling the conditions of Article 101(3) for the period of time required to recoup the investment.

([96]) See the judgment of the Court of 27 June 2024, *Teva UK and Others v Commission*, C-198/19 P, ECLI:EU:C:2024:551, paragraph 135.

([97]) See the judgment of the Court of 17 September 1985, *Ford v Commission*, joined cases 25/84 and 26/84, ECLI:EU:C:1985:340, paragraphs 25-26 and the Guidelines on the application of Article 81(3) of the Treaty (cited in footnote 9), paragraph 44.

([98]) See, for example, Commission Decision 1999/242/EC of 3 March 1999, relating to a proceeding pursuant to Article 85 of the EC Treaty (IV/36.237 – *TPS*) (OJ L 90, 2.4.1999, p. 6, ELI: http://data.europa.eu/eli/dec/1999/242/oj)). Similarly, the prohibition of Article 101(1) only applies as long as the agreement has a restrictive object or restrictive effects.

196. The first condition of Article 101(3) of the Treaty requires an assessment of the objective benefits generated by the agreement. Examples of such efficiencies are set out in Section 2.2 of these Guidelines.

197. The third condition of Article 101(3) of the Treaty requires that the agreement does not impose restrictions that are not indispensable for the attainment of the objective benefits of the agreement. To assess whether the indispensability test is met, the Commission will in particular examine whether individual restrictions make it possible to perform the activity in question more efficiently than would have been the case in the absence of the restriction concerned. In making this assessment, the market conditions and the realities facing the parties must be taken into account. Undertakings invoking the benefit of Article 101(3) are not required to consider hypothetical and theoretical alternatives. They must, however, explain and demonstrate why seemingly realistic and significantly less restrictive alternatives would be significantly less efficient. If the application of what appears to be a commercially realistic and less restrictive alternative would lead to a significant loss of efficiencies, the restriction in question is treated as indispensable. In some cases, it may also be necessary to examine whether the agreement as such is indispensable to achieve the efficiencies. In the case of simple licensing between two parties it is generally not necessary to go beyond an examination of whether individual restraints are indispensable. Normally there is no less restrictive alternative to the licence agreement as such.

198. The second condition of Article 101(3) of the Treaty requires that consumers receive a fair share of the benefits. It implies that consumers of the products produced under the licence must at least be compensated for the negative effects of the agreement ([99]). This means that the efficiency gains must fully offset the likely negative impact on prices, output and other relevant factors caused by the agreement. They may do so by changing the cost structure of the undertakings concerned, giving them an incentive to reduce price, or by allowing consumers to gain access to new or improved products, compensating for any likely price increase ([100]).

199. The last condition of Article 101(3) of the Treaty requires that the agreement does not afford the parties the possibility of eliminating competition in respect of a substantial part of the products concerned. It presupposes an analysis of remaining competitive pressures on the market and the impact of the agreement on such sources of competition. For the application of this condition, the relationship between Article 101(3) and Article 102 must be taken into account. In accordance with settled case law, the application of Article 101(3) cannot prevent the application of Article 102 of the Treaty ([101]). Moreover, since Articles 101 and 102 both pursue the aim of maintaining effective competition on the market, consistency requires that Article 101(3) be interpreted as precluding any application of the exception rule to restrictive agreements that constitute an abuse of a dominant position ([102]). The fact that the agreement substantially reduces competition in relation to one relevant parameter does not necessarily mean that competition is eliminated within the meaning of Article 101(3). A technology pool can, for instance, lead to the emergence of an industry standard, leading to a situation in which there is little competition between the technological formats. Once the main market players adopt a certain format, network effects may make it very difficult for alternative formats to survive. However, this does not imply that the creation of a de facto industry standard always eliminates competition within the meaning of the last condition of Article 101(3), in particular where suppliers remain free to compete on price, quality, choice, innovation and product features.

([99]) See paragraph 85 of the Guidelines on the application of Article 81(3) of the Treaty, cited in footnote 9.

([100]) Ibidem, paragraphs 98 and 102.

([101]) See by analogy the judgment of the Court of 16 March 2000, *Compagnie Maritime Belge*, Joined cases C-395/96 P and C-396/96 P, ECLI:EU:C:2000:132, paragraph 130. Similarly, the application of Article 101(3) does not prevent the application of the Treaty rules on the free movement of goods, services, persons and capital. Those rules are in certain circumstances applicable to agreements, decisions and concerted practices within the meaning of Article 101. See to that effect the judgment of the Court of 19 February 2002, *Wouters*, C-309/99, ECLI:EU:C:2002:98, paragraph 120.

([102]) See in this respect the judgment of the Court of First Instance of 10 July 1990, *Tetra Pak* (I), T-51/89, ECLI:EU:T:1990:41. See also paragraph 106 of the Guidelines on the application of Article 81(3) of the Treaty cited in footnote 9 of these Guidelines.

4.2. *Application of Article 101 of the Treaty to various types of licensing restraints*

200. This Section covers various types of restraints that are commonly included in technology transfer agreements. Restraints that have already been addressed in the other Sections of these Guidelines, in particular Section 3.4 on hardcore restrictions and Section 3.5 on excluded restrictions, are only dealt with briefly in this Section.

201. This Section covers both agreements between competitors and agreements between non-competitors. For agreements between competitors, a distinction is made – where appropriate – between reciprocal and non-reciprocal agreements. That distinction is not required in the case of agreements between non-competitors. When undertakings are neither actual nor potential competitors on a relevant technology market or on a market for products incorporating the licensed technology, a reciprocal licence is, for all practical purposes, equivalent to two separate licences. The situation is different for arrangements whereby the parties jointly assemble a technology package which is then licensed to third parties. Such arrangements are covered in this Section.

202. This Section does not cover obligations in technology transfer agreements that are generally not restrictive of competition within the meaning of Article 101(1) of the Treaty. Those obligations include, but are not limited to:

(a) confidentiality obligations;

(b) obligations on licensees not to sub-license;

(c) obligations not to use the licensed technology rights after the expiry of the agreement, provided that the licensed technology rights remain valid and in force;

(d) obligations to assist the licensor in enforcing the licensed intellectual property rights;

(e) obligations to pay minimum royalties or to produce a minimum quantity of products incorporating the licensed technology;

(f) obligations to use the licensor's trademark or indicate the name of the licensor on the product.

4.2.1. **Royalty obligations**

203. The parties to a technology transfer agreement are, in general, free to determine the royalty payable by the licensee and its mode of payment without being caught by Article 101(1) of the Treaty. That principle applies both to agreements between competitors and agreements between non-competitors. Royalty obligations may for instance take the form of lump sum payments, a percentage of the selling price or a fixed amount for each product incorporating the licensed technology. Where the licensed technology relates to an input which is incorporated into a final product, it is generally not restrictive of competition for the royalties to be calculated on the basis of the price of the final product, provided that it incorporates the licensed technology ([103]). In the case of software licensing, royalties based on the number of users and royalties calculated on a per machine basis are generally compatible with Article 101(1).

204. Outside the block exemption, royalty provisions in technology transfer agreements between competitors may restrict competition within the meaning of Article 101(1) of the Treaty where competitors engage in cross-licensing and impose running royalties that are clearly disproportionate compared to the market value of the licence and where the parties have similar cost structures, or where such royalties have a significant impact on market prices. In assessing whether the royalties are disproportionate, it is necessary to examine the royalties paid by other licensees on the product market for the same or substitute technologies. In such cases, it is unlikely that the conditions of Article 101(3) are satisfied.

([103]) This is without prejudice to the possible application of Article 102 of the Treaty to the setting of royalties (see the judgment of the Court of 14 February 1978, *United Brands*, C-27/76, ECLI:EU:C:1978:22, paragraph 250, see also the judgment of the Court of 16 July 2009, *Der Grüne Punkt – Duales System Deutschland GmbH*, C-385/07 P, ECLI:EU:C:2009:456, paragraph 142).

205. The block exemption only applies to technology transfer agreements as long as technology rights licensed under the agreement are valid and in force. However, agreements which contain royalty obligations that extend beyond the period of validity of the licensed technology rights do not necessarily restrict competition within the meaning of Article 101(1) of the Treaty, in particular where the licensee can freely terminate the agreement. For example, that type of provision may allow the licensee to spread the royalties over a longer period. If, after the licensed technology rights expire, third parties are legally able to exploit the technology and create sufficient competitive pressure in the market, post-expiration royalties are unlikely to restrict competition within the meaning of Article 101(1) ([104]). However, in specific circumstances, such obligations may restrict competition, for instance, if, upon expiration of the rights, terminating the agreement would significantly hinder the licensee's ability to remain active in the market and there is insufficient competitive pressure from third parties (for example, due to high barriers to entry) ([105]).

206. In the case of agreements between non-competitors, the block exemption covers agreements whereby royalties are calculated on the basis of both products produced with the licensed technology and products produced with technologies licensed from third parties. Such arrangements may facilitate the metering of royalties. However, they may also lead to foreclosure by increasing the cost of using third party inputs and may thus have effects similar to those of a non-compete obligation. If royalties are paid not just on products produced with the licensed technology but also on products produced with third party technology, then the royalties will increase the cost of the latter products and reduce demand for third party technology. Outside the block exemption, the question whether the restriction has foreclosure effects must therefore be considered. For that purpose, it is appropriate to use the analytical framework set out in Section 4.2.7 of these Guidelines. In the case of appreciable foreclosure effects, such agreements are caught by Article 101(1) of the Treaty and unlikely to fulfil the conditions of Article 101(3), unless there is no other practical way of calculating and monitoring royalty payments.

4.2.2. **Exclusive licensing and sales restrictions**

207. For the purpose of these Guidelines, it is useful to distinguish between restrictions on production within a given territory (exclusive or sole licences) and restrictions on the sale of products incorporating the licensed technology into a given territory and/or to a given customer group (sales restrictions).

