

Competition rules relating to technology transfer agreements**Communication pursuant to Article 5 of Council Regulation No 19/65/EEC of 2 March 1965 on the application of Article 81(3) of the EC Treaty to certain categories of agreements and concerted practices, as last amended by Regulation (EC) No 1/2003**

(2003/C 235/04)

(Text with EEA relevance)

The Commission invites all interested parties to send their comments on the following texts:

- draft Commission Regulation on the application of Article 81(3) of the EC Treaty to categories of technology transfer agreements,
- draft Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements.

These comments should be sent to the Commission not later than eight weeks after the date of the publication in the *Official Journal of the European Union*. It is standard Commission practice to publish the submissions received in response to a public consultation. However, it is possible to request that submissions or parts thereof remain confidential. Should this be the case, please indicate clearly on the front page of the submission that you request it should not be made publicly available. In this case, a non-confidential version of the submission should also be forwarded to the Commission for publication. Comments should be sent either by e-mail to:

COMP-TECHNOLOGY-TRANSFER@cec.eu.int

or in writing to:

European Commission
Directorate-General for Competition
Unit A 1 — Policy Development (Antitrust/mergers)
Technology Transfer Review
B-1049 Brussels.

Draft Commission Regulation on the application of Article 81(3) of the Treaty to categories of technology transfer agreements

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Council Regulation No 19/65/EEC of 2 March 1965 on application of Article 85(3) of the Treaty to certain categories of agreements and concerted practices ⁽¹⁾, as last amended by Regulation (EC) No 1/2003 ⁽²⁾, and in particular Article 1 thereof,

Having published a draft of this Regulation ⁽³⁾,

Having consulted the Advisory Committee on Restrictive Practices and Dominant Positions,

Whereas:

- (1) Regulation No 19/65/EEC empowers the Commission to apply Article 81(3) of the Treaty by Regulation to certain categories of technology transfer agreements and corresponding concerted practices to which only two undertakings are party, falling within Article 81(1).
- (2) Pursuant to Regulation No 19/65/EEC, the Commission has, in particular, adopted Regulation (EC) No 240/96 of 31 January 1996 on the application of Article 81(3) of the Treaty to certain categories of technology transfer agreements ⁽⁴⁾.
- (3) On 20 December 2001 the Commission published an Evaluation Report on the Transfer of Technology Block Exemption Regulation (EC) No 240/96 ⁽⁵⁾. This generated a public debate on the application of this Regulation and on the application in general of Articles 81(1) and (3) of the Treaty to technology transfer agreements. The response to the Evaluation Report from Member States and third parties has been generally in favour of reform of Community competition policy on technology transfer agreements. It has been considered therefore that Regulation (EC) No 240/96 should be replaced.
- (4) A new regulation, replacing Regulation (EC) No 240/96, should meet the two requirements of ensuring effective competition and providing adequate legal security for undertakings. The pursuit of these objectives should take account of the need to simplify the regulatory framework and its application. It is appropriate to move away from

the approach of listing exempted clauses and to place greater emphasis on defining the categories of agreements which are exempted up to a certain level of market power and on specifying the restrictions or clauses which are not to be contained in such agreements. This is consistent with an economics based approach which assesses the impact of agreements on the relevant market. It is also consistent with such an approach to make a distinction between agreements between competitors and agreements between non-competitors.

- (5) Technology transfer agreements concern the licensing of technology. This Regulation should only deal with such agreements where the licensor permits the licensee to exploit the licensed technology for the manufacture or provision of goods or services. It should not deal with licensing agreements for the purpose of doing further research and development. It should also not deal with licensing agreements to set up patent pools, i.e. agreements for the pooling of technologies with the purpose of licensing the created package of intellectual property rights to third parties.
- (6) For the application of Article 81(3) by regulation, it is not necessary to define those technology transfer agreements that are capable of falling within Article 81(1). In the individual assessment of agreements under Article 81(1), account has to be taken of several factors, and in particular the market structure on the relevant technology and product markets.
- (7) The benefit of the block exemption should be limited to those agreements which can be assumed with sufficient certainty to satisfy the conditions of Article 81(3). In order to attain the benefits and objectives of technology transfer the benefit of this Regulation should also apply to provisions contained in technology transfer agreements that do not constitute the primary object of such agreements, but are directly related to the application of the licensed technology.
- (8) Transfer of technology agreements will usually improve economic efficiency and be pro-competitive as they can facilitate diffusion, reduce duplication of research and development, strengthen the incentive for the initial research and development, spur incremental innovation and generate product market competition.
- (9) The likelihood that such efficiency enhancing and pro-competitive effects will outweigh any anti-competitive effects due to 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.

⁽¹⁾ OJ 36, 6.3.1965, p. 533/65.

⁽²⁾ OJ L 1, 4.1.2003, p. 1.

⁽³⁾ OJ C 235, 1.10.2003, p. 10.

⁽⁴⁾ OJ L 31, 9.2.1996, p. 2.

⁽⁵⁾ COM(2001) 786 final, 20.12.2001.

- (10) For technology transfer agreements between competitors, it can be presumed that, where the combined share of the relevant markets accounted for by the parties does not exceed 20 % and the agreements do not contain certain severely anti-competitive restraints, that they generally lead to an improvement in production or distribution and allow consumers a fair share of the resulting benefits.
- (11) For technology transfer agreements between non-competitors it can be presumed that, where the individual share of the relevant markets accounted for by each of the parties does not exceed 30 % and the agreements do not contain certain severely anti-competitive restraints, that they generally lead to an improvement in production or distribution and allow consumers a fair share of the resulting benefits.
- (12) Above these market share thresholds there can be no presumption that technology transfer agreements falling within the scope of Article 81(1) will usually give rise to objective advantages of such a character and size as to compensate for the disadvantages which they create for competition.
- (13) 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 restraints 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. In the case of such hardcore restrictions, the whole agreement should be excluded from the benefit of the block exemption.
- (14) In order to protect incentives to innovate and the appropriate application of intellectual property rights, certain conditions should be attached to the block exemption. To this end, the exemption of, in particular, grant back obligations for severable improvements should be limited to non-exclusive obligations. Where such conditions are not respected, only the restriction in question should be excluded from the benefit of the block exemption.
- (15) The market-share thresholds, the non-exemption of technology transfer agreements containing severely anti-competitive restraints and the conditions 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.
- (16) In particular cases in which the agreements falling under this Regulation nevertheless have effects incompatible with Article 81(3), the Commission may withdraw the benefit of the block exemption. This may occur in particular where the incentives to innovate are reduced or where access to the markets is hindered.
- (17) Regulation (EC) No 1/2003 empowers the competent authorities of Member States to withdraw the benefit of the block exemption in respect of technology transfer agreements having effects incompatible with the conditions laid down in Article 81(3), where such effects are felt in their respective territory, or in a part thereof, and where such territory has the characteristics of a distinct geographic market. Member States should ensure that the exercise of this power of withdrawal does not prejudice the uniform application throughout the common market of the Community competition rules or the full effect of the measures adopted in implementation of those rules.
- (18) 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 declare this Regulation inapplicable to technology transfer agreements containing specific restraints relating to the market concerned, thereby restoring the full application of Article 81 to such agreements.
- (19) This Regulation only covers technology transfer agreements between a licensor and a licensee. It covers such agreements even if conditions are stipulated for more than one level of trade, by 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 must comply with the competition rules applicable to supply and distribution agreements. Supply and distribution agreements concluded between a licensee and its buyers are not exempted by this Regulation. These agreements are only exempted if covered by a block exemption regulation for supply and distribution agreements.
- (20) This Regulation is without prejudice to the application of Article 82,
- 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 transfer agreement' means a patent licensing agreement, a know-how licensing agreement, a software copyright licensing agreement or a mixed patent, know-how or software copyright licensing agreement, including such agreement containing provisions which relate to the sale and purchase of products or which relate to the licensing of other intellectual property rights or the assignment of intellectual property rights, provided that those provisions do not constitute the primary object of the agreement and are directly related to the manufacture or provision of the contract products; assignments of patents, know-how, software copyright or a combination thereof where the risk associated with the exploitation of the technology remains with the assignor, in particular where the sum payable in consideration of the assignment is dependent on the turnover obtained by the assignee in respect of products manufactured or provided with the assigned technology, the quantity of such products produced or the number of operations carried out employing the technology, shall also be deemed to be technology transfer agreements;
- (c) 'product' means a good and/or a service, including both intermediary goods and/or services and final goods and/or services;
- (d) 'contract products' means products manufactured or provided with the licensed technology;
- (e) 'intellectual property rights' includes industrial property rights, copyright and neighbouring rights;
- (f) 'patents' means patents, patent applications, utility models, applications for registration of utility models, designs, topographies of semiconductor products, supplementary protection certificates for medicinal products or other products for which such supplementary protection certificates may be obtained and plant breeder's certificates;
- (g) 'know-how' means a package of non-patented practical information, resulting from experience and testing, which is secret, substantial and identified: in this context, 'secret' means that the know-how is not generally known or easily accessible; 'substantial' means that the know-how includes information which is indispensable for the manufacture or provision of the contract products; 'identified' means that the know-how is described in a sufficiently comprehensive manner so as to make it possible to verify that it fulfils the criteria of secrecy and substantiality;
- (h) 'competing undertakings' means undertakings which compete on the relevant technology market and/or the relevant product market:
- undertakings compete on the 'relevant technology market' if the undertakings license competing technologies (actual competitors on the technology market),
 - undertakings compete on the 'relevant product market' if the undertakings are both active on the relevant product and geographic market(s) on which the contract products are sold (actual competitors on the product market) or would, on realistic grounds, undertake the necessary additional investments or other necessary switching costs so that they could enter the(se) relevant product and geographic market(s) in response to a small and permanent increase in relative prices (potential competitors on the product market);
- (i) 'selective distribution system' means a distribution system where the licensor undertakes to license the manufacture and provision of the contract products only to licensees selected on the basis of specified criteria and where these licensees undertake not to sell the contract products to unauthorised distributors.
2. The terms 'undertaking', 'licensor' and 'licensee' shall include their respective connected undertakings.
- 'Connected undertakings' means:
- (a) undertakings in which a party to the 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 agreement, the rights or powers listed in (a);
 - (c) undertakings in which an undertaking referred to in (b) has, directly or indirectly, the rights or powers listed in (a);
 - (d) undertakings in which a party to the agreement together with one or more of the undertakings referred to in (a), (b) or (c), or in which two or more of the latter undertakings, jointly have the rights or powers listed in (a);

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

(i) parties to the agreement or their respective connected undertakings referred to in (a) to (d); or

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

Article 2

Exemption

Pursuant to Article 81(3) of the Treaty and subject to the provisions of this Regulation, it is hereby declared that Article 81(1) shall not apply to technology transfer agreements entered into between two undertakings for the manufacture or provision of contract products.