4.2.2.1. *Exclusive and sole licences*

208. An exclusive licence means that the licensor itself is not permitted to produce on the basis of the licensed technology rights, nor to license those rights to third parties, in general or for a particular use or in a particular territory. In such cases, the licensee is the only party that is authorised to produce on the basis of the licensed technology rights for the use or in the territory concerned.

209. A sole licence means that the licensor undertakes not to license third parties to produce within a given territory, but retains the right to produce using the licensed technology itself.

210. Where the licensor undertakes not to produce itself or license others to produce within a given territory, that territory may cover the whole world or any part of it.

211. Exclusive and sole licences are often accompanied by sales restrictions that limit where the parties may sell products incorporating the licensed technology.

212. Reciprocal exclusive licensing between competitors is a form of market and customer sharing, as set out in Article 4(1), point (c), of the TTBER. However, reciprocal sole licensing between competitors is block-exempted up to the market share threshold of 20 %. Under such an agreement, the parties mutually commit not to license their competing technologies to third parties but can continue to use the technologies themselves. Where the parties have significant market power, such agreements may facilitate collusion by ensuring that the parties are the only sources of output in the market based on the licensed technologies.

([104]) See the judgment of the Court of 7 July 2016, *Genentech*, C-567/14, ECLI:EU:C:2016:526, paragraphs 39-40.
([105]) See also paragraph (124) et seq.

213. Non-reciprocal exclusive licensing between competitors is block-exempted up to the market share threshold of 20 %. Above the market share threshold, exclusive licensing can produce restrictive effects; the greater the market power of either party, the greater the likelihood of restrictive effects. Where the exclusive licence is worldwide, it implies that the licensor leaves the market. Where exclusivity is limited to a particular territory such as a Member State, the agreement implies that the licensor refrains from producing goods and services based on the licensed technology in the territory in question. To assess such exclusive licences, it is necessary to take into account the market power of the licensor and the licensee. If both parties have a limited market position on the product market and the licensor lacks the capacity to effectively exploit the technology in the licensee's territory, the agreement is unlikely to fall within Article 101(1) of the Treaty. A special case exists where the licensor and the licensee only compete on the technology market. The licensor, for instance a research institute or a small research-based undertaking, such as a spin-off, that competes with the licensee only on the technology market, lacks the production and distribution capabilities to effectively bring to market products incorporating the licensed technology. In such cases, the licensor is incapable of effectively competing downstream on the product market. As a result, the exclusive licence is unlikely to restrict competition within the meaning of Article 101(1), provided that the licensee does not have significant market power on the product market.

214. Exclusive licensing between non-competitors – to the extent that it is caught by Article 101(1) of the Treaty – is likely to fulfil the conditions of Article 101(3). An exclusive licence is frequently necessary in order to induce the licensee to invest in the licensed technology and to bring the products to market in a timely manner. This is in particular the case where the licensee must make large investments to develop the licensed technology further. Intervening against exclusivity once the licensee has successfully commercialised the licensed technology would deprive the licensee of the financial return on its investment and would be detrimental to competition, the dissemination of technology and innovation. The Commission will therefore only exceptionally intervene against exclusive licensing in agreements between non-competitors, irrespective of the territorial scope of the licence.

215. However, if the licensee already owns a substitutable technology that it uses for in-house production, the exclusive licence might not be necessary to incentivise the licensee to bring a product to the market. In such cases, the exclusive licensing may instead be caught by Article 101(1) of the Treaty, in particular where the licensee has market power on the product market. The main situation in which intervention may be warranted is where a dominant licensee obtains an exclusive licence to one or more competing technologies. Such agreements are likely to be caught by Article 101(1) and unlikely to fulfil the conditions of Article 101(3). For Article 101(1) to apply, entry into the technology market must be difficult and the licensed technology must constitute a real source of competition on the market. In such circumstances, an exclusive licence may foreclose third party licensees, raise barriers to entry and allow the licensee to maintain or strengthen its market power.

216. Cross-licensing arrangements, whereby two or more parties agree to license their technologies only to each other and not to license third parties, give rise to particular concerns where the resulting package of technologies creates a de facto industry standard to which third parties must have access in order to compete effectively on the market. In such cases, the arrangement creates a closed standard reserved for the parties to the arrangement. The Commission will assess such arrangements in accordance with the principles applied to technology pools (see Section 4.4 of these Guidelines). In particular, the technologies which support such a standard should normally be licensed to third parties on fair, reasonable and non-discriminatory terms ([106]), in line with the applicable standard development process ([107]). Where the parties to the arrangement compete with third parties on an existing product market and the arrangement relates to that product market, a closed standard is likely to have substantial exclusionary effects. This negative impact on competition can only be avoided by licensing also to third parties.

([106]) See in that respect the Commission's Notice in the Canon/Kodak Case (OJ C 330, 1.11.1997, p. 10) and the IGR Stereo Television Case mentioned in: European Commission, Eleventh report on competition policy – Published in conjunction with the 'Fifteenth General Report on the Activities of the European Communities in 1981', Publications Office of the European Union, 1982, paragraph 94.

([107]) See the guidance on standardisation in Chapter 7 of the Guidelines on Horizontal Agreements.

4.2.2.2. *Sales restrictions*

217. As regards sales restrictions, an important distinction must be made between licensing between competitors and licensing between non-competitors.

218. Restrictions on active and passive sales by one or both parties in a reciprocal agreement between competitors are hardcore restrictions of competition under Article 4(1), point (c), of the TTBER. Such sales restrictions are caught by Article 101(1) of the Treaty and are unlikely to fulfil the conditions of Article 101(3). Such restrictions are generally considered market sharing, since they prevent the affected party from selling actively and passively into territories and to customer groups which it actually served or could realistically have served in the absence of the agreement.

219. In the case of non-reciprocal agreements between competitors, the block exemption applies to restrictions on active or passive sales by the licensee or the licensor into the exclusive territory or to the exclusive customer group reserved for the other party (see Article 4(1), point (c)(i), of the TTBER) up to the market share threshold of 20 %. Above the market share threshold, such sales restrictions fall within Article 101(1) of the Treaty when one or both of the parties have significant market power. However, such restrictions may be indispensable for the dissemination of valuable technologies and may therefore fulfil the conditions of Article 101(3). This may be the case where the licensor has a relatively weak market position in the territory where it exploits the technology itself. In such cases, restrictions on active sales by the licensee may be indispensable to induce the licensor to grant the licence. In the absence of such restrictions, the licensor could face active competition in its main area of activity. Similarly, restrictions on active sales by the licensor may be indispensable, in particular where the licensee has a relatively weak market position in the territory allocated to it and has to make significant investments to exploit the licensed technology effectively.

220. The block exemption also applies to restrictions on active sales by the licensee into an exclusive territory or to a customer group allocated to another licensee that was not a competitor of the licensor at the time when the technology transfer agreement was concluded. However, this only applies where the agreement is non-reciprocal (see Article 4(1), point (c)(ii), of the TTBER). Above the market share threshold, such active sales restrictions are likely to fall within Article 101(1) of the Treaty where the parties have significant market power. The restraint is nevertheless likely to be indispensable within the meaning of Article 101(3) for the period of time required for the protected licensee to penetrate a new market and establish a market presence in the allocated territory or vis-à-vis the allocated customer group. This protection against active sales allows the licensee to overcome the asymmetry that it faces due to the fact that some of the licensees are competing undertakings of the licensor and thus already established on the market. Restrictions on passive sales by licensees into a territory or to a customer group that have been exclusively allocated to another licensee are hardcore restrictions under Article 4(1), point (c), of the TTBER.

221. In the case of agreements between non-competitors, restrictions of the licensee's ability to make active and passive sales into a territory or customer group reserved exclusively to the licensor are block-exempted up to the market share threshold of 30 %. Above that threshold, such restrictions require an individual assessment. They may, in certain cases, fall outside Article 101(1) of the Treaty or fulfil the conditions of Article 101(3), for example, if they are objectively necessary for the dissemination of valuable technologies. This may be the case where the licensor has a relatively weak market position in the territory where it exploits itself the technology. In such cases, restrictions of the licensee's ability to make active sales may be indispensable to induce the licensor to grant the licence. In the absence of such restrictions, the licensor could face active competition in its main area of activity. In other cases, sales restrictions on the licensee may be caught by Article 101(1) and may not fulfil the conditions of Article 101(3). This is likely to be the case where the licensor individually has a significant degree of market power and where a series of similar agreements concluded by licensors, which together hold a strong position on the market, has a cumulative effect.

222. However, in the case of agreements between non-competitors, where the licensor operates a selective distribution system in a given territory, it is not permitted to combine that system with exclusive territorial or customer group allocations where this would lead to a restriction of active or passive sales to end-users. Such combination would constitute a hardcore restriction under Article 4(2), point (c) of the TTBER (see paragraph (151) of the Guidelines).

223. Sales restrictions on the licensor, where they fall within Article 101(1) of the Treaty, are likely to fulfil the conditions of Article 101(3), unless there are no real alternatives to the licensor's technology on the market, or such alternatives are licensed by the licensee from third parties. Such restrictions and in particular restrictions of active sales are likely to be indispensable within the meaning of Article 101(3) to induce the licensee to invest in the production, marketing and sale of the products incorporating the licensed technology. It is likely that the licensee's incentive to invest would be significantly reduced if it faced direct competition from the licensor whose production costs are not burdened by royalty payments, possibly leading to sub-optimal levels of investment.

224. As regards restrictions in agreements between non-competitors of the licensee's ability to make active sales to territories or customer groups allocated exclusively to other licensees, these restrictions are block-exempted up to the market share threshold of 30 %. Above that threshold, such restrictions require an individual assessment. Where the licensee has significant market power, these restrictions may limit intra-technology competition and are likely to fall within Article 101(1) of the Treaty. However, such restrictions may fulfil the conditions of Article 101(3) where they are necessary to prevent free riding and to induce the licensee to make the investment necessary for the effective exploitation of the licensed technology inside its territory and to promote sales of the licensed product. Restrictions of passive sales are categorised as hardcore restrictions by Article 4(2), point (b), of the TTBER (see paragraphs (144) to (151) above). Such restrictions are, in general, unlikely to fulfil the conditions of Article 101(3).