This exemption shall apply to the extent that such agreements contain restrictions of competition falling within the scope of Article 81(1). The exemption shall apply for as long as the intellectual property right on the licensed technology has not expired or been declared invalid or, in the case of know-how, remains secret, except in the event where the know-how becomes publicly known as a result of action by the licensee, in which case the exemption shall apply for the duration of the agreement.

Article 3

Market share thresholds

1. Where the undertakings party to the technology transfer 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 %, either on a relevant technology market, or on a relevant product market.

2. Where the undertakings party to the technology transfer 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 technology and product markets.

3. For the purposes of paragraphs 1 and 2, the market share of a party on the relevant technology market(s) is defined in terms of the presence of the licensed technology on the relevant product market(s). A licensor's market share on the relevant technology market(s) shall be the combined market

share on the relevant product market(s) of the contract products manufactured or provided by the licensor and its licensees.

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:

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

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

(c) the allocation of markets or customers except:

(i) the obligation on the licensee in a non-reciprocal agreement to exploit the licensed technology only within one or more technical fields of use or one or more product markets;

(ii) the requirement that the licensee manufactures or provides the contract products only for its own use, including sale of the contract products as spare parts for its own products;

(d) the restriction of the licensee's ability to exploit its own technology or the restriction of the ability 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:

(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 sell the contract products, except:
- (i) the restriction of sales into the exclusive territory or to an exclusive customer group reserved for sales by the licensor;
 - (ii) the restriction of active sales into the exclusive territory or to an exclusive customer group allocated by the licensor to another licensee;
 - (iii) the requirement that the licensee manufactures or provides the contract products only for its own use, including sale of the contract products as spare parts for its own products;
 - (iv) the restriction of sales to end users by a licensee operating at the whole sale level of trade;
 - (v) the restriction of sales to unauthorised distributors by the members of a selective distribution system;
- (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.

Article 5

Conditions

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 license to the licensor or to a third party designated by the licensor in respect of its own severable improvements to or its new applications of the licensed technology;
 - (b) any direct or indirect obligation on the licensee to assign, in whole or in part, to the licensor or to a third party designated by the licensor, rights to improvements to or new applications of the licensed technology;
 - (c) any direct or indirect obligation not to challenge the validity or contest the secrecy or substantiality of intellectual property rights which the licensor holds in the

common market, without prejudice to the possibility to provide for termination of the technology transfer agreement in the event that the licensee challenges the validity or contests the secrecy or substantiality of the licensed intellectual property rights.

2. The exemption provided for in Article 2 shall not apply to any direct or indirect obligation limiting the output of contract products by the licensee in a non-reciprocal technology transfer agreement between competing undertakings.

3. The exemption provided for in Article 2 shall not apply, where the undertakings party to the agreement are not competing undertakings, to any direct or indirect obligation limiting the licensee's ability to exploit its own technology or limiting the ability 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 of the benefit of the Regulation

1. The Commission may withdraw the benefit of this Regulation, pursuant to Article 29 of Regulation (EC) No 1/2003, where it finds in any particular case, that a technology transfer agreement to which this Regulation applies nevertheless has effects which are incompatible with the conditions laid down in Article 81(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;
- (c) without any objectively valid reason, the parties do not exploit the licensed technology.

2. Where in any particular case, a technology transfer agreement to which the exemption provided for in Article 2 applies has effects incompatible with the conditions laid down in Article 81(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 application of this Regulation in respect of that territory, under the same conditions as those set out in paragraph 1.

*Article 7***Non-application of the 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 restraints 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**

1. For the purposes of applying the market share thresholds provided for in Article 3, the following rules shall apply:

- (a) the market share shall be calculated on the basis of market sales value data; 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;
- (c) the market share held by the undertakings referred to in point 2(e) of Article 1 shall be apportioned equally to each undertaking having the rights or the powers listed in point 2(a) of Article 1.

2. If the market share referred to in Article 3(1) or Article 3(2) is initially not more than 20 % respectively 30 % but subsequently rises above those levels without exceeding 25 % respectively 35 %, the exemption provided for in Article 2 shall continue to apply for a period of two consecutive calendar years following the year in which the 20 % threshold or 30 % threshold was first exceeded.

3. If the market share referred to in Article 3(1) or Article 3(2) is initially not more than 20 % respectively 30 % but subsequently rises above 25 % respectively 35 %, the exemption provided for in Article 2 shall continue to apply for one calendar year following the year in which the level of 25 % or 35 % was first exceeded.

4. The benefit of paragraphs 2 and 3 may not be combined so as to exceed a period of two calendar years.

*Article 9***Transitional period**

1. Regulation (EC) No 240/96 is repealed with effect from 1 May 2004.

2. The prohibition laid down in Article 81(1) of the Treaty shall not apply during the period from 1 May 2004 to 31 October 2005 in respect of agreements already in force on 30 April 2004 which do not satisfy the conditions for exemption provided for in this Regulation but which, on 30 April 2004, satisfied the conditions for exemption provided for in Regulation (EC) No 240/96.

*Article 10***Period of validity**

This Regulation shall enter into force on 1 May 2004.

It shall expire on 30 April 2014.

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

Done at Brussels, ...

Draft Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements

I. INTRODUCTION

1. These guidelines set out the principles for the assessment of technology transfer agreements under Article 81 of the Treaty. Technology transfer agreements concern the licensing of technology where the licensor permits the licensee to exploit the licensed technology for the manufacture or provision of goods or services, as defined in Commission Regulation (EC) No .../2004 on the application of Article 81(3) of the Treaty to categories of technology transfer agreements (the TTBER) ⁽¹⁾.
2. The purpose of the guidelines is to provide guidance on the application of the TTBER as well as on the application of Article 81 to technology transfer agreements that fall outside the scope of the TTBER. The guidelines are without prejudice to the possible parallel application of Article 82 of the Treaty to licensing agreements. The application of Article 81(3) by way of individual application or by way of block exemption does not preclude the application of Article 82 ⁽²⁾.
3. The standards set forth in these guidelines must be applied in light of the circumstances specific to each case. This excludes a mechanical application. Each case must be assessed on its own facts and the guidelines must be applied reasonably and flexibly. The Commission will keep under review the functioning of the TTBER and the guidelines to consider whether changes need to be made.
4. The present guidelines are without prejudice to the interpretation of Article 81 that may be given by the Court of Justice and the Court of First Instance.

II. GENERAL PRINCIPLES

1. Article 81 and intellectual property rights

5. The aim of Article 81 as a whole is to protect competition on the market with a view to promoting consumer welfare and an efficient allocation of resources. Article 81(1) prohibits all agreements and concerted practices between undertakings and decisions by associations of undertakings ⁽³⁾ which may affect trade between Member States ⁽⁴⁾ and which have as their object or effect the prevention, restriction or distortion of competition ⁽⁵⁾. As an exception to this rule Article 81(3) provides that the prohibition contained in Article 81(1) may be declared inapplicable in case of agreements which contribute to improving the production or distribution of products or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefits, and which do not impose restrictions which are not indispensable to the attainment of these objectives, and do not afford such

undertakings the possibility of eliminating competition in respect of a substantial part of the products concerned.

6. 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 his intellectual property and to exploit it, *inter alia*, by licensing it to third parties. Once a product incorporating an intellectual property right has been put on the market inside the EEA by the holder or with his consent, the intellectual property right is exhausted in the sense that the holder can no longer use it to control the sale of the product ⁽⁶⁾. The licensor has no legally protected right to prevent sales by licensees or buyers of products incorporating the licensed technology. On the other hand, the sale of copies of a protected work does not lead to the exhaustion of performance rights, including rental rights, in the work ⁽⁷⁾. The principle of 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 his intellectual property without his consent.
7. The fact that intellectual property laws grant exclusive rights of exploitation does not imply that intellectual property rights are immune from competition law intervention. Articles 81 and 82 are applicable to agreements whereby the holder licenses another undertaking to exploit its intellectual property rights ⁽⁸⁾. Nor does it imply that there is an inherent conflict between intellectual property rights and the Community competition rules. Indeed, both bodies of law share the same basic objective of promoting consumer welfare and an efficient allocation of resources. Innovation constitutes an essential and dynamic component of an open and competitive market economy. Intellectual property rights promote dynamic competition by encouraging undertakings to invest in developing new or improved products and processes. So does competition since it pushes undertakings to innovate. Therefore, both intellectual property rights and competition are necessary to promote innovation and ensure a competitive exploitation thereof.
8. The assessment under Article 81 does not only focus on the *ex post* situation where the exclusive right may reduce the level of rivalry on the market. In order not to reduce dynamic competition it must be kept in mind that the creation of intellectual property rights often entail substantial investment and that it is often a risky endeavour. Many intellectual property rights have little commercial value. In order to maintain the incentive to innovate, the innovator must therefore not be unduly restricted in the exploitation of intellectual property rights that turn out to be valuable.

9. In assessing licensing agreements under Article 81 the Commission applies to intellectual property rights in principle the same analytical framework as in the case of any other property. This framework is sufficiently flexible to allow the Commission to take due account of the dynamic aspects of technology licensing. This means, in particular, that there is no presumption that intellectual property rights and licence agreements as such give rise to competition concerns. Licence agreements may be non-restrictive of competition and create only pro-competitive efficiencies. Also, restrictive licence agreements may often give rise to pro-competitive efficiencies, which must be considered under Article 81(3) and balanced against the negative effects on competition, which flow from such restrictive agreements⁽⁹⁾.