4.2.3. **Output restrictions**

225. Reciprocal output restrictions in technology transfer agreements between competitors constitute a hardcore restriction as set out in Article 4(1), point (b), of the TTBER (see paragraph (128) of the Guidelines). Article 4(1), point (b) does not cover output restrictions relating to the licensed technology imposed on the licensee in a non-reciprocal agreement or imposed on only one of the licensees in a reciprocal agreement. Such restrictions are block-exempted up to the market share threshold of 20 %. Above that threshold, output restrictions require an individual assessment. Such restrictions may restrict competition within the meaning of Article 101(1) of the Treaty where the parties have significant market power. However, Article 101(3) is likely to apply in cases where the licensor's technology is substantially better than the licensee's technology and the output limitation substantially exceeds the output of the licensee prior to the conclusion of the agreement. In that case, the effect of the output limitation is limited, even in markets where demand is growing. For the application of Article 101(3) of the Treaty, it must also be taken into account that such restrictions may be necessary to induce the licensor to disseminate its technology as widely as possible. For instance, a licensor may be reluctant to license its competitors if it cannot limit the licence to a particular production site with a specific capacity (a site licence). Where the technology transfer agreement leads to a real integration of complementary assets, output restrictions on the licensee may therefore fulfil the conditions of Article 101(3). However, this is unlikely to be the case where the parties have significant market power.

226. Output restrictions in technology transfer agreements between non-competitors are block-exempted up to the market share threshold of 30 %. Above that threshold, an individual effects assessment is required. The main anti-competitive risk flowing from output restrictions on licensees in agreements between non-competitors is the reduction of intra-technology competition between licensees. The significance of such anti-competitive effects depends on the market position of the licensor and the licensees, and the extent to which the output limitation prevents the licensee from satisfying demand for the products incorporating the licensed technology.

227. Where output restrictions are combined with exclusive territories or exclusive customer groups, their restrictive effects are increased. The combination of the two types of restraints makes it more likely that the agreement serves to partition markets.

228. Output limitations imposed on the licensee in agreements between non-competitors may also have pro-competitive effects by promoting the dissemination of technology. As a supplier of technology, the licensor should normally be free to determine the output produced with the licensed technology by the licensee. If the licensor were not free to determine the output of the licensee, a number of technology transfer agreements might not come into existence in the first place, which would have a negative impact on the dissemination of technology.

That is particularly likely to be the case where the licensor is also a producer, since the licensee's output may find its way back into the licensor's main area of operation and thus have a direct impact on those activities. On the other hand, it is less likely that output restrictions are necessary to ensure dissemination of the licensor's technology when they are combined with sales restrictions on the licensee, prohibiting it from selling into a territory or customer group reserved for the licensor.

4.2.4. **Field of use restrictions**

229. Under a field of use restriction, the licensee's use of the licensed technology is limited to one or more technical fields of application, product markets or industrial sectors. This means that the licensee can only use the licensed technology rights within those specified areas. An industrial sector may encompass several product markets, but not part of a product market. The same technology can often be used to make different products; these products may belong to the same or to different product markets. For instance, a moulding technology could be used within the same industrial sector to make plastic bottles and plastic glasses, each product belonging to a separate product market. However, a single product market may encompass several technical fields of use. For instance, a technology to make chipsets may be used to produce chipsets with up to four CPUs and more than four CPUs. A licence limiting the use of the licensed technology to the production of chipsets with up to four CPUs constitutes a technical field of use restriction.

230. Given that field of use restrictions are covered by the block exemption and that certain customer restrictions are hardcore restrictions under Articles 4(1), point (c) and 4(2), point (b), of the TTBER, it is important to distinguish the two categories of restrictions (see also paragraphs (138) and (139) of these Guidelines). A customer restriction presupposes that specific customer groups are identified and that the parties are restricted from selling to such identified groups. The fact that a field of use restriction may correspond to certain groups of customers within a product market does not imply that the restriction is a customer restriction. For instance, the fact that certain customers buy predominantly or exclusively chipsets with more than four CPUs does not imply that a licence that is limited to chipsets with up to four CPUs constitutes a customer restriction. However, the field of use must be defined objectively by reference to identified and meaningful technical characteristics of the contract product.

231. Because certain output restrictions are hardcore restrictions under Article 4(1), point (b) of the TTBER, it is important to note that field of use restrictions are not considered to be output restrictions. This is because a field of use restriction does not limit the output that the licensee may produce within the licensed field of use.

232. Similarly to territories, fields of use can be allocated to the licensee under an exclusive or sole licence. See Section 4.2.2.1 of these Guidelines for an explanation of the difference between exclusive and sole licensing, including the impact on the ability of the licensor to exploit the licensed technology within the field of use concerned. In particular, for licensing between competitors, this means that reciprocal exclusive licensing is hardcore under Article 4(1), point (c) of the TTBER.

233. Field of use restrictions may have pro-competitive effects by encouraging the licensor to license its technology for applications that fall outside its main area of activity. If the licensor could not prevent licensees from operating in fields where it exploits the technology itself or in fields where the value of the technology is not yet well established, it would be likely to disincentivise the licensor from licensing or lead it to charge a higher royalty. The fact that in certain sectors licensing often occurs to ensure design freedom by preventing infringement claims must also be taken into account. Within the scope of the licence, the licensee is able to develop its own technology without fearing infringement claims by the licensor.

234. Field of use restrictions on licensees in agreements between actual or potential competitors are block-exempted up to the market share threshold of 20 %. Above the market share threshold, such restrictions must be individually assessed. The main competition concern is the risk that the licensee ceases to be a competitive force outside the licensed field of use. This risk is greater in the case of cross licensing between competitors where the agreement provides for asymmetrical field of use restrictions. Field of use restrictions are asymmetrical where one party is permitted to use the licensed technology in one industrial sector, product market or technical field of application

and the other party is permitted to use the other licensed technology in a different industrial sector, product market or technical field of application. Competition concerns may in particular arise where the licensee's production facility, which is tooled up to use the licensed technology, is also used to produce products outside the licensed field of use using the licensee's own technology. If the agreement is likely to lead the licensee to reduce output outside the licensed field of use, the agreement is likely to fall within Article 101(1) of the Treaty. Symmetrical field of use restrictions, that is to say, agreements whereby the parties are licensed to use each other's technologies within the same field(s) of use, are unlikely to fall within Article 101(1). Such agreements are unlikely to restrict competition that existed in the absence of the agreement. Article 101(1) is also unlikely to apply to agreements that merely enable the licensee to develop and exploit its own technology within the scope of the licence without fearing infringement claims by the licensor. In such cases, field of use restrictions do not in themselves restrict competition that existed in the absence of the agreement. In the absence of the agreement, the licensee also risked infringement claims outside the scope of the licensed field of use. However, if the licensee terminates or scales back its activities in the area outside the licensed field of use without business justification, this may be an indication of an underlying market sharing arrangement amounting to a hardcore restriction under Article 4(1), point (c), of the TTBER.

235. Field of use restrictions on licensee and licensor in agreements between non-competitors are block-exempted up to the market share threshold of 30 %. Above the market share threshold, such restrictions require an individual assessment. In general, they either do not restrict competition within the meaning of Article 101(1) of the Treaty, or they are efficiency-enhancing and may therefore fulfil the conditions of Article 101(3). They promote the dissemination of technology by giving the licensor an incentive to license for exploitation in fields in which it does not want to exploit the technology itself. If the licensor were not able to prevent licensees from operating in fields where the licensor exploits the technology itself, it could be disincentivised from licensing.

236. In agreements between non-competitors, the licensor is normally also entitled to grant exclusive or sole licences to different licensees limited to one or more fields of use. Such restrictions limit intra-technology competition between licensees in the same way as territorial exclusive licensing and are assessed in the same way (see Section 4.2.2.1 of these Guidelines).

4.2.5. **Captive use restrictions**

237. A captive use restriction is an obligation on the licensee to limit its production of the products incorporating the licensed technology to the quantities required for the production of its own products and the maintenance and repair of its own products. In other words, this type of use restriction obliges the licensee to use the products incorporating the licensed technology only as an input for incorporation into its own production. It does not permit the licensee to sell the product incorporating the licensed technology for incorporation into the products of other producers.

238. Captive use restrictions are block-exempted up to the market share thresholds of 20 % and 30 %. Above those thresholds, such restrictions require an individual assessment. In this respect, it is necessary to distinguish agreements between competitors and agreements between non-competitors.

239. In technology transfer agreements between competitors, a requirement that the licensee uses the licensed technology only to produce inputs for incorporation into its own products prevents it from supplying components to third party producers. If, prior to the conclusion of the agreement, the licensee was not an actual or potential supplier of components to other producers, the captive use restriction does not change anything compared to the situation before the conclusion of the agreement. In those cases, the restriction is assessed in the same way as in the case of agreements between non-competitors. On the other hand, if the licensee is an actual or potential supplier of components, it is necessary to assess the impact of the agreement on that activity. If by tooling up to use the licensor's technology, the licensee ceases to use its own technology on a standalone basis and thereby ceases to operate as a component supplier, the agreement restricts competition that existed before the conclusion of the agreement. It may result in serious anti-competitive effects when the licensor has a significant degree of market power on the component market.

240. In the case of technology transfer agreements between non-competitors, there are two main competitive risks stemming from captive use restrictions: a restriction of intra-technology competition on the market for the supply of inputs; and the prevention of arbitrage between licensees, which may increase the licensor's ability to impose discriminatory royalties on licensees.

241. However, captive use restrictions may also promote pro-competitive licensing. If the licensor is a supplier of components, the restraint may be necessary for the dissemination of technology between non-competitors to occur. In the absence of the restraint, the licensor may not grant the licence or may do so only against higher royalties, because otherwise it would create direct competition with itself on the component market. In such cases, a captive use restriction either does not restrict competition within the meaning of Article 101(1) of the Treaty or fulfils the conditions of Article 101(3). However, the licensee must not be restricted from selling the licensed product as replacement parts for its own products. The licensee must be able to serve the after-market for its own products, including independent service providers that service and repair the products produced by the licensee.

242. Where the licensor is not a component supplier on the relevant product market, the above reason for imposing captive use restrictions does not apply. In such cases, a captive use restriction may in principle promote the dissemination of technology by ensuring that licensees do not sell to producers that compete with the licensor on other product markets. However, a restriction on the licensee not to sell into certain customer groups reserved for the licensor normally constitutes a less restrictive alternative. Consequently, in such cases, a captive use restriction is generally not necessary for the dissemination of technology to take place.

4.2.6. **Tying and bundling**

243. In the context of technology licensing tying occurs when the licensor makes the licensing of one technology (the tying product) conditional upon the licensee taking a licence for another technology or purchasing a product from the licensor or someone designated by it (the tied product). Bundling occurs where two technologies or a technology and a product are only sold together as a bundle. In both cases, however, it is a condition that the products and technologies involved are distinct in the sense that there is distinct demand for each of the products and technologies forming part of the tie or the bundle. In the following, the term 'tying' refers to both tying and bundling.

244. Article 3 of the TTBER, which limits the scope of the block exemption by means of market share thresholds, ensures that tying and bundling are not block-exempted above the market share thresholds of 20 % in the case of agreements between competitors and 30 % in the case of agreements between non-competitors. The market share thresholds apply to any relevant technology or product market affected by the technology transfer agreement, including the market for the tied product. The remainder of this Section provides guidance for the assessment of tying in individual cases above the market share thresholds ([108]).

245. The main restrictive effect of tying is foreclosure of competing suppliers of the tied product. Tying may also allow the licensor to maintain market power in the market for the tying product by raising barriers to entry. For instance, it may force new entrants to enter several markets at the same time. Moreover, tying may allow the licensor to increase royalties, for example when the tying product and the tied product are partly substitutable and the two products are not used in fixed proportions. Tying prevents the licensee from switching to substitute inputs in response to royalty increases for the tying product. These competition concerns are independent of whether the parties to the agreement are competitors or not. For tying to produce likely anti-competitive effects, the licensor must have a significant degree of market power in the tying product so as to restrict competition in the tied product. In the absence of such market power, the licensor is unlikely to be able to leverage its technology

([108]) For an example of how this analytical framework has been applied in practice, see Commission decision of 20 December 2012 in case AT.39230 – *Rio Tinto Alcan*, paragraphs 96 *et seq*.

to foreclose suppliers of the tied product. Furthermore, as in the case of non-compete obligations, the tie must cover a sufficient proportion of the tied product market for appreciable foreclosure effects to occur. In cases where the licensor has market power on the market for the tied product, rather than on the market for the tying product, the restraint is generally analysed as a non-compete clause or quantity forcing. This reflects the fact that any competition concern is likely to originate in the tied product market, not in the tying product market ([109]).

246. Tying can also give rise to efficiency gains. This is for instance the case where the tied product is necessary for a technically satisfactory exploitation of the licensed technology or for ensuring that production under the licence conforms to quality standards respected by the licensor and other licensees. In such cases, tying will often fulfil the conditions of Article 101(3) of the Treaty. Where licensees use the licensor's trademark or brand name, or where it is otherwise obvious to consumers that there is a link between the product incorporating the licensed technology and the licensor, the licensor has a legitimate interest in ensuring that the quality of the products does not undermine the value of its technology or its commercial reputation. Moreover, where it is known to consumers that the licensor and its licensees produce on the basis of the same technology, licensees are unlikely to take a licence unless the technology is exploited by all parties in a technically satisfactory way.

4.2.7. **Non-compete obligations**

247. Non-compete obligations in the context of technology licensing take the form of an obligation on the licensee not to use third party technologies that compete with the licensed technology. To the extent that a non-compete obligation covers a product or an additional technology supplied by the licensor, the obligation is dealt with in Section 4.2.6 of these Guidelines on tying.

248. The TTBER exempts non-compete obligations in agreements between competitors and in agreements between non-competitors up to the market share thresholds of 20 % and 30 % respectively. The remainder of this Section provides guidance for the assessment of non-compete obligations in individual cases above the market share thresholds.

249. The main competitive risk presented by non-compete obligations is foreclosure of third-party technologies. Non-compete obligations may also facilitate collusion between licensors where several licensors use them in separate agreements (cumulative use) or in the case of cross-licensing between competitors where both parties agree not to use third party technologies. Foreclosure of competing technologies reduces competitive pressure on the royalties charged by the licensor and reduces competition between the incumbent technologies by limiting the possibilities for licensees to switch to competing technologies. As in both cases the main problem is foreclosure, the analysis can in general be the same in the case of agreements between competitors and agreements between non-competitors.

250. Foreclosure may arise where a substantial proportion of potential licensees are already tied to one or, in the case of cumulative effects, more sources of technology and are prevented from exploiting competing technologies. Foreclosure effects may result from agreements concluded by a single licensor with a significant degree of market power or from the cumulative effect of agreements concluded by several licensors, even where each individual agreement or network of agreements is covered by the TTBER. In the latter case, however, a serious cumulative effect is unlikely to arise as long as less than 50 % of the market is tied. Above that threshold, significant foreclosure is likely to occur when there are relatively high barriers to entry for new licensees. If barriers to entry are low, new licensees are able to enter the market and exploit commercially attractive technologies held by third parties and thus represent a real alternative to incumbent licensees. In order to determine the real possibility for

([109]) For the applicable analytical framework see Section 4.2.7 of these Guidelines and paragraphs 298 *et seq*. of the Vertical Guidelines.

entry and expansion by third parties, it is also necessary to take account of the extent to which distributors are tied to licensees by non-compete obligations. Third party technologies only have a real possibility of entry if they have access to the necessary production and distribution assets. In other words, the ease of entry depends not only on the availability of licensees but also the extent to which they have access to distribution. In assessing foreclosure effects at the distribution level, the Commission will apply the analytical framework set out in Section 8.2.1 of the Vertical Guidelines ([110]).

251. Where the licensor has significant market power, obligations on licensees to obtain the technology only from the licensor can lead to significant foreclosure effects. The stronger the market position of the licensor, the higher the risk of foreclosing competing technologies. For appreciable foreclosure effects to occur, the non-compete obligations do not necessarily have to cover a substantial part of the market. Appreciable foreclosure effects may occur where non-compete obligations are targeted at undertakings that are the most likely to license competing technologies. The risk of foreclosure is particularly high where there is only a limited number of potential licensees.

252. Non-compete obligations may also produce pro-competitive effects. First, such obligations may promote dissemination of technology by reducing the risk of misappropriation, in particular in respect of licensed know-how. If a licensee is entitled to license competing technology rights from third parties, there is a risk that licensed know-how would be used in the exploitation of competing technologies and thus benefit competitors. Where a licensee also exploits competing technologies, it may make monitoring of royalty payments more difficult. This may act as a disincentive for licensors to enter into licensing agreements.

253. Second, non-compete obligations, possibly combined with an exclusive territory, may be necessary to ensure that the licensee has an incentive to invest in and exploit the licensed technology effectively. In cases where the agreement is caught by Article 101(1) of the Treaty because of an appreciable foreclosure effect, it may be necessary, in order to benefit from Article 101(3), to choose a less restrictive alternative. Such alternatives could include the imposition of minimum output or royalty obligations, which typically have less potential to foreclose competing technologies.

254. Third, in cases where the licensor undertakes to make significant client-specific investments, for instance in training and adapting the licensed technology to the licensee's needs, non-compete obligations, or minimum output or minimum royalty obligations may be necessary to induce the licensor to make the investment and to avoid hold-up problems. However, in most cases, the licensor will be able to recover the costs of such investments through a lump-sum payment. This implies that less restrictive alternatives are available.

4.3. *Settlement agreements*

255. Licensing of technology rights in settlement agreements may serve as a means of settling disputes or avoiding that one party exercises its intellectual property rights to prevent the other party from exploiting its own intellectual property rights ([111]).

256. Settlement agreements in the context of technology disputes are, in principle a legitimate way to find a mutually acceptable compromise to a bona fide legal dispute. On the other hand, challenges to the validity and scope of intellectual property rights are part of normal competition in sectors where there exist exclusive rights in relation to technology ([112]). Also, it is in the general public interest to remove invalid intellectual property rights as an unmerited barrier to innovation and economic activity ([113]).

([110]) See footnote 20.

([111]) The TTBER and these Guidelines are without prejudice to the application of Article 101 of the Treaty to settlement agreements which do not contain a licensing agreement.

([112]) See judgments of the Court of 30 January 2020, *Generics (UK) and Others*, C-307/18, ECLI:EU:C:2020:52, paragraph 81; of 27 June 2024, *Commission v Krka*, C-151/19 P, ECLI:EU:C:2024:546, paragraph 72; of 27 June 2024, *Commission v Servier and Others*, C-176/19 P, ECLI:EU:C:2024:549, paragraph 105.

([113]) See judgment of 25 February 1986, *Windsurfing v Commission*, C-193/83, ECLI:EU:C:1986:75, paragraph 92.

257. Subject to an assessment of its specific content and economic context, licensing, including cross licensing, in the context of settlement agreements may be regarded as legitimate from a competition law perspective where, in the absence of the licence, the licensee would be excluded from the market ([114]).

258. However, settlement agreements may also restrict competition within the meaning of Article 101(1) of the Treaty, depending on their terms and the terms of other agreements between the parties, as well as their legal and economic context ([115]). In those cases, it is particularly necessary to assess whether the parties are actual or potential competitors.

Pay-for-restriction in settlement agreements

259. 'Pay-for-restriction' or 'pay-for-delay' type settlement agreements often do not involve the transfer of technology rights, but are based on a value transfer from one party in return for a limitation on the entry and/or expansion on the market of the other party and may fall within Article 101(1) ([116]).