2. The general framework for applying Article 81

10. Article 81(1) applies both to restrictions of competition between the parties to an agreement and to restrictions of competition between the parties or any of the parties and third parties. These restrictions of competition can be either restrictions by object or restrictions by effect. Restrictions of competition by object are those that by their very nature restrict competition. These are restrictions which in light of the objectives pursued by the Community competition rules are presumed to have negative effects on competition and in respect of which it is therefore unnecessary for the purposes of applying Article 81(1) to demonstrate any actual effects on the market⁽¹⁰⁾. Moreover, the conditions of Article 81(3) are unlikely to be fulfilled in the case of restrictions by object. The assessment of whether or not an agreement has as its object the restriction of competition is based on a number of factors. These factors include, in particular, the content of the agreement and the objective aims pursued by it. It may also be necessary to consider the context in which it is (to be) applied or the actual conduct and behaviour of the parties on the market⁽¹¹⁾. The way in which an agreement is actually implemented may reveal a restriction by object even where the formal agreement does not contain an express provision to that effect. Evidence of subjective intent on the part of the parties to restrict competition is a relevant factor but not a necessary condition. For licence agreements, the Commission considers that the restrictions covered by the list of hardcore restrictions of competition contained in Article 4 of the TTBER are restrictive by their very object.

11. For licence agreements to be restrictive of competition by effect they must be capable of affecting competition to such an extent that on the relevant market negative effects on prices, output, innovation or the variety or quality of goods and services can be expected with a reasonable degree of probability. The likely negative effects on competition must be appreciable⁽¹²⁾. Anti-competitive effects are likely to occur when at least one of the parties has or obtains some degree of market power and the agreement contributes to the creation, maintenance or strengthening of that market power or

allows the parties to exploit such market power. Market power is the ability to maintain prices above competitive levels or to maintain output in terms of product quantities, product quality and variety or innovation below competitive levels for a significant period of time.

12. Licence agreements can contribute to the creation, maintenance or strengthening of market power by restricting competition between the parties or by restricting competition from third parties. In the assessment of the likely negative effects on competition, it is important to take account not only of effects on price and output but also of any negative impact on innovation. Licence agreements that have an appreciable negative impact on innovation by the parties to the agreement or by third parties are caught by Article 81(1).

13. For the purposes of analysing the restrictive effects of agreements, it is normally necessary to define the relevant market and to examine and assess, *inter alia*, the nature of the products and technologies concerned, the market position of the parties, the market position of competitors, the market position of buyers, the existence of potential competitors and the level of entry barriers.

14. The assessment of whether a licence agreement is restrictive of competition must be made within the actual context in which competition would occur in the absence of the agreement with its alleged restrictions⁽¹³⁾. In making this assessment it is necessary to take account of the likely impact of the agreement on inter-technology competition (i.e. competition between undertakings using competing technologies) and on intra-technology competition (i.e. competition between undertakings using the same technology)⁽¹⁴⁾. Article 81(1) prohibits restrictions of both inter-technology competition and intra-technology competition. In order to ascertain whether an agreement or its individual parts are restrictive of competition within the meaning of Article 81(1) it is relevant to ask the following two questions. The first question relates to the impact of the agreement on inter-technology competition while the second question relates to the impact of the agreement on intra-technology competition:

(a) Does the agreement restrict actual or potential competition that would have existed had no licence been granted? If so, the agreement is normally caught by Article 81(1) provided that trade between Member States is capable of being appreciably affected. For instance, where two undertakings established in different Member States cross licence competing technologies and undertake not to sell products in each others home markets, (potential) competition that existed prior to the agreement is restricted. Similarly, where a licensor imposes on his licensees not to use competing technologies and these obligations foreclose third party technologies, actual or potential competition that would have existed in the absence of the agreement is restricted.

- (b) Does the agreement restrict competition that would have existed in the absence of its alleged restriction(s) of competition? This question relates to the issue of whether or not the restriction is objectively necessary for the conclusion of the agreement. If so, the agreement with its restraints is not caught by Article 81(1). This assessment is 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 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 have been concluded by undertakings in a similar setting. For instance, territorial restraints in an agreement between non-competitors may fall outside Article 81(1), if the restraints are objectively necessary in order to penetrate a new market. Claims that in the absence of a restriction the supplier would have resorted to vertical integration are not sufficient. Decisions on whether or not to vertically integrate depend on a broad range of complex economic factors, a number of which are internal to the undertaking concerned. The initial choice to rely on cooperation rather than vertical integration anyhow already generally indicates that vertical integration was not practicable.
15. Licence agreements, however, are not only capable of producing anti-competitive effects. They also have significant pro-competitive potential. Licence agreements may promote innovation by allowing innovators to earn returns to cover at least part of their research and development costs. Licence agreements may also lead to a dissemination of technologies, which creates value by reducing the production costs of the licensee or by enabling him to produce new or improved products. Efficiencies at the level of the licensee normally stem from a combination of the licensor's technology with the assets and technologies of the licensee. Such integration of complementary assets may lead to a cost/output configuration that would not otherwise be possible. For instance, the combination of an improved technology of the licensor with more efficient production or distribution assets of the licensee may reduce production costs or lead to the production of a higher quality product.
16. The pro-competitive effects of licence agreements must be balanced against the restrictive effects in the context of Article 81(3). When all four conditions of Article 81(3) are fulfilled, the restrictive licence agreement in question is valid and enforceable, no prior decision to that effect being required⁽¹⁵⁾. Hardcore restrictions of competition only fulfil the conditions of Article 81(3) in very exceptional circumstances. Such agreements generally fail (at least) one of the first two conditions of Article 81(3). They normally do not create objective economic benefits or benefits for consumers. Moreover, these types of agreements generally also fail the indispensability test under the third condition. For example, if two competitors license each other their respective technologies and as part of this agreement restrict each other's pricing or output of the products produced with these technologies, this will normally lead to a lower output and a misallocation of resources and higher prices for the consumers. The price and output restrictions on the products to be produced are also not indispensable to achieve the possible efficiencies resulting from the availability to both competitors of the two technologies.
- ### 3. Market definition
17. The Commission's approach to defining the relevant market is laid down in its market definition guidelines⁽¹⁶⁾. The present guidelines only address aspects of market definition that are of particular importance in the field of technology licensing.
18. Technology is an input, which is either integrated into a product or a production process. Technology licensing can therefore affect competition both in input markets and in output markets. An agreement between two parties which sell competing products and which cross licence technologies used for the production of these products may restrict competition on the product market concerned. It may also restrict competition on the market for technology and possibly also on other input markets. For the purposes of assessing the competitive effects of licence agreements it may therefore be necessary to define relevant goods and service markets (product markets) as well as technology markets⁽¹⁷⁾. The term 'product market' used in Article 3 of the TTBER refers to relevant goods and service markets in both their geographic and product dimension. As is clear from Article 1(1)(h) of the TTBER the term is used merely to distinguish relevant goods and service markets from relevant technology markets.
19. Product markets comprise in particular final and intermediate products incorporating the licensed technology as well as their substitutes.
20. Technology markets consist of the licensed technology and its substitutes, i.e. other technologies which customers could use as substitutes. The methodology for defining technology markets follows the same principles as the definition of product markets. Starting from the technology, which is marketed by the parties, one needs to identify those other technologies to which customers could switch in response to a small but permanent increase in relative prices, i.e. the royalties. An alternative approach is to look at the market for products incorporating the licensed technology, cf. point 21 below.

21. 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. An alternative approach, which is the one used in Article 3(3) 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. Under this approach all sales are taken into account, irrespective of whether the product incorporates a technology that is being licensed. By taking into account technologies that are (only) being used in-house, Article 3(3) departs from standard practice⁽¹⁸⁾. However, in the case of technology markets the approach of Article 3(3) is considered justified. Indeed, this approach is in general a good indicator of the strength of the 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 small but permanent increase in the price for licenses. 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 he has a high share of licensing income. If the downstream product market is competitive, competition at this level may effectively constrain the licensor. An increase in royalties upstream affects the costs of the licensee, making him less competitive, causing him 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. In individual cases outside the safe harbour of the TTBER, it may be necessary, however, to apply both of the described approaches in order to accurately assess the market strength of the licensor.

22. Some licence agreements may affect innovation. 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⁽¹⁹⁾. Competition on such existing markets may be affected by agreements that retard 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 useful and necessary to define innovation markets. This is particularly the case where the agreement affects innovation aiming at creating new products and where it is possible at an early stage to identify research and development poles⁽²⁰⁾. In such cases, it can be analysed whether after the agreement there will be a sufficient number of competing research and development poles

left for effective competition in innovation to be maintained.

4. The distinction between competitors and non-competitors

23. In general agreements between competitors pose a greater risk to competition on the market than agreements between non-competitors. However, competition between undertakings that use the same technology (intra-technology competition) 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 to consumers of these products, but also spur further competition between undertakings that use competing technologies. In the context of licensing it must also be taken into account that licensees are selling their own product. 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.

24. In order to determine the competitive relationship between the parties, it must be examined 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, they are deemed to be non-competitors. Where on the other hand, the licensor and the licensee are both active on the same product market or the same technology market, they are actual competitors on the market concerned. The parties are considered to be potential competitors on the product market if in the absence of the agreement they would likely have undertaken the necessary additional investment to enter the relevant market in response to a small but permanent increase in product prices. The parties are for instance likely to be considered potential competitors on the product market 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 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. The parties are considered to be potential competitors on the technology market where they own substitutable technologies, even if in the specific case the licensee is not licensing his own technology, provided that he would be likely to do so in the face of a small but permanent increase in technology prices.

25. If the parties own technologies that are in a one-way or two-way blocking position, the parties are considered to be non-competitors on the technology market. A one-way blocking position exists when a technology cannot be exploited without infringing upon another technology. This is for instance the case, where one patent covers an improvement of a technology covered by another patent. In that case, the exploitation of the improvement patent presupposes that the holder obtains a licence to the basic patent. A two-way blocking position exists where neither technology can be exploited without infringing upon the other technology and where the holders thus need to obtain a licence or a waiver from each other. In assessing whether a blocking position exists the Commission will rely on objective factors as opposed to the subjective views of the parties. The Commission assumes that holders of technologies, which from a technical point of view are substitutable, are potential competitors on the technology market, unless the parties provide convincing evidence of the existence of a blocking position. Particularly convincing evidence is required in the case of a two-way blocking position. Relevant evidence comprises final court decisions on the matter and opinions of independent experts. In the latter case the Commission will, in particular, closely examine how the expert has been selected.