260. For example, 'pay-for-restriction' or 'pay-for-delay' type settlement agreements between actual or potential competitors are considered a restriction by object where it is evident from examining the agreement that the value transfers involved have no explanation other than serving the commercial interests of both the technology holder and the other parties involved not to engage in competition on the merits ([117]). This applies, for instance, where one party makes value transfers to one or more other parties resulting in a net gain for those parties which is sufficiently significant to disincentivise them from entering or expanding in the market independently ([118]).

Cross licensing in settlement agreements

261. Settlement agreements whereby the parties merely cross-license each other and impose restrictions on the use of their technologies, including restrictions on the licensing to third parties, may be caught by Article 101(1) of the Treaty. The agreement is unlikely to raise competition concerns if the parties are not actual or potential competitors and the cross-licensing is limited to what is necessary to resolve a genuine two-way blocking position. If instead the parties are competitors and the parties share markets or fix reciprocal running royalties that have a significant impact on market prices, the agreement is very likely to fall within Article 101(1).

262. Where under the settlement agreement the parties are entitled to use each other's technology and the agreement extends to future developments, it is necessary to assess the impact of the agreement on the parties' incentive to innovate. In cases where the parties have a significant degree of market power, the agreement is likely to be caught by Article 101(1) of the Treaty where the agreement prevents the parties from gaining a competitive lead over each other. Agreements that eliminate or substantially reduce the possibilities of one party to gain a competitive lead over the other reduce the incentive to innovate and thus adversely affect an essential parameter

([114]) See e.g. judgment of the Court of 27 June 2024, *Commission v Krka*, C-151/19 P, ECLI:EU:C:2024:546, paragraph 398, which clarifies that this does not apply if the agreements between the parties also prohibit the licensee from entering other markets.

([115]) See to that effect judgment of the Court of 27 June 2024, *Commission v Servier and Others*, C-176/19 P, ECLI:EU:C:2024:549, paragraphs 178-179.

([116]) See e.g. the judgment of the Court of 30 February 2020, *Generics (UK) and Others*, C-307/18, ECLI:EU:C:2020:52, paragraphs 60 et seq. See also the judgment of 27 June 2024, *Commission v Servier and Others*, C-176/19 P, ECLI:EU:C:2024:549, paragraph 104. This judgment clarifies that, in the specific context of the pharmaceutical industry and patent settlements between an originator medicine manufacturer and a generic medicine manufacturer, a value transfer may be considered legitimate if it is fully justified by the need to compensate for costs or disruptions caused by the settled litigation – such as expenses and fees of the generic manufacturer's advisers – or by the need to remunerate the actual and proven supply of goods or services provided by the generic manufacturer to the originator manufacturer.

([117]) See, for instance, the judgment of the Court of 25 March 2021, *Lundbeck v Commission*, C-591/16 P, ECLI:EU:C:2021:243, paragraph 114.

([118]) There is no requirement for that net gain to necessarily be greater than the profits which the competitor would have made if it had been successful in the patent proceedings. See, for example, the judgment of the Court of 30 January 2020, *Generics (UK) and Others*, C-307/18, ECLI:EU:C:2020:52, paragraphs 87-94.

of competition. Such agreements are also unlikely to satisfy the conditions of Article 101(3). It is particularly unlikely that the restriction can be considered indispensable within the meaning of the third condition of Article 101(3). The achievement of the objective of the agreement, namely to ensure that the parties can continue to exploit their own technology without being blocked by the other party, does not require that the parties agree to share future innovations. However, the parties are unlikely to be prevented from gaining a competitive lead over each other where the purpose of the licence is to allow the parties to develop their respective technologies and where the licence does not lead them to use the same technological solutions. Such agreements merely create design freedom by preventing future infringement claims by the other party.

No-challenge clauses in settlement agreements

263. In the context of a settlement agreement, no-challenge clauses frequently fall outside Article 101(1) of the Treaty.

264. However, no-challenge clauses in settlement agreements can under specific circumstances be anti-competitive and may be caught by Article 101(1) of the Treaty ([119]). For instance, a no-challenge clause may be used to eliminate a competitor which, absent the clause, would likely have posed a competitive threat ([120]). In addition, a no-challenge clause may infringe Article 101(1) where an intellectual property right was granted following the provision of incorrect or misleading information ([121]). Scrutiny of such clauses may also be necessary if the technology rights are a necessary input for the licensee's production (see also paragraph (160) of these Guidelines).

4.4. *Technology pools*

265. Technology pools are arrangements whereby two or more parties assemble a package of technology which is licensed not only to contributors to the pool but also to third parties. In terms of their structure, technology pools can take the form of simple agreements between a limited number of parties or more complex arrangements whereby the organisation of the licensing of the pooled technologies is entrusted to a separate entity. In both cases, the pool may allow licensees to access the technology covered by the pool on the basis of a single licence.

266. There is no inherent link between technology pools and standards, but pools often support, in whole or in part, a *de facto* or *de jure* industry standard ([122]). Different technology pools may support competing standards ([123]). Technology pools can produce pro-competitive effects, in particular by reducing transaction costs and setting a limit on cumulative royalties to prevent double marginalisation. They enable one-stop licensing of the technologies covered by the pool. This is particularly valuable in sectors where intellectual property rights are prevalent and licences need to be obtained from a significant number of licensors to operate on the market. In cases where licensees receive on-going services concerning the application of the licensed technology, joint licensing and service provision through the pool can lead to further cost reductions. Patent pools can also play a beneficial role in the implementation of pro-competitive standards.

([119]) See e.g. the judgment of the Court of 30 February 2020, *Generics (UK) and Others*, C-307/18, ECLI:EU:C:2020:52, paragraph 82.

([120]) See to that effect the judgment of the General Court of 18 October 2023, *Teva Pharmaceutical Industries and Cephalon v Commission*, T-74/21, ECLI:EU:T:2023:651, paragraph 242.

([121]) See to that effect the Commission Decision of 26 November 2020 in case in AT.39686 – *Cephalon*, paragraph 1208.

([122]) See concerning the treatment of standards and the treatment of standardisation agreements in Guidelines on Horizontal Agreements, Chapter 7, cited in footnote 16. Technology pools typically operate licensing programmes that are structured around specific industry standards.

([123]) See in this respect the Commission's press release IP/02/1651 concerning the licensing of patents for third generation (3G) mobile services. That case involved five technology pools creating five different technologies, each of which could be used to produce 3G equipment.

267. Technology pools may also be restrictive of competition. The creation of a technology pool necessarily implies joint selling of the pooled technologies, which in the case of pools composed solely or predominantly of substitute technologies amounts to a price fixing cartel. Technology pools may also foreclose alternative technologies, for instance when the pool supports an industry standard or establishes a *de facto* industry standard. The existence of the standard, combined with the pool may make it more difficult for new technologies to enter the market or foreclose competing technologies already in the market.

268. Agreements establishing technology pools and setting out the terms and conditions for their operation are not covered by the TTBER, irrespective of the number of parties involved. This is because the agreement to establish the pool does not permit a particular licensee to produce contract products (see Section 3.2.4 of these Guidelines). Such agreements are to be assessed solely under these Guidelines.

269. Technology pools give rise to a number of issues that do not arise in the context of other types of technology licensing, in particular regarding the selection of the included technologies and the operation of the pool. Licensing out from the pool generally constitutes a multi-party agreement, as the contributors to the pool commonly determine the terms of the licence. For this reason, licensing out from a pool is also not covered by the TTBER. It is addressed separately in paragraph (285) and Section 4.4.2 of these Guidelines.

4.4.1. **The assessment of the creation and operation of technology pools**

270. The way in which a technology pool is created, organised and operated can reduce the risk of it having the object or effect of restricting competition and help to ensure that the arrangement is pro-competitive. In assessing the possible competitive risks and efficiencies, the Commission will consider, among other factors, the transparency of the pool creation process; the selection and nature of the pooled technologies, including the extent to which independent experts are involved in the creation and operation of the pool and whether safeguards against exchange of sensitive information and independent dispute resolution mechanisms have been put in place.

Open participation

271. When participation in the creation of the pool and of any *de facto* or *de jure* standard supported by the pool is open to all interested parties, it is more likely that the technologies included in the pool are selected on the basis of price and quality considerations than when the pool is set up by a limited group of technology owners.

Selection and nature of the pooled technologies

272. The competitive risks and the efficiency enhancing potential of technology pools depend to a large extent on the relationship between the pooled technologies and the technologies outside the pool. Two basic distinctions must be made between: (a) technological complements and substitutes, and (b) essential and non-essential technologies.

273. Two technologies are complements as opposed to substitutes when they are both required to produce the product or carry out the process to which the technologies relate. Conversely, two technologies are substitutes when either technology allows the holder to produce the product or carry out the process to which the technologies relate.

274. A technology can be essential in two situations:

(a) where the technology is essential to produce a particular product or carry out a particular process to which the pooled technologies relate;

(b) where the technology is essential to produce such a product or carry out such a process in accordance with a standard that incorporates the pooled technologies.

275. In the first case, a technology is essential (as opposed to non-essential) if there are no viable substitutes (both from a commercial and technical point of view) for that technology inside or outside the pool, and the technology constitutes a necessary part of the package of technologies required to produce the product(s) or carry out the process(-es) to which the pool relates. In the second case, a technology is essential if it constitutes a necessary part (there are no viable substitutes) of the pooled technologies required to comply with the standard supported by the pool (standard essential technologies). Technologies that are essential are by definition also complements, as each technology is required to make use of the entire package of technologies covered by the pool. The fact that a technology holder declares that a technology is essential does not in itself establish that such a technology is essential within the meaning of the criteria set out in this paragraph.

276. When technologies in a pool are substitutes, royalties are likely to be higher than they would otherwise be, because licensees do not benefit from rivalry between the technologies in question. When the technologies in the pool are complements, the technology pool reduces transaction costs and may lead to lower overall royalties. This is because the parties are in a position to set a common royalty for the package, rather than each licensor setting separate royalties for their own technology, without taking into account that increasing the royalty for one technology will usually decrease demand for complementary technologies. If royalties for complementary technologies are set individually, the total of those royalties may often exceed what would be collectively set by a pool for the package of the same complementary technologies. The assessment of the role of substitutes outside the pool is set out in paragraph (286).

277. The distinction between complementary and substitute technologies is not clear-cut in all cases, since technologies may be substitutes in part and complements in part. When, due to efficiencies stemming from the integration of two technologies, licensees are likely to demand both technologies, the technologies are treated as complements, even if they are partly substitutable. In such cases, it is likely that, in the absence of the pool, licensees would want to licence both technologies due to the additional economic benefit of using both technologies as opposed to using only one of them.

278. Absent such demand-based evidence, certain features of the pool may indicate that the pooled technologies are complements, such as:

(a) the parties contributing technology to the pool remain free to license their technology rights individually;

(b) the pool offers both the entire package and the option to license the technology rights of each party also separately;

(c) the aggregate royalties for separate licences to all the pooled technologies do not exceed the royalties charged by the pool for the whole package of technology rights.

279. The inclusion of substitute technologies in the pool generally restricts inter-technology competition since it can amount to collective bundling and lead to price fixing between competitors. As a general rule, the Commission considers that the inclusion of significant substitute technologies in the pool restricts competition within the meaning of Article 101(1) of the Treaty. The Commission also considers that it is unlikely that the conditions of Article 101(3) will be fulfilled in such case. Given that the technologies in question are alternatives, no transaction cost savings accrue from including both technologies in the pool. In the absence of the pool, licensees would not have demanded both technologies. To alleviate the competition concerns, it is not sufficient that the parties remain free to license independently. This is because the parties are likely to have little incentive to license independently in order not to undermine the pool's licensing activity, which allows them to jointly exercise market power.

Selection and function of independent experts

280. Another relevant factor in assessing the competitive risks and the efficiencies of technology pools is the extent to which independent experts are involved in the creation and operation of the pool. For instance, the assessment of whether a technology is essential to a standard supported by a pool is often a complex matter that requires special expertise. The involvement of independent experts in such assessment can help to ensure that only essential technologies are included in the pool. Where the selection of technologies to be included in the pool is carried out by an independent expert, this may also help to ensure that competition between available technological solutions is not distorted.

281. The Commission will take into account how experts are selected and the functions that they are to perform. Experts should be independent from the undertakings that have formed the pool. If experts are connected to the licensors or the pool administrators, or depend on the licensors or the pool administrators in any other way, the involvement of the expert will be given less weight. Experts must also have the necessary technical expertise to perform the various functions with which they have been entrusted. The functions of independent experts may include, in particular, verifying whether the technology rights proposed for inclusion into the pool are valid and essential. Invalid intellectual property rights stifle innovation, rather than promoting it.

282. Finally, any dispute resolution mechanisms foreseen in the instruments setting up the pool are relevant and should be taken into account. The more dispute resolution is entrusted to bodies or persons that are independent from the pool and its members, the more likely it is that the dispute resolution will operate in a neutral way.

Safeguards against exchange of commercially sensitive information

283. It is also relevant to consider the arrangements governing the exchange of commercially sensitive information between the parties ([124]). The Commission will take into account what safeguards have been put in place to ensure that commercially sensitive information is not exchanged. An independent expert, licensing body or pool administrator may play an important role in this respect by ensuring that output and sales data, which may be necessary for the purposes of calculating and verifying royalties, is not disclosed to members of the pool that compete on affected markets.

284. Safeguards should also be put in place to ensure that commercially sensitive information is not exchanged between competing pools, in particular where technology holders participate in the (creation of) competing pools.

Safe harbour

285. The creation and operation of the pool, including the licensing out, generally falls outside Article 101(1) of the Treaty, irrespective of the market position of the parties, if all the following conditions are fulfilled:

(a) participation in the pool creation process is open to all interested technology rights owners;

(b) the technology rights included in the pool are disclosed in an effective manner to potential and existing licensees;

(c) sufficient safeguards are adopted to ensure that only essential technologies (which therefore necessarily are also complements) are pooled, and the methodology used to verify essentiality and the results of the essentiality assessments are disclosed in an effective manner to potential licensees;

(d) sufficient safeguards are adopted to ensure that exchanges of sensitive information (such as pricing and output data) are limited to what is necessary for the creation and operation of the pool;

(e) the pooled technologies are licensed into the pool on a non-exclusive basis;

(f) the pooled technologies are licensed out by the pool to all potential licensees on fair, reasonable and non-discriminatory terms (FRAND) ([125]), including provisions that ensure that licensees are not charged more than once for the same technology rights;

(g) the parties contributing technology to the pool and the licensees are free to challenge the validity and the essentiality of the pooled technologies;

(h) the parties contributing technology to the pool and the licensees remain free to develop competing products and technology.

([124]) For details on information exchange, see Guidelines on Horizontal Agreements, chapter 6, cited in footnote 16.
([125]) For details on FRAND, see the Guidelines on Horizontal Agreements, paragraph 458, cited in footnote 16.

Outside the safe harbour

286. Where significant complementary but non-essential technologies are included in the pool there is a risk of foreclosure of third party technologies. Once a technology is included in the pool and licensed as part of the package, licensees are likely to have little incentive to license a competing technology when the royalty paid for the package already covers a substitute technology. Moreover, the inclusion of technologies which are not necessary for the purposes of producing the product(s) or carrying out the process(-es) to which the technology pool relates or to comply with the standard which includes the pooled technology also forces licensees to pay for technology that they may not need. The inclusion of such complementary technology thus amounts to collective bundling. Where a pool encompasses non-essential technologies, the arrangement is likely to be caught by Article 101(1) of the Treaty where the pool has a significant position on any relevant market.

287. Given that substitute and complementary technologies may be developed after the creation of the pool, the need to assess essentiality does not end with the creation of the pool.. A technology included in a pool may become non-essential over time, due to technological developments, such as the evolution of the standard itself, or changes in its practical implementation. For example, a patent assessed as essential to an earlier version of a standard may no longer qualify as such if subsequent changes reduce its relevance or make its use optional. Where it is brought to the attention of the pool that such alternative technology is available and demanded by licensees, foreclosure concerns may be avoided by offering to new and existing licensees a licence without the no-longer essential technology at a correspondingly reduced royalty rate. However, there may be other ways to ensure that third party technologies are not foreclosed.

288. In the assessment of technology pools comprising non-essential but complementary technologies, at least the following factors should be considered:

(a) whether there are any pro-competitive reasons for including the non-essential technologies in the pool;

(b) whether the licensors in the pool remain free to license their respective technologies independently: where the pool is composed of a limited number of technologies and there are substitute technologies outside the pool, licensees may want to put together their own technology package composed partly of technology forming part of the pool and partly of technology owned by third parties;

(c) whether, in cases where the pooled technologies have different applications some of which do not require use of all of the pooled technologies, the pool offers the technologies only as a single package or whether it offers separate packages for distinct applications, each comprising only those technologies relevant to the application in question. In the latter case, technologies which are not essential to a particular product or process are not tied to essential technologies;

(d) whether the pooled technologies are available only as a single package or whether licensees have the possibility of obtaining a licence for only part of the package with a corresponding reduction of royalties. The possibility to obtain a licence for only part of the package may reduce the risk of foreclosure of third party technologies outside the pool, in particular where the licensee obtains a corresponding reduction in royalties. This requires that a share of the overall royalty has been assigned to each technology in the pool. Where the licence agreements concluded between the pool and individual licensees are of relatively long duration and the pooled technology supports a *de facto* industry standard, the fact that the pool may foreclose access to the market of new substitute technologies must also be taken into account. In assessing the risk of foreclosure in such cases, it is relevant to take into account whether licensees can terminate at reasonable notice part of the licence and obtain a corresponding reduction of royalties.

289. Technology pools that restrict competition within the meaning of Article 101(1) of the Treaty may give rise to pro-competitive efficiencies (see paragraph (266) of these Guidelines) which must be assessed under Article 101(3) and balanced against the negative effects on competition. For example, where the technology pool includes non-essential technologies but fulfils all the other conditions of the safe harbour set out in paragraph (285), and there are pro-competitive reasons for including non-essential patents in the pool (see paragraph (288) of these Guidelines) and licensees have the possibility of obtaining a licence for only part of the package with a corresponding reduction of royalties (see paragraph (288) of these Guidelines), the conditions of Article 101(3) are likely to be fulfilled.

4.4.2. **Assessment of individual restraints in agreements between the pool and its licensees**

290. Where the agreement to create a technology pool does not infringe Article 101 of the Treaty, the next step is to assess the competitive impact of the licensing agreements concluded by the pool with its licensees. The conditions under which those licences are granted may be caught by Article 101(1). The purpose of this Section is to address a certain number of restraints that are commonly found in licensing agreements from technology pools and which need to be assessed in the overall context of the pool. The TTBER does not apply to licence agreements concluded between the pool and third-party licensees (see paragraph ((269)) of these Guidelines). This Section therefore deals with the individual assessment of licensing issues that are particular to licensing in the context of technology pools.

291. In making its assessment of technology transfer agreements between the pool and its licensees, the Commission will be guided by the following main principles:

(a) the stronger the market position of the pool, the greater the risk of anti-competitive effects;

(b) the stronger the market position of the pool, the more likely that agreeing not to license to all potential licensees or to license on discriminatory terms will infringe Article 101 of the Treaty;

(c) pools should not unduly foreclose third party technologies or limit the creation of alternative pools;

(d) the agreements should not contain any of the hardcore restrictions listed in Article 4 of the TTBER (see Section 3.4 of these Guidelines).