26. 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 market. Often, however, it is not possible to come to this conclusion at the time of the conclusion of the agreement. 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 CD technology was developed and players and discs were put on the market, it was not obvious that this new technology would replace LP technology. 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 Articles 81(1) and 81(3) must be applied in light of the actual context in which the agreement occurs, the assessment is sensitive to material changes in the facts. The classification of the relationship between the parties will therefore change if at a later point in time the licensee's technology becomes obsolete or uncompetitive on the market.

III. APPLICATION OF THE BLOCK EXEMPTION REGULATION

1. The effects of the block exemption

27. Technology transfer agreements that fulfil the conditions set out in the TTBER are block exempted from the prohibition rule contained in Article 81(1). Block exempted agreements are legally valid and enforceable. Such agreements can only be prohibited for the future and only upon formal withdrawal of the block exemption by the Commission or a Member State competition authority. Block exempted agreements cannot be held invalid on competition grounds by national courts in the context of private litigation.
28. Block exemption of categories of restrictive technology transfer agreements is based on the presumption that such agreements fulfil the four conditions laid down in Article 81(3). It is thus presumed that the agreements give rise to economic efficiencies, that the restrictions contained in the agreements are indispensable to the attainment of these efficiencies, that consumers within the affected markets receive a fair share of the efficiency gains and that the agreements do not afford the undertakings concerned the possibility of eliminating competition in respect of a substantial part of the products in question. The market share thresholds (Article 3), the hardcore list (Article 4) and the conditions (Article 5) aim at ensuring that only agreements that can reasonably be presumed to fulfil the four conditions of Article 81(3) are block exempted.
29. Most technology transfer agreements are not restrictive of competition within the meaning of Article 81(1). In a number of cases, some of which are mentioned in section IV below, individual licence agreements fall outside Article 81(1) either because they do not restrict competition at all or because the restriction of competition is not appreciable⁽²¹⁾. To the extent that such agreements would anyhow fall within the scope of the TTBER, there is no need to determine whether they are caught by Article 81(1)⁽²²⁾.
30. Outside the scope of the block exemption, it becomes relevant to examine whether in the individual case the agreement is caught by Article 81(1) and if so whether the conditions of Article 81(3) are satisfied. There is no presumption that technology transfer agreements falling outside the block exemption are incompatible with Article 81. In particular, there is no presumption of illegality merely because the market shares of the parties exceed the market share thresholds set out in Article 3 of the TTBER. Such agreements may be non-restrictive or, if restrictive, may fulfil the conditions of Article 81(3). The non-application of the block exemption merely signifies that individual assessment is required. It is only when agreements contain hardcore restrictions of competition that it can normally be presumed that they are prohibited by Article 81.

2. Scope and duration of the Block Exemption Regulation

2.1. Agreements between two parties

31. According to Article 2(1) of the TTBER the Regulation covers technology transfer agreements 'between two undertakings'. Technology transfer agreements between more than two undertakings are not covered by the TTBER. The decisive factor in terms of distinguishing between agreements between two parties and multiparty agreements is whether the agreement in question is concluded between more than two parties.

32. Agreements concluded by two parties fall within the scope of the TTBER even if the agreement stipulates conditions for more than one level of trade. For instance, the TTBER applies to a licence 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 ⁽²³⁾.

33. 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 parties. 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 parties, the Commission will apply by analogy the principles set out in the TTBER. Agreements between more than two undertakings that would have been block exempted had they been concluded between only two undertakings will in principle be treated as if they were covered by the block exemption.

2.2. Agreements for the manufacture or provision of contract products

34. It follows from Article 2 that for licence agreements to be covered by the TTBER they must be 'for the manufacture or provision of contract products', i.e. products incorporating or produced with the licensed technology. The TTBER does not cover technology pools. The notion of technology pools covers agreements whereby two or more parties agree to pool their respective technologies and licence them as a package. The notion of technology pools also covers arrangements whereby two or more undertakings agree to licence a third party and authorise him to licence on the package of technologies. Technology pools are dealt with in section IV.4 below. Similarly, the TTBER does not apply to agreements whereby the licensee is authorised by the licensor to grant licenses to third parties (sub-licensees) for the exploitation of the licensor's technology. However, the Commission will apply by analogy the principles set out in the TTBER and these guidelines to such 'master

licensing' agreements between licensor and licensee. Agreements between the licensee and sub-licensees are covered by the TTBER.

35. The TTBER does not apply to licence agreements, including cross licensing agreements, which aim at ensuring that one party does not invoke his intellectual property rights to prevent the other party from exploiting his own technology (non-assertion agreements). Nor does it apply to agreements that aim solely at settling claims that the intellectual property rights of one party infringes upon the intellectual property rights of the other party and vice versa (settlement agreements). In neither case is the agreement entered into for the manufacture or provision of contract products. Such agreements are dealt with in section IV.3 below.

36. The term 'contract products' encompasses goods manufactured or services provided with the licensed technology. This 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 is licensed for the purposes of producing goods and services, including subcontracting by the licensor ⁽²⁴⁾.

37. Subcontracting is an arrangement whereby the licensor licences technology to the licensee who undertakes to manufacture certain products exclusively for the licensor on the basis thereof. 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, the licensed technology and not the supplied equipment must constitute the primary object of the agreement.

38. Subcontracting agreements as such normally fall outside Article 81(1) when the licensed technology or the supplied equipment is necessary for the purpose of producing the goods and services covered by the agreement. It is not in itself restrictive of competition for an undertaking to outsource production to another undertaking and oblige the subcontractor to use the licensed technology only to produce the goods and services covered by the agreement and supply those goods and services exclusively to the licensor. The exclusive supply obligation is inherent in subcontracting and does not constitute a customer restriction for the purposes of the TTBER. The test of necessity is satisfied if in the absence of the agreement the sub-contractor could not have produced a product with the same features as that ordered by the licensor.

39. Subcontracting agreements, however, may be caught by Article 81(1) when they go beyond simple outsourcing as described in the previous point. Competition concerns may for instance arise where subcontracting agreements reduce the ability or incentive of the subcontractor to innovate, where they foreclose third parties or where they facilitate collusion on the market. Restrictions on the subcontractor to carry out research and development and grant back obligations are treated in the same way as in the context of any other licence agreement. The same is true of non-compete obligations, imposing on the subcontractor not to deal with third parties in respect of products not manufactured for the subcontracting licensor or in respect of technologies not licensed from him. However, the mere fact that production under the agreement takes up most or all of the subcontractor's capacity is not sufficient for a finding of foreclosure, provided that the subcontractor is not prevented from expanding his capacity.
40. Subcontracting, as defined, does not encompass research and development subcontracting whereby the licensee undertakes to carry out further research and development in the field covered by the licensed technology and to hand back the improved technology package to the licensor. The main object of such agreements is the provision of research and development services aiming at improving the technology as opposed to the production of goods and services on the basis of the licensed technology. Such agreements fall outside the scope of the TTBER and the present guidelines.
41. Similarly, the TTBER and the guidelines do not cover agreements whereby a technology is licensed for the purposes of enabling the licensee to carry out further research and development for his own account for later exploitation. For instance, the TTBER and the guidelines do not cover the licensing of a technological research tool used in the process of further research activity.
- 2.3. *The concept of technology transfer agreements*
42. The TTBER and these guidelines cover agreements for the transfer of technology. According to Article 1(1)(b) and (f) of the TTBER the concept of 'technology' covers patents and patent applications, utility models and applications for utility models, design rights, plant breeders rights, topographies of semiconductor products, supplementary protection certificates for medicinal products or other products for which such supplementary protection certificates may be obtained, software copyright, and know-how.
43. Know-how is defined in Article 1(1)(g) as a package of non-patented practical information, resulting from experience and testing, which is secret, substantial and identified. 'Secret' means that the know-how is not generally known or easily accessible. 'Substantial' means that the know-how includes information, which is indispensable for the manufacture or provision of the products covered by the licence agreement or the application of the process covered by the licence agreement. 'Identified' means that the know-how is described in a sufficiently comprehensive manner to make it possible to verify that it fulfils the criteria of secrecy and substantiality.
44. 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 his technology against payment of royalties. It can also take the form of sub-licensing, whereby a licensee, having been authorised to do so by the licensor, grants licenses to third parties (sub-licensees) for the exploitation of the technology. In the case of sub-licensing, however, the agreement between the licensor and the licensee is not covered by the TTBER since that licence is not granted for the purpose of producing goods and services on the basis of the licensed technology, cf. point 34 above.
45. According to Article 1(1)(b) of the TTBER, the Regulation also covers agreements whereby technology is assigned, provided that the assignor retains the risk associated with the exploitation of the intellectual property. This is particularly the case where the sum payable in consideration of the assignment is dependent on the turnover obtained by the assignee in respect of the products manufactured or provided with the assigned technology, the quantity of such products produced or the number of operations carried out employing the technology. Such assignments are in functional terms akin to a traditional licence agreement. It is a common feature of licence agreements that the consideration payable to the licensor depends on the licensee's use of the licensed technology. Other cases of assignment are not covered by the TTBER.