292. Undertakings setting up a technology pool that is compatible with Article 101 of the Treaty, are normally free to negotiate and set royalties for the technology package, (subject to any existing commitment to license on FRAND terms), and each technology's share of the royalties either before or after the standard is set. Such agreement is inherent in the establishment of the pool and cannot in itself be considered restrictive of competition. In certain circumstances, it may be more efficient if the royalties of the pool are agreed before the standard is set, to avoid that the standard setting process increases the royalty rate by conferring significant market power on one or more essential technologies. However, licensees must remain free to determine the price of products produced under the licence.

293. Where the pool has a dominant position on the market, royalties and other licensing terms should be non-excessive and non-discriminatory and licences should be non-exclusive ([126]). Those requirements are necessary to ensure that the pool is open and does not lead to foreclosure and other anti-competitive effects on downstream markets. Those requirements, however, do not preclude different royalty rates for different uses. It is in general not considered restrictive of competition to apply different royalty rates to different product markets, whereas there should be no discrimination within product markets. In particular, the treatment of licensees of the pool should not depend on whether they are also licensors. The Commission will therefore take into account whether licensors and licensees are subject to the same royalty obligations.

294. Licensors and licensees should be free to develop competing products and standards. They should also be free to grant and obtain licences outside the pool. These requirements are necessary to limit the risk of foreclosure of third party technologies and ensure that the pool does not limit innovation and preclude the creation of competing technological solutions. Where pooled technology is included in a *de facto* industry standard and where the parties are subject to non-compete obligations, the pool creates a particular risk of preventing the development of new and improved technologies and standards.

([126]) However, if a technology pool has no market power, licensing out from the pool will normally not restrict competition within the meaning of Article 101(1) even if those conditions are not fulfilled.

295. Grant-back obligations should be non-exclusive and limited to developments that are essential or important to the use of the pooled technology. That allows the pool to feed on and benefit from improvements to the pooled technology. It is legitimate for the parties to the pool to ensure that the exploitation of the pooled technology cannot be held up by licensees, including subcontractors working under the licence of the licensee, that hold or obtain essential technologies.

296. One of the risks is that technology pools may shield invalid technology rights. Pooling may raise the costs and reduce the likelihood of a successful challenge. It may fail if only one patent in the pool is valid. The shielding of invalid patents in the pool may oblige licensees to pay higher royalties and prevent innovation in the field covered by the invalid patent. In that context, non-challenge clauses, including termination clauses ([127]), in a technology transfer agreement between the pool and licensees are likely to fall within Article 101(1) of the Treaty.

4.5. *Licensing Negotiation Groups*

4.5.1. **Introduction**

297. Licensing Negotiation Groups ('LNGs') are arrangements whereby potential licensees (technology implementers) agree to negotiate the terms of technology transfer agreements jointly. The guidance in this Section applies to LNGs to the extent that they relate to the negotiation of the terms of technology transfer agreements as defined in Article 1(1), point, (c), of the TTBER. This guidance applies irrespective of:

(a) the legal form of the LNG (for example, whether it consists of a simple agreement or a separate legal entity);

(b) whether or not the members of the LNG are competing undertakings in downstream product markets;

(c) whether or not the counterparty of the LNG is an individual technology holder or a technology pool or intermediary platform ([128]).

298. Where negotiations between an LNG and a technology holder lead to agreed licensing terms, any resulting technology transfer agreements concluded between the right holder and the individual members of the LNG must be assessed, as appropriate, under the TTBER or Chapter 4 of these Guidelines.

299. Chapter 4 of the Guidelines on Horizontal Agreements (Joint Purchasing) shall not apply to LNGs that are covered by this guidance. This guidance is without prejudice to the application of Article 102 of the Treaty.

Possible pro-competitive effects of LNGs

300. LNGs can facilitate technology licensing by:

(a) reducing the number of individual negotiations between technology holders and technology implementers, thereby reducing licensing transaction costs;

(b) pooling the expertise of technology implementers, for example concerning the validity and value of technology rights, thereby promoting more informed negotiations;

(c) helping to address a first-mover disadvantage, namely where technology implementers are unwilling to negotiate a technology transfer agreement before their competitors have done so ([129]).

([127]) See Section 3.5 of these Guidelines.

([128]) Unless indicated otherwise, references in this Section to technology holders include individual right holders, technology pools and intermediary platforms.

([129]) The guidance in this Section is without prejudice to obligations arising under intellectual property law for technology implementers to obtain licences in order to exploit technology rights.

Possible anti-competitive effects of LNGs

301. The possible anti-competitive effects of LNGs include:

(a) the creation of excessive bargaining power for participating technology implementers, enabling them to force technology holders to accept sub-competitive licensing terms (below FRAND in the case of standard-essential patents), which may disincentivise innovation by technology holders ([130]);

(b) the exchange of commercially sensitive information between competing technology implementers, resulting in a loss of strategic uncertainty, contrary to the principle that each undertaking must determine its conduct on the market independently;

(c) increased commonality of costs between competing technology implementers, which may facilitate coordination in downstream product markets;

(d) collusion between participating implementers in downstream product markets ([131]);

(e) foreclosure of competing implementers in downstream product markets ([132]).

4.5.2. **Assessment under Article 101(1) of the Treaty**

Main competition concerns

302. LNGs comprising actual or potential competitors may lead to restrictions of competition on upstream markets for the licensing of technology and/or downstream product markets, resulting in reduced innovation, product quality, variety or output, increased prices, market allocation, or anti-competitive foreclosure of other technology implementers.

Restrictions of competition by object

303. LNGs that operate transparently vis-à-vis technology right holders and that are limited to the joint negotiation of the terms of technology transfer agreements generally do not restrict competition by object.

304. LNGs can be distinguished from buyer cartels, namely agreements or concerted practices between two or more purchasers ([133]) which, outside any joint purchasing arrangement that interacts collectively with suppliers on behalf of its members: (i) coordinate the purchasers' individual behaviour on the purchasing market;(ii) influence relevant parameters of competition between them, or (iii) involve the exchange of commercially sensitive information between the purchasers about their purchasing intentions or their negotiations with suppliers ([134]). In the context of technology licensing, such coordination of purchaser behaviour could notably take the form of a coordinated holdout, namely a refusal or unreasonable delay by technology implementers to negotiate or enter into technology transfer agreements or to accept reasonable licensing terms.

305. Where technology implementers deal individually with technology holders (namely they do not engage in joint negotiations with the technology holder), each implementer must decide its licensing strategy independently and the implementers must not, through agreements or concerted practices, remove strategic uncertainty between themselves regarding their future behaviour on the market. In particular, technology implementers must not, before they engage in individual licensing negotiations with a technology holder, attempt to fix between themselves one or more of the terms of the technology transfer agreement (for example, the scope or field of use of the technology licence, the licence fee, the identity of the licensor or the duration of the licence).

([130]) In particular, LNG members may engage in coordinated hold-outs, namely they may refuse to negotiate or enter into technology transfer agreements, or engage in unreasonable delays.

([131]) See also paragraph (308).

([132]) See also paragraph (309).

([133]) See also paragraphs 279 to 281 of the Guidelines on Horizontal Agreements. References in paragraphs (304) to (306) of these Guidelines to purchasers include by analogy potential licensees of technology.

([134]) See Chapter 6 of the Guidelines on Horizontal Agreements concerning information exchange and, in particular, Section 6.2.6, which also applies to exchanges of commercially sensitive information between purchasers.

306. Buyer cartels reveal by their nature a sufficient degree of harm to competition such that it is not necessary to assess their effects on the market ([135]). They thus constitute a restriction of competition by object within the meaning of Article 101(1) of the Treaty. Accordingly, for the purpose of assessing a buyer cartel, it is not necessary to define the relevant market(s) or to assess the market position of the participating purchasers on the upstream purchasing market or whether they compete on downstream selling markets.

307. The following factors make it less likely that an LNG will constitute a buyer cartel:

(a) The LNG makes clear to technology holders that it negotiates on behalf of its members, with a view to them entering into technology transfer agreements upon the terms agreed through the joint negotiations. This does not require the LNG to disclose systematically to the technology holder the identity of every member, in particular where the membership of the LNG changes frequently ([136]). However, it is not the responsibility of technology holders to take steps to find out about the existence of an LNG, for example through third parties or press reports. That being said, secrecy is not a requirement for establishing a buyer cartel ([137]).

(b) The members of the LNG have defined the form, scope and functioning of their cooperation in a written agreement, so that its compliance with Article 101 can be verified *ex post* and checked against the actual operation of the LNG. However, a written agreement cannot in itself shield the LNG from competition law enforcement.

308. LNGs can also contribute to or serve as a tool to engage in a seller cartel, namely an agreement between competitors to fix sale prices, limit output or share markets or customers on downstream product markets. In that case, the LNG may be assessed together with the cartel on the downstream product market.

309. An LNG that aims to exclude actual or potential competitors of the LNG members from downstream product markets is a form of horizontal boycott and constitutes a restriction of competition by object.

310. An LNG may lead to the exchange of commercially sensitive information between the LNG members, which may be competitors. Where any such exchange is not objectively necessary for the implementation of the LNG and proportionate to the objectives thereof, it may constitute a restriction of competition by object.

Restrictive effects on competition

311. LNGs through which technology implementers interact collectively with technology holders must be assessed in their legal and economic context, with regard to their actual and likely effects on competition. The assessment must cover the possible restrictive effects on relevant technology markets, where the LNG interacts with technology holders, and relevant product markets, where the members of the LNG may compete as suppliers. In that assessment, the Commission will compare the actual or likely effects of the LNG on those markets to the situation that would occur in the absence of the specific LNG.

312. In general, LNGs are less likely to give rise to competition concerns where the members do not have market power on relevant technology licensing markets or on relevant product markets.

([135]) Judgment of the General Court of 7 November 2019, Campine, T-240/17, ECLI:EU:T:2019:778, paragraph 297; see also judgment of the Court of 4 June 2009, T-Mobile Netherlands and Others, C-8/08, ECLI:EU:C:2009:343, paragraph 37; judgment of the Court of First Instance of 13 December 2006, French Beef, joined cases T-217/03 and T-245/03, ECLI:EU:T:2006:391, paragraph 83 and following.