46. The TTBER only applies to agreements that have as their primary object the transfer of technology as opposed to the purchase of goods and services or the licensing of other types of intellectual property. Agreements containing provisions relating to the purchase and sale of products are only covered by the TTBER to the extent that those provisions do not constitute the primary object of the agreement and are directly related to the application of the licensed technology. This is likely to be the case where the tied products take the form of machinery or process input which is specifically tailored to incorporate the licensed technology or allow it to be efficiently exploited. If, on the other hand, the product is simply another input into the final product, it must be carefully examined whether the licensed technology constitutes the primary object of the agreement. For instance, in cases where the licensee is already manufacturing a final product on the basis of another technology, the licence must lead to a significant improvement of the licensee's production process, exceeding the value of the product purchased from the licensor. The requirement that the tied products must be directly related to the licensing of technology implies that the TTBER does not cover the purchase of products that have no relation with the products incorporating the licensed technology. This is for example the case where the tied product is not intended to be used with the licensed product, but relates to an activity on a separate product market.
47. The TTBER only covers the licensing of other types of intellectual property such as trademarks and copyright, other than software copyright, to the extent that they are directly related to the exploitation of the licensed technology and do not constitute the primary object of the agreement. This condition ensures that agreements covering other types of intellectual property rights are only block exempted to the extent that these other intellectual property rights serve to enable the licensee to better exploit the licensed technology. The licensor may for instance authorise the licensee to use his trademark on the products incorporating the licensed technology. The 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. An obligation on the licensee to use the licensor's trademark may also promote the dissemination of technology by allowing the licensor to identify himself as the source of the underlying technology. However, where the value of the licensed technology to the licensee is limited because he already employs an identical or very similar technology and the main object of the agreement is the trademark, the TTBER does not apply⁽²⁵⁾.
48. The licensing of copyright for the purpose of reproduction and distribution of the protected work, i.e. the production of copies for resale, is considered to be similar to technology licensing. Since such licence agreements relate to the production and sale of products on the basis of an intellectual property right, they are considered to be of the same nature as technology transfer agreements and normally raise similar issues. As a general rule the Commission will therefore apply the principles set out in the TTBER and these guidelines when assessing under Article 81 such licensing of copyright.
49. On the other hand, the licensing of rights in performances and other rights related to copyright is considered to raise particular issues and it may not be warranted to assess such licensing on the basis of the principles developed in these guidelines. In the case of the various rights related to performances value is created not by the reproduction and sale of copies of a product but by each individual performance of the protected work. Such exploitation can take various forms including the performance, showing or the renting of protected material such as movies, music or sporting events. In the application of Article 81, the specificities of the work and the way in which it is exploited must be taken into account⁽²⁶⁾. The Commission will therefore not apply by way of analogy the TTBER and the present guidelines to the licensing of these other rights.
50. The Commission will also not extend the principles developed in the TTBER and these guidelines to trademark licensing. However, 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 (EC) No 2790/1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices⁽²⁷⁾.
- #### 2.4. Duration
51. The block exemption applies for as long as the licensed property right has not expired or been declared invalid. In the case of know-how the block exemption applies as long as the licensed know-how remains secret, except where the know-how becomes publicly known as a result of the action of the licensee, in which case the exemption shall apply for the duration of the agreement, cf. Article 2 of the TTBER.
52. The block exemption applies to each licensed property right covered by the agreement and ceases to apply on the date of expiry, invalidity or the coming into the public domain of the last intellectual property right which constitutes 'technology' within the meaning of the TTBER, cf. point 42 above.

53. Outside the scope of the block exemption the assessment may differ according to the intellectual property in question and whether, for instance, the agreement covers a basic patent or an improvement of an expired basic patent.

2.5. Relationship with other block exemption regulations

54. The TTBER covers agreements between two parties concerning the licensing of technology for the purpose of the manufacture or provision of contract products. However, technology 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 (EC) No 2658/2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements ⁽²⁸⁾, Commission Regulation (EC) No 2659/2000 on the application of Article 81(3) to categories of research and development agreements ⁽²⁹⁾, and Commission Regulation (EC) No 2790/1999 on the application of Article 81(3) of the Treaty to categories of vertical agreements and concerted practices ⁽³⁰⁾.

2.5.1. The Block Exemption Regulations on specialisation and R & D agreements

55. According to Article 1(1)(c) of Regulation (EC) No 2658/2000 on specialisation agreements, that Regulation covers, *inter alia*, joint production agreements by virtue of which two or more undertakings agree to produce certain products jointly. The 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.

56. Where undertakings establish a production joint venture and licence the joint venture to exploit technology, which is used in the production of the products produced by the joint venture, such licensing is subject to Regulation (EC) No 2658/2000 and not the TTBER. Accordingly, licensing in the context of a production joint venture normally falls to be considered under Regulation (EC) No 2658/2000. However, where the joint venture engages in licensing of the technology to third parties, the activity is not linked to production by the joint venture and therefore not covered by that Regulation.

Such licensing arrangements, which bring together the technologies of the parties, constitute technology pools, which are dealt with in section IV.4 below.

57. Regulation (EC) No 2659/2000 on research and development agreements covers agreements whereby two or more undertakings agree to jointly carry out research and development and to jointly exploit the results thereof. According to Article 2(11), research and development and the exploitation of the results are carried out jointly where the work involved is carried out by a joint team, organisation or undertakings, jointly entrusted to a third party or allocated between the parties by way of specialisation in research, development, production and distribution, including licensing.

58. It follows that Regulation (EC) No 2659/2000 covers licensing between the parties and by the parties to a joint entity in the context of a research and development agreement. In the context of such agreement the parties can also determine the conditions for licensing the fruits of the research and development agreement to third parties. However, since third party licensees are not party to the research and development agreement, the individual licence agreement concluded with third parties is not covered by Regulation (EC) No 2659/2000. Such licence agreements are block exempted where they fulfil the conditions of the TTBER.

2.5.2. The Block Exemption Regulation on vertical agreements

59. Commission Regulation (EC) No 2790/1999 on vertical agreements covers 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 thus covers supply and distribution agreements ⁽³¹⁾.

60. Given that the TTBER only covers agreements between two parties and that a licensee, selling products incorporating the licensed technology, is a supplier for the purposes of Regulation (EC) No 2790/1999, these two block exemption regulations are closely related. The agreement between licensor and licensee is subject to the TTBER whereas agreements concluded between a licensee and buyers are subject to Regulation (EC) No 2790/1999 and the Guidelines on Vertical Restraints ⁽³²⁾.

61. The TTBER block exempts agreements between the licensor and the licensee also where the agreement imposes obligations on the licensee as to the way in which he must sell the products incorporating the licensed technology. In particular, the licensee can be obliged 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 must, in order to be block exempted, comply with Regulation (EC) No 2790/1999. For instance, the licensor can impose on the licensee to establish a system based on exclusive distribution in accordance with specified rules. However, it follows from Article 4(b) of Regulation (EC) No 2790/1999 that distributors must be free to make passive sales into the territories of other exclusive distributors.

62. Furthermore, distributors must in principle be free to sell both actively and passively into territories covered by the distribution systems of other licensees producing their own products on the basis of the licensed technology. For the purposes of Regulation (EC) No 2790/1999 each licensee is a separate supplier. However, the reasons underlying the block exemption contained in that Regulation may also apply where the products incorporating the licensed technology are sold by the 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 Regulation (EC) No 2790/1999 are fulfilled. For a common brand identity to exist the products must be sold and marketed under a common brand, which is predominant in terms of conveying quality and other relevant information to the consumer. It does not suffice that in addition to the licensees' brands the product carries the licensor's brand, which identifies him as the source of the licensed technology.

3. The safe harbour established by the Block Exemption Regulation

63. According to Article 3 of the TTBER the block exemption of restrictive agreements is subject to market share thresholds, confining the scope of the block exemption to agreements that can generally be presumed to fulfil the conditions of Article 81(3).

64. The applicable threshold depends on whether the agreement is concluded between competitors or

between non-competitors. For the purposes of the TTBER undertakings are competitors on the relevant technology market when they licence competing technologies to third parties. Potential competition on the technology market is not taken into account in the application of the market share thresholds. Outside the safe harbour potential competition on the technology market is taken into account and may lead to a re-qualification of the competitive relationship between the parties, see in particular point 24 above.

65. Undertakings are competitors for the products concerned where the undertakings are both active on the relevant product and geographic market(s) on which the products incorporating the licensed technology are sold (actual competitors). They are also considered competitors where they would, on realistic grounds, undertake the necessary additional investments or other necessary switching costs so that they could enter the relevant product and geographic market(s) in response to a small and permanent increase in relative prices (potential competitors).

66. It follows from points 64 and 65 that two undertakings are not competitors for the purposes of the TTBER where the licensor is neither an actual nor a potential supplier of products on the relevant market and the licensee, already present on the product market, is not licensing out a competing technology even if he owns and produces on the basis of a competing technology. The parties, however, become competitors if at a later point in time the licensee starts licensing out his technology or the licensor becomes an actual or potential supplier of products on the relevant market. Moreover, as indicated in point 64, above the market share threshold potential competition on the technology market is taken into account.

67. In the case of agreements between competitors the market share threshold is 20 % and in the case of agreements between non-competitors, it is 30 %, cf. Article 3(1) and (2) of the TTBER. Where the undertakings party to the licensing agreement are not competitors, the agreement is covered if the market share of each of the parties does not exceed 30 % on relevant technology and product markets. Where the undertakings party to the licensing agreement are competitors, the agreement is covered if the combined market shares of the parties does not exceed 20 % on relevant technology and product markets. It follows, that the market share thresholds apply both to technology markets and markets for products incorporating the licensed technology. If the applicable market share threshold is exceeded on any relevant market, the block exemption does not apply to the agreement for that relevant market.

68. In the case of technology markets, it follows from Article 3(3) of the TTBER that the licensor's market share is to be calculated on the basis of all sales by the licensor, the licensee and other licensees of products incorporating the licensor's technology and this for each product market separately⁽³³⁾. Where the parties are competitors on the technology market, sales of products incorporating the licensee's technology must be added to the sales of the products incorporating the licensed technology. In the case of new technologies that have not yet generated any sales, a zero market share is assigned. When sales commence the technology will start accumulating market share.
69. In the case of product markets, the licensee's market share is to be calculated on the basis of the licensee's sales of products incorporating the licensed technology and competing products, i.e. the global sales of the licensee on the product market in question. Where the licensor is also a supplier of products on the relevant market, the licensor's sales on the product market in question must also be taken into account. In the calculation of product market shares, however, sales made by other licensees are not taken into account when calculating the licensee's and/or licensor's market share.
70. Market shares should be calculated on the basis of sales value data 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.
71. The principles set out above can be illustrated by the following examples:

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 mass 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 0, B was selling EUR 25 million worth of products produced with the freely available technologies. In year 1, A gives a license 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 2 and the following years B produces and sells only Xeran worth EUR 40 million annually. In addition in year 1, A is also licensing to C. C was not active on

that product market before. C produces and sells only Xeran, EUR 10 million in year 1 and EUR 15 million in year 2 and thereafter. Assume it is established that the total market of Xeran and its substitutes where B and C are active is worth EUR 200 million in each year.

In year 1, the year the license agreement is concluded, A's market share on the technology market is 0 % as its market share has to be calculated on the basis of the total sales of Xeran in the preceding year. In year 2, 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 1. In year 3 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 1, B's market share on the product market is 12,5 %, reflecting B's EUR 25 million sales in year 0. In year 2, B's market share is 15 % because its sales have increased to EUR 30 million in year 1. In year 3 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, 5 % in year 2 and 7,5 % thereafter.

As it concerns an agreement between non-competitors and the market share of A, B and C is below 30 % each year, the agreements are falling within the safe harbour of the TTBE.

Example 2

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

In this case, A's market share on the technology market has to be calculated for each of the two geographic markets. 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, i.e. half the size of the market in example 1, the market share of A is 0 % in year 1, 15 % in year 2 and 40 % thereafter. B's market share is 25 % in year 1, 30 % in year 2 and 40 % in year 3. In year 1 and 2 both A's and B's market share does not exceed the 30 % threshold. The threshold is however exceeded from year 3 and this means that, in line with Article 8(3) of the TTBER, after year 4 the license 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 sale 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 1, 10 % in year 2 and 15 % thereafter. The market share of C on the product market is the same: 0 % in year 1, 10 % in year 2 and 15 % thereafter. The licence agreement between A and C falls therefore within the safe harbour for the whole period.

Licensing between competitors

Example 1

Companies A and B are active on the same relevant market for a certain chemical product. They also each own a patent on different technologies used to produce this product. In year 1, A and B sign a cross licence agreement licensing each other the use of their respective technologies. In year 0, 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 1 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. B sells from year 1, EUR 15 million of the product produced with its own technology and EUR 10 million of the product produced with A's technology. Assume it is established that the total market of 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, either by A or B, with A's technology. In year 1 the market share of A on the technology market is therefore 15 %, reflecting its own production and sales of EUR 15 million in year 0. From year 2, A's market share on the technology market is 20 %, reflecting the EUR 20 million sale of the product produced with A's technology and produced and sold by A and B (EUR 10 million each). Similarly, in year 1, 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 1 and 20 % thereafter. The market share of B on the product market is 20 % in year 1 and 25 % thereafter.

As it concerns an agreement 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 be able to benefit from the safe harbour. It is clear that this is not the case here. The combined market share on the technology market and on the product market is 35 % in year 1 and 45 % thereafter. This agreement between competitors will therefore have to be assessed on an individual basis.

4. Hardcore restrictions of competition under the Block Exemption Regulation

4.1. General principles

72. Article 4 of the TTBER contains a list of hardcore restrictions of competition. The classification of a restraint as a hardcore restriction of competition is based on the nature of the restriction and experience showing that such restrictions are almost always anti-competitive. In line with the case law of the Community Courts⁽³⁴⁾ such a restriction may result from the clear objective of the agreement or from the circumstances of the individual case, cf. point 10 above. An examination of the facts underlying the agreement and the specific circumstances in which it operates may therefore be required before it can be concluded whether a particular restriction constitutes a hardcore restriction of competition.

73. When a technology transfer agreement contains a hardcore restriction of competition, it follows from Article 4(1) and 4(2) of the TTBER that the agreement as a whole falls outside the scope of the block exemption. There is no severability for hardcore restrictions. Moreover, the Commission holds the view that in the context of individual assessment hardcore restrictions of competition will only in exceptional circumstances fulfil the four conditions of Article 81(3), cf. point 16 above.

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

4.2. Agreements between competitors

75. Article 4(1) lists the hardcore restrictions for licensing between competitors. According to this provision, the TTBER does not cover agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object:

- (a) the restriction of a party's ability to determine its prices when selling products to third parties;
- (b) the limitation of output or sales, except limitations on the output of products incorporating the licensed technology imposed on the licensee in a non-reciprocal agreement;
- (c) the allocation of markets or customers except
- (i) the obligation on the licensee in a non-reciprocal agreement to exploit the licensed technology only within one or more technical fields of use or one or more product markets, and
- (ii) the requirement that the licensee manufactures or provides the contract products only for its own use including sale of the contract products as spare parts for its own products;
- (d) The restriction of the licensee's ability to exploit its own technology or the restriction of the ability 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.
76. The hardcore restriction of competition contained in Article 4(1)(a) concerns agreements between competitors that have as their object the fixing of prices for products sold to third parties. Price fixing between competitors constitutes a restriction of competition by its very object. Price fixing can for instance take the form of a direct agreement on the exact price to be charged or on a price list with certain allowed maximum rebates. It 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.
77. Price fixing may also occur where parties, who sell competing products, cross licence technologies that are incorporated into those products. When 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⁽³⁵⁾. Competitors can therefore use royalties as a means of coordinating prices on downstream product markets⁽³⁶⁾. Where competitors conclude an agreement providing for cross licensing and reciprocal royalty payments based on the sales of the final product, the Commission will treat the arrangement as price fixing where the agreement does not lead to a significant integration of complementary technologies. In the absence thereof the agreement is devoid of any pro-competitive purpose and does not constitute a bona fide licensing arrangement. In cases where the agreement does constitute a bona fide licensing arrangement because it leads to a significant integration of complementary technologies the agreement will normally not fall under Article 4(1)(a) and will in that event be block exempted up to the market share threshold of 20 %. The Commission will only consider that the arrangement constitutes price fixing where the parties could reasonably have chosen a less restrictive payment scheme such as lump sum payments or one-way payment of net royalties and where the amount of the royalty is such that it is likely to have a not insignificant impact on prices.
78. The hardcore restriction contained in Article 4(1)(a) 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 are also caught by Article 4(1)(d) according to which the licensee must not be restricted in his ability to use his own technology, see point 89 below. The very nature of such agreements is to restrict competition since the agreement raises the cost of using the licensee's own competing technology and restricts competition that existed in the absence of the agreement⁽³⁷⁾. This is so both in the case of reciprocal and non-reciprocal arrangements. Exceptionally, however, an agreement whereby royalties are calculated on the basis of all product sales may fulfil the conditions of Article 81(3) 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.
79. The hardcore restriction of competition set out in Article 4(1)(b) concerns sales and output limitations. When competitors agree to reciprocal limitations on output the agreement amounts to a cartel. The same is true of agreements that reduce the incentive of the parties to expand output, for example by imposing on a party to make payments to the other party if a certain level of output is exceeded.

80. Quantity limitations on the licensee in non-reciprocal agreements are neither covered by the list of hardcore restrictions of competition, nor are they block exempted, cf. Articles 4(1)(b) and 5(2) of the TTBER. For the purposes of these Articles an agreement is non-reciprocal where one competitor licences a technology from another competitor but does not himself grant a licence for a competing technology. Conversely, a licence is reciprocal where a competitor licenses a technology to another competitor and obtains a licence for a competing technology from that competitor⁽³⁸⁾. The exclusion from the hardcore list only covers quantity limitations on the licensee in a non-reciprocal agreement. Restrictions on the licensor in terms of where he produces or sells, how much he produces or sells and at what price he sells are covered by the hardcore list. The more favourable treatment of quantity limitations on the licensee is based on the following two considerations: First, the risk that the agreement is not a bona fide licensing arrangement is less when the restriction is only imposed on the licensee. 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. In the case of reciprocal agreements with output limitations, on the other hand, there is a substantial risk that the object and effect of the agreement is to reduce output and raise prices. Secondly, an output restriction on the licensee may be necessary in order to give the licensor an incentive to disseminate his technology. Where the licensed technology, however, does not allow the licensee to obtain cost or other efficiencies to any significant extent the agreement will be dealt with as a hardcore restriction, because the agreement is likely to restrict competition that existed prior to the agreement without having a pro-competitive purpose. The Commission will also examine whether in the practical application of the agreement the licensor is subject to restrictions as regards his commercial activities. If so, the agreement is restrictive by object and subject to the list of hardcore restrictions of competition.
81. The hardcore restriction of competition set out in Article 4(1)(c) concerns the allocation of markets and customers. Agreements whereby competitors share markets and customers, for example by allocating exclusive territories or customer groups, have as their object the restriction of competition. Restrictions of this nature can for example take the form of cross licensing arrangements whereby each party is granted an exclusive right to exploit the licensed technology in a particular territory. They can also take the form of a non-reciprocal licence whereby the licensee is granted an exclusive territory whereas the licensor reserves another territory to himself. Even where no explicit or implicit restrictions are imposed on the licensor it is considered hardcore if the licence restricts the licensee as to where and to whom he may sell. Such restrictions restrict competition that existed prior to the agreement. Moreover, they are not considered necessary with a view to promoting the dissemination of technology. This interest is sufficiently protected by excluding non-reciprocal output limitations and field of use restrictions on the licensee from the scope of Article 4 and by block exempting royalty obligations. Article 4(1)(c) applies irrespective of whether the licensee remains free to use his own technology. Once the licensee has tooled up to use the licensor's technology, it may be costly to use another technology. Moreover, given the anti-competitive potential of the restraint the licensee may have little incentive to produce under his own technology.
82. The hardcore restriction of competition set out in Article 4(1)(c) also covers agreements whereby the licensor grants an exclusive licence according to which he undertakes not to exploit the licensed technology himself. Such a licence implies that the licensor leaves the market on which the parties compete and thus entails an extreme form of market sharing. Article 4(1)(c) on the other hand does not extend to exclusive licensing whereby the licensor undertakes not to licence other third parties within a particular territory. The latter form of exclusivity is covered by the block exemption and is dealt with in section IV.2.2 below.
83. Field of use⁽³⁹⁾ restrictions between competitors may amount to an allocation of markets and customers, in which case they are caught by Article 4(1)(c). Under a field of use restriction the licence is either limited to one or more technical fields of application or one or more product markets. Article 4(1)(c) is applicable where competitors cross licence competing technologies and impose reciprocal field of use restrictions covering distinct product markets or technical fields of application. For instance, if A and B cross licence competing technologies and A limits the licence to product market X and B limits his licence to product market Y, the agreement amounts to a sharing of product markets. Article 4(1)(c) also applies to a field of use restriction on the licensor in a non-reciprocal agreement, since it amounts to reserving the market(s) concerned for the licensee. In both cases, however, it is only a hardcore restriction if the restriction covers a market in which the parties are actual or likely potential competitors. Article 4(1)(c) does not apply to field of use restrictions covering markets where the parties are neither actual nor potential competitors. In such cases the agreement is treated in the same way as an agreement between non-competitors. The agreement also falls outside Article 4(1)(c) where the field of use restriction is symmetrical in the sense that both parties can exploit the licensed technology only within the same field(s) of use. Article 4(1)(c) does not require that in the case of agreements between competitors the licensee must be able to exploit the licensed technology within all actual or potential fields of use. It is therefore not a hardcore restriction of competition for competitors to cross licence each other for the same field(s) of use.