([136]) In general, it will be in the interest of an LNG to provide technology holders with sufficient information about the identity of its members to enable the technology holder to make an informed decision about whether to negotiate with the LNG.

([137]) The Commission has sanctioned buyer cartels that did not operate entirely secretly but at least began in a relatively transparent way. See Commission Decision 2003/600/EC of 2 April 2003, relating to a proceeding pursuant to Article 81 of the EC Treaty (Case COMP/C.38.279/F3 French beef) (OJ L 209, 19.8.2003, p. 12, ELI: http://data.europa.eu/eli/dec/2003/600/oj).

313. Certain restrictions agreed by the members of an LNG may fall outside the scope of Article 101(1) where they are objectively necessary for the implementation of the LNG and proportionate to its objectives ([138]).

Relevant markets

314. LNGs may affect competition on upstream technology licensing markets, namely the markets where the LNG members jointly negotiate with technology holders, and on downstream product markets, namely the markets where the LNG members are active as suppliers.

315. The definition of relevant technology markets follows the principles set out in the Market Definition Notice and relies on the concept of substitutability to identify competitive constraints. As the negotiation of licences by technology implementers is a form of purchasing, the assessment of substitutability focuses on the alternatives available to suppliers of the technology, rather than on the alternatives available to the implementers. In other words, the alternatives available to the technology holders are decisive in identifying the competitive constraints on the LNG members. Those alternatives may be analysed, for example, by examining the technology holders' likely reaction to a small but non-transitory decrease of the price offered for their technologies. Once the relevant market has been defined, the market share of the members of the LNG can be calculated based on the value or volume of their purchases of licences of the relevant technology as a share of the total sales in the relevant technology licensing market.

316. Where the members of the LNG are actual or potential competitors on downstream product markets, those markets are also relevant for the assessment. The relevant product markets are defined using the methodology described in the Market Definition Notice.

Market power

317. There is no absolute threshold above which it can be presumed that the members of an LNG have market power such that the LNG is likely to lead to restrictive effects on competition within the meaning of Article 101(1) of the Treaty. However, in most cases, the members of an LNG are unlikely to have market power if their combined share of demand on relevant technology markets does not exceed 15 % and their combined share of supply on relevant product markets does not exceed 15 %.

318. A market share above that threshold in one or both markets does not in itself indicate that the LNG is likely to lead to restrictive effects on competition. An LNG with a combined market share exceeding that threshold requires a detailed assessment of its effects on the relevant markets, taking into account factors such as the characteristics and market position of the LNG members, market concentration, closeness of competition, the possible existence of contractual or other links between the LNG members and other implementers of the affected technologies, the nature of the technologies affected by the LNG, the operating rules of the LNG (including, for example, whether the LNG members remain free to negotiate and conclude agreements with technology holders outside the LNG), and possible countervailing power of technology holders and downstream customers.

Effects on technology markets

319. Where the members of the LNG have a high combined share of demand on relevant technology markets, the LNG may allow them to exercise joint buying power. This may lead to restrictive effects on competition in the relevant technology markets, for example by reducing the incentives of technology holders to invest in research and development. The risk of such negative effects is greater where an LNG interacts with technology holders that do not have countervailing bargaining power or where the LNG members take coordinated action with the object of restricting the freedom of the technology holder to decide whether to negotiate with the LNG, for example by engaging in coordinated refusals to negotiate or conclude technology transfer agreements. Conversely, such

([138]) See paragraph (19) regarding the concept of ancillary restraints.

negative effects are less likely where technology holders have countervailing bargaining power. That may be the case, for example, where the relevant technologies are essential to a standard that is widely adopted in relevant downstream product markets or for which there are no substitutes; where there are very few licensors and they hold large portfolios of technology rights, or where the LNG negotiates with a technology pool.

320. LNGs may also be used to foreclose competing technology implementers from technology markets and thereby restrict competition on downstream product markets. For example, an LNG may restrict the ability of technology holders to enter into technology transfer agreements with implementers that are not members of the LNG or restrict the terms of such agreements. Foreclosure concerns are less likely where (i) participation in the LNG is open to all technology implementers that fulfil objective and non-discriminatory criteria, (ii) the operating rules of the LNG do not discriminate between members, and (iii) the LNG does not restrict the ability of technology holders to enter into technology transfer agreements with competing implementers or restrict the terms of such agreements.

Effects on downstream product markets

321. Where the members of an LNG are not actual or potential competitors on downstream product markets or do not have market power on those markets, the LNG is unlikely to have restrictive effects on competition in downstream markets.

322. Where the members of an LNG are actual or potential competitors on downstream product markets, the LNG may facilitate coordination of the members' behaviour on the downstream markets ([139]). The risk of such coordination is higher where (i) the structure of the downstream product markets is conducive to collusion (for example, the market is concentrated and displays a significant degree of transparency) or (ii) the members of the LNG have a high combined market share on the downstream product markets.

323. LNGs can also facilitate collusion between their members where the LNG leads to a high degree of commonality of costs (in particular variable costs) between the members, provided the LNG members have market power on the relevant downstream product market and the characteristics of the market are conducive to coordination.

324. The implementation of an LNG may lead to the exchange of commercially sensitive information between the LNG members, for example regarding the terms upon which they would be willing to enter into technology transfer agreements. Where the LNG itself does not fall within Article 101(1) of the Treaty because it has neutral or positive effects on competition, an information exchange that is objectively necessary to implement the LNG and is proportionate to the objectives thereof does not fall within that prohibition either ([140]).

325. The exchange of commercially sensitive information may facilitate coordination in relation to sale prices and output and thus lead to a collusive outcome on downstream product markets. To minimise the risk of unnecessary exchanges of commercially sensitive information, LNGs can implement clean teams, independent managers or other safeguards, for example to ensure that commercially sensitive information is only shared between the LNG members in anonymised and/or aggregated form. Safeguards can also be implemented to ensure that commercially sensitive information is not shared with other LNGs, for example in cases where members participate in more than one LNG.

([139]) See also paragraph (308) regarding the possibility that LNGs may be used as a tool to engage in a seller cartel on downstream product markets.

([140]) Judgment of the Court of 11 September 2014, *MasterCard v Commission*, C-382/12 P, ECLI:EU:C:2014:2201, paragraph 89. See also paragraph 369 of the Guidelines on Horizontal Agreements.

Safe harbour

326. LNGs that do not involve restrictions of competition by object and that fulfil all of the following conditions are in general unlikely to restrict competition within the meaning of Article 101(1) of the Treaty or are likely to fulfil the conditions of Article 101(3):

(a) participation in the LNG is open to all technology implementers that meet objective and non-discriminatory criteria;

(b) the LNG discloses to technology holders its operating rules and the fact that it negotiates on behalf of its members;

(c) the activity of the LNG is limited to the joint negotiation of the terms of technology transfer agreements;

(d) the members of the LNG do not exchange commercially sensitive information other than information that is objectively necessary and proportionate for the conduct of joint negotiations through the LNG;

(e) the members of the LNG do not engage in coordinated behaviour, including coordinated hold-outs, that has the object of limiting either the freedom of technology holders to decide whether or not to enter into or to terminate negotiations with the LNG, or the freedom of LNG members to negotiate and conclude agreements bilaterally with technology holders, without prejudice to the possibility for the LNG members to agree that they will not bilaterally negotiate or conclude technology transfer agreements with a technology holder during negotiations between that technology holder and the LNG, provided that the duration of such restriction does not exceed 6 months;

(f) the LNG and any technology transfer agreements negotiated through the LNG do not restrict the ability of technology holders to enter into technology transfer agreements with third parties or restrict the terms of those agreements;

(g) the licensing fees payable under technology transfer agreements negotiated through the LNG do not exceed 10 % of the sale price of the products incorporating the licensed technology.

327. LNGs that do not fulfil the above conditions require an individual assessment under Article 101 of the Treaty. There is no presumption that such LNGs restrict competition within the meaning of Article 101(1) or that they do not fulfil the conditions of Article 101(3).

4.5.3. **Assessment under Article 101(3) of the Treaty**

328. Where an LNG restricts competition within the meaning of Article 101(1) of the Treaty, it is necessary to assess whether the LNG generates efficiencies that fulfil the conditions of Article 101(3).

Efficiency gains

329. LNGs can generate efficiency gains. In particular, they can reduce licensing transaction costs for both technology implementers and technology holders, notably by eliminating the need for each LNG member to engage in bilateral licensing negotiations with a particular technology holder. By pooling the expertise of technology implementers, LNGs can reduce information asymmetries between technology implementers and holders, leading to more informed negotiations, including on whether proposed licensing terms are FRAND. LNGs can also address a first-mover disadvantage, whereby technology implementers may be unwilling to enter into a technology transfer agreement before their competitors have done so. These efficiencies may result in the conclusion of a greater number of technology transfer agreements and thus a wider dissemination of technology. This can in turn be expected to lead to more innovation in the market, to the benefit of consumers.

Indispensability

330. Restrictions that go beyond what is necessary to achieve the efficiency gains generated by an LNG do not meet the conditions of Article 101(3). For example, for the purpose of reducing licensing transaction costs, it may not be indispensable for an LNG to require a technology holder not to grant more favourable licensing terms to third parties.

Pass-on to consumers

331. Efficiency gains that are attained by indispensable restrictions must be passed on to consumers to an extent that outweighs any restrictive effects on competition caused by the LNG. For example, reductions in technology licensing costs may be passed on in the form of lower sale prices on downstream product markets. Consumer pass-on is more likely where the members of the LNG do not have market power in downstream product markets.

No elimination of competition

332. The conditions of Article 101(3) of the Treaty will not be fulfilled if the LNG enables the parties to eliminate competition in respect of a substantial part of the products in question. This condition applies both to relevant technology markets and to relevant product markets. High combined market shares are one indication that this condition may not be fulfilled.