84. Under Article 4(1)(c)(i) it does not amount to a hardcore restriction of competition to impose in a non-reciprocal agreement a field of use restriction on the licensee. The fact that the licence is limited to one or more product markets or one or more technical fields of use does not in itself amount to market sharing, provided that in accordance with Article 4(1)(d) the licensee is unrestricted in the use of his own competing technology. If so, it cannot be presumed that the field of use restriction will cause the licensee to withdraw from the markets excluded by the restriction.

85. Article 4(1)(c)(ii) contains a further exception, namely captive use restrictions, i.e. a requirement whereby the licensee may produce the products incorporating the licensed technology only for his own use⁽⁴⁰⁾. Where the contract product is a component, the licensee can thus be obliged to produce that component only for incorporation into his own products and can be obliged not to sell the components to other manufacturers. The licensee must be able, however, to sell the components as spare parts for his own products and must thus be able to supply third parties that perform after sale services on these products. Captive use restrictions as defined 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 IV.2.5 below.

86. The hardcore restriction of competition set out in Article 4(1)(d) covers firstly restrictions on the parties to carry out research and development. Both parties must be free to carry out independent research and development. This rule applies irrespective of whether the restriction applies to a field covered by the licence or to other fields. It does not, however, extend to restrictions on a party to carry out research and development with third parties, where such restriction is necessary to protect the licensor's know-how against disclosure. The condition for applying this exception is particularly likely to be fulfilled where the third party in question is an actual or likely potential competitor of the licensor on the technology market.

87. According to Article 4(1)(d), the licensee must also be unrestricted in the use of his own competing technology provided that in so doing he does not make use of the technology licensed from the licensor. In relation to his own technology the licensee must not be subject to limitations in terms of where he produces or sells, how much

he produces or sells and at what price he sells. He must also not be obliged to pay royalties on products produced on the basis of his own technology, cf. point 78 above. Moreover, the licensee must not be restricted in licensing his own technology to third parties. When restrictions are imposed on the licensee's use of his own technology or to carry out research and development 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 his technology. Competition in the field of innovation also suffers when the licensor is restricted in carrying out research and development.

4.3. Agreements between non-competitors

88. Article 4(2) lists the hardcore restrictions for licensing between non-competitors. According to this provision the TTBER does not cover agreements which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object:

(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 sell the contract products, except:

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

(ii) the restriction of active sales into the exclusive territory or to an exclusive customer group allocated by the licensor to another licensee;

(iii) the requirement that the licensee manufactures or provides the contract products only for its own use, including sale of the contract products as spare parts for its own products;

(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 by the members of a selective distribution system;

(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.

It is recalled, cf. point 31 above, that the block exemption covers licence agreements whereby the licensor imposes obligations that the licensee must or may impose on his buyers, including distributors. Such obligations do not constitute resale restrictions within the meaning of Article 4(2)(b) of the TTBER. However, these obligations must comply with the competition rules applicable to supply and distribution agreements. Since the TTBER is limited to agreements between two parties the agreements concluded between the licensee and his buyers implementing such obligations are not covered by the TTBER. Such agreements are only block exempted when they comply with Regulation (EC) No 2790/1999, cf. section 2.5.2 above.

89. The hardcore restriction of competition set out in Article 4(2)(a) concerns the fixing of prices charged when selling products to third parties. More specifically, this 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 the margin, fixing the maximum level of discount on a prescribed price level, linking the prescribed resale price to the resale prices of competitors, 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, or the obligation on licensees to report price deviations. Similarly, direct or indirect price fixing can be made more effective when combined with measures that reduce the licensee's incentive to lower his selling price, such as the licensor obliging the licensee to apply a most-favoured-customer clause, i.e. an obligation to grant to a customer any more favourable terms granted to any other customer.

90. The hardcore restriction of competition set out in Article 4(2)(b) concerns agreements or concerted practices that have as their direct or indirect object the restriction of sales by licensees of products incorporating the licensed technology. Article 4(2)(b) does not cover sales restrictions on the licensor. All sales restrictions on the licensor are thus block exempted up to the market share threshold. Sales restrictions on the licensee 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. It 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 licensed products. There are, however, a number of important exceptions to this general hardcore restriction covering the sales by licensees.

91. Restrictions on active and passive sales⁽⁴¹⁾ by licensees into an exclusive territory or to an exclusive customer group reserved for the licensor do not constitute hardcore restrictions of competition, cf. Article 4(2)(b)(i). Indeed, they are block exempted. 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.

92. Restrictions on active sales between territories or customer groups allocated to different licensees are block exempted on condition that the protected licensee has been granted an exclusive territory or an exclusive customer group, cf. Article 4(2)(b)(ii). The block exemption of active selling is based on the assumption that such restrictions promote non-price competition and improvements in the quality of services by solving free rider problems⁽⁴²⁾. If no exclusive territory or customer group has been granted, restrictions on active selling imposed on other licensees are caught by Article 4(2)(b).

93. Restrictions on passive sales between licensees are covered by the list of hardcore restrictions. When caught by Article 81(1) passive sales restrictions are unlikely to fulfil the conditions of Article 81(3). In particular, such restrictions are unlikely to be indispensable for the attainment of efficiencies⁽⁴³⁾. Restrictions on passive (and active) sales by other licensees into the exclusive territory of a particular licensee, however, often fall outside Article 81(1) for a certain initial period after the conclusion of the agreement with this licensee. Licensees often have to commit substantial investments in production assets and promotional activities in order to start up and develop a new territory. The risks facing the new licensee are therefore likely to be substantial, in particular since promotional expenses and investment in assets required to produce on the basis of a particular technology are often sunk, i.e. they cannot be recovered if the licensee exits the market. In such circumstances, it is likely that licensees would not enter into the licence agreement without protection for a certain period of time against passive (and active) sales into their territory by other licensees. The Commission therefore takes the view that restrictions on passive sales into the exclusive territory of a licensee by other licensees normally fall outside Article 81(1) for a period of two years from the date on which the product incorporating the licensed technology was first put on the market by the licensee in question.

94. Article 4(2)(b)(iii) brings under the block exemption a restriction whereby the licensee is obliged to produce products incorporating the licensed technology only for his own (captive) use. Where the contract product is a component the licensee can thus be obliged to use that product only for incorporation into his own products and can be obliged not to sell the product to other manufacturers. The licensee must however be able to sell the products as spare parts for his 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 IV.2.5 below.

95. Article 4(2)(b)(iv) brings under the block exemption an obligation on the licensee not to sell to end users and thus only to sell to retailers. Such an obligation allows the licensor to assign the wholesale distribution function to the licensee and normally falls outside Article 81(1)⁽⁴⁴⁾.

96. Finally, Article 4(2)(b)(v) brings under the block exemption a restriction on the licensee not to sell to unauthorised distributors. This exception allows the

licensor to impose on the licensees an obligation to form part of a selective distribution system. In that case, however, the licensees must according to Article 4(2)(c) 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 foreseen in Article 4(2)(b)(iv), cf. the previous point.

5. Conditions under the Block Exemption Regulation

97. Article 5 of the TTBER lists five types of restrictions that are not block exempted and which thus require individual assessment of their anti-competitive and pro-competitive effects. It follows from Article 5 that the inclusion in a licence agreement of any of the restrictions contained in these provisions does not prevent the application of the block exemption to the rest of the agreement. It is only the individual restriction in question that is not block exempted, implying that individual assessment is required. Accordingly, the rule of severability applies to the restrictions set out in Article 5.

98. Article 5(1) contains the following three conditions:

- (a) The licensee must not be obliged to grant an exclusive licence to the licensor or to a third party designated by the licensor in respect of its own severable improvements to or its new applications of the licensed technology. An improvement is severable, if it can be exploited without infringing upon the licensed technology or without making use of licensed know-how.
- (b) The licensee must not be obliged to assign to the licensor or to a third party designated by the licensor rights to improvements to or new applications of the licensed technology.
- (c) The licensee must not be prevented from challenging the validity or contest the secrecy or substantiality of intellectual property rights held by the licensor in the common market. However, if the licensee challenges the validity of the licensed technology the licensor is entitled under the TTBER to terminate the licence agreement.

The purpose of Article 5(1)(a), (b) and (c) is to avoid block exemption of agreements that may reduce the incentive of licensees to innovate.

99. An obligation to assign to the licensor or grant him an exclusive licence to severable improvements of the licensed technology is likely to reduce the licensee's incentive to innovate since it hinders the licensee in exploiting his improvements, including by way of licensing 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. According to Article 5(1)(a) and (b) such obligations are not block exempted. On the other hand, the block exemption covers non-exclusive grant back obligations. This is so also where the grant back obligation is non-reciprocal, i.e. only imposed on the licensee, and where under the agreement the licensor is entitled to feed-on the improvements to other licensees. A non-reciprocal grant back obligation may promote innovation and the dissemination of new technology by permitting the licensor to freely determine whether and to what extent to pass-on his own improvements to his licensees. A feed-on clause may also promote the dissemination of technology because each licensee knows at the time of contracting that he will be on an equal footing with other licensees in terms of the technology on the basis of which he is producing. The block exemption covers in addition exclusive grant backs concerning non-severable improvements. The latter obligation, however, normally falls outside Article 81(1), because the improvement cannot be exploited independently of the licensed technology.
100. The application of Article 5(1)(a) and (b) does not depend on whether or not the licensor pays a purchase price or royalties in return for acquiring the improvement or for obtaining an exclusive licence. However, the existence or otherwise of such payments is a factor to be taken into account in an individual assessment under Article 81. When grant backs are made against consideration it is less likely that the obligation creates a disincentive for the licensee to innovate.
101. In the assessment of grant backs outside the scope of 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 grant back obligations will have restrictive effects on competition in innovation. The stronger the position of the licensor's technology, the more likely it is that the licensee will be an important source of innovation and future competition. The impact of grant back obligations can also be enhanced in case of parallel networks of licence agreements containing such obligations. When available technologies are controlled by a limited number of licensors that impose grant back obligations on licensees, the risk of anti-competitive effects is greater than where there are a number of technologies only some of which are licensed on grant back terms.
102. The risk of negative effects on innovation is higher in the case of cross licensing between competitors where a grant back obligation is combined with an obligation on each licensor to share with the other party improvements of his technology. The sharing of all improvements between competitors prevents both competitors from gaining a competitive lead over the other.
103. The condition set out in Article 5(1)(c) concerns non-challenge clauses, i.e. obligations not to challenge the validity of the licensor's intellectual property. The reason for excluding such restrictions from the scope of the block exemption is the fact that licensees are normally in the best position to determine whether or not an intellectual property right is invalid. In the interest of undistorted competition and in conformity with the principles underlying the protection of intellectual property, invalid intellectual property rights should be eliminated. Invalid intellectual property stifles innovation rather than promoting it. Article 81(1) is likely to apply to non-challenge clauses where the licensed technology 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⁽⁴⁵⁾. In such cases the conditions of Article 81(3) are unlikely to be fulfilled except where the non-challenge obligation is imposed in the context of the settlement of a patent dispute.
104. The TTBER, however, does cover the possibility for the licensor to terminate the licence agreement in the event of a challenge of the licensed technology. Accordingly, the licensor is not forced to continue dealing with a licensee that challenges the very subject matter of the licence agreement, implying that upon termination any further use by the licensee of the challenged technology is at the challenger's own risk. Article 5(1)(c) ensures, however, that the TTBER does not cover contractual obligations obliging the licensee not to challenge the licensed technology, which would permit the licensor to sue the licensee for breach of contract and thereby create a further disincentive for the licensee to challenge the validity of the licensor's technology. The provision thereby ensures that the licensee is in the same position as third parties.
105. The restraint covered by Article 5(2), which concerns quantity limitations imposed on the licensee in non-reciprocal licenses between competitors, has already been explained in point 80 above.

106. Article 5(3) excludes from the scope of the block exemption, in the case of agreements between non-competitors, any direct or indirect obligation limiting the licensee's ability to exploit his own technology or limiting the ability of the parties to the agreement to carry out research and development, unless such latter 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)(d) of the hardcore list concerning agreements between competitors, which is dealt with in points 80 and 81 above. However, in the case of agreements between non-competitors it cannot be presumed that such restrictions have negative effects on competition and that the conditions of Article 81(3) are generally not satisfied⁽⁴⁶⁾. Individual assessment is required.

107. 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 block exemption the parties are considered non-competitors in spite of the fact that the licensee does own a competing technology. This is the case where the licensee owns a technology but does not licence it and the licensor is not an actual or potential supplier on the product market. For the purposes of the block exemption the parties are in such circumstances neither competitors on the technology market nor competitors on the product market⁽⁴⁷⁾. In such cases, it is important to ensure that the licensee is not restricted in his ability to exploit own technology and further develop it. This technology constitutes a competitive constraint in the market, which should be preserved. In such a situation restrictions are therefore normally considered to be restrictive of competition and not to satisfy the conditions of Article 81(3).

108. 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 research and development may be restrictive of competition where only a few technologies are available. In that case the parties may be 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 research and development. In that case the conditions of Article 81(3) are unlikely to be fulfilled. In other cases, where several technologies are available and where the parties do not possess special assets or skills, the restriction on research and development is likely to either fall outside Article 81(1) for lack of restrictive effect or satisfy the conditions of Article 81(3). The restraint may promote the dissemination of new technology by assuring the licensor that the licence does

not create a new competitor and by inducing the licensee to focus on the exploitation and development of the licensed technology.

6. Withdrawal and disapplication of the Block Exemption Regulation

6.1. *Withdrawal procedure*

109. According to Article 6 of the TTBER the Commission and the competition authorities of the Member States may withdraw the benefit of the block exemption in respect of individual agreements that do not fulfil the conditions of Article 81(3). The power of the competition authorities of the Member States to withdraw the benefit of the block exemption is limited to cases where the relevant geographic market is no wider than the territory of the Member State in question.

110. The four conditions of Article 81(3) are cumulative and must all be fulfilled for the exception rule to be applicable⁽⁴⁸⁾. The block exemption can therefore be withdrawn where a particular agreement fails one or more of the four conditions.

111. Where the withdrawal procedure is applied, the withdrawing authority bears the burden of proving that the agreement falls within the scope of Article 81(1) and that the agreement does not satisfy all four conditions of Article 81(3). Given that withdrawal implies that the agreement in question is restrictive of competition within the meaning of Article 81(1) and does not fulfil the conditions of Article 81(3), withdrawal is necessarily accompanied by a negative decision based on Articles 5, 7 or 9 of Regulation (EC) No 1/2003.

112. According to Article 6 withdrawal may in particular be warranted in the following circumstances:

1. access of third parties' technologies to the market is restricted, for instance by the cumulative effect of parallel networks of similar restrictive agreements imposing on licensees not to use third party technology;

2. access of potential licensees to the market is restricted, for instance by the cumulative effect of parallel networks of similar restrictive agreements preventing licensors from licensing to other licensees;
 3. without any objectively valid reason the parties refrain from exploiting the licensed technology.
113. Articles 4 and 5 of the TTBER, containing the list of hardcore restrictions of competition and excluded provisions, aim at ensuring that block exempted agreements do not reduce the incentive to innovate, do not delay the dissemination of technology, or do not unduly restrict competition between the licensor and licensee or between licensees. However, the list of hardcore restrictions and conditions do not as such take into account the impact of the agreement on third parties. In particular, the block exemption does not take account of any cumulative effect of similar restrictions contained in networks of licence agreements. Licence agreements may lead to foreclosure of third parties both at the level of the licensor and at the level of the licensee. Foreclosure of other licensors may stem from the cumulative effect of networks of licence agreements imposing on the licensees not to exploit competing technologies, leading to the exclusion of other (potential) licensors. Foreclosure 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 are facing relatively high barriers to entry. Foreclosure of other licensees may stem from the cumulative effect of licence agreements imposing on licensors not to licence other licensees and thereby preventing potential licensees from gaining access to the necessary technology. The issue of foreclosure is examined in more detail in section IV.2.7 below.
114. The Commission is also likely to withdraw the benefit of the block exemption where the parties refrain from exploiting the licensed technology, unless they have an objective justification for doing so. Indeed, when the parties do not exploit the licensed technology, no efficiency enhancing integration of activity takes place, in which case the very rationale of the block exemption disappears. 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 covered by the list of hardcore restrictions of competition contained in Article 4 of the TTBER. Moreover, where it is clear that the licensee does not intend to use the licensed technology for the purpose of producing goods and services incorporating the licensed technology, the agreement does not constitute a technology transfer agreement within the meaning of Article 2 of the TTBER and the block exemption does not apply. For all these reasons the Commission will examine very closely cases of non-exploitation.
- ### 6.2. Disapplication of the Block Exemption Regulation
115. 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 these 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 disapplying the TTBER.
116. Whereas withdrawal of the benefit of the TTBER by the Commission under Article 6 implies the adoption of a decision under Articles 7 or 9 of Regulation (EC) No 1/2003, the effect of a Commission disapplication regulation under Article 7 of the TTBER is merely to remove, in respect of the restraints and the markets concerned, the benefit of the application of the TTBER and to restore the full application of Article 81(1) and (3). Following the adoption of a regulation declaring the TTBER inapplicable for a particular market in respect of agreements containing certain restraints, the criteria developed by the relevant case law of the Community Courts and by notices and previous decisions adopted by the Commission will give guidance on the application of Article 81 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.
117. For the purpose of calculating the 50 % market coverage ratio, account must be taken of each individual network of licence agreements containing restraints, or combinations of restraints, producing similar effects on the market.
118. Article 7 does not entail an obligation on the part of the Commission to act where the 50 % market-coverage ratio is exceeded. In general, disapplication is appropriate when it is likely that access to the relevant market or competition therein 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 Community.

119. Any regulation adopted under Article 7 must clearly set out its scope. This means, first, that the Commission must define the relevant product and geographic market(s) and, secondly, that it must 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 its regulation according to the competition concern which it intends to address. For instance, while all parallel networks of non-compete arrangements shall be taken into account in view of establishing the 50 % market coverage ratio, the Commission may nevertheless restrict the scope of the disapplication regulation only to non-compete obligations exceeding a certain duration. Thus, agreements of a shorter duration or of a less restrictive nature might be left unaffected, due to the lesser degree of foreclosure attributable to such restraints. 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 ⁽⁴⁹⁾.

120. The transitional period of not less than six months that the Commission will have to set under Article 7(2) should allow the undertakings concerned to adapt their agreements to take account of the regulation disapplying the TTBER.

121. A regulation disapplying the TTBER will not affect the block exempted status of the agreements concerned for the period preceding its entry into force.

IV. APPLICATION OUTSIDE THE SCOPE OF THE BLOCK EXEMPTION REGULATION

1. The general framework for analysis

122. 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 subject to individual assessment. Agreements that either do not restrict competition within the meaning of Article 81(1) or which fulfil the conditions of Article 81(3) are valid and enforceable. It is recalled that there is no presumption of illegality of agreements that fall outside the scope of the block exemption provided that they do not contain hardcore restrictions of competition. In particular, there is no presumption of

restrictive effects merely because the market share thresholds are exceeded. Individual assessment is required.

1.1. *The relevant factors*

123. In the application of Article 81(1) to individual cases 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 of the licensed products;
- (e) entry barriers;
- (f) maturity of the market; and
- (g) other factors.

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.

124. 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 the incentives that they face.

125. The *market position of 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. This is particularly so where the market share reflects cost advantages or other competitive advantages vis-à-vis competitors. These competitive advantages may for instance result from being a first mover in the market, from holding essential patents or from having superior technology.
126. In analysing the competitive relationship between the parties it is sometimes necessary to go beyond the analysis set out in the above sections II.3 on market definition and II.4 on the distinction between competitors and non-competitors. Even where the licensor is not an actual or potential supplier on the product market and the licensee is not an actual or potential competitor on the technology market, it is relevant to the analysis whether the licensee owns a competing technology, which is not being licensed. If the licensee has a strong position on the product market, an agreement granting him an exclusive licence to a competing technology can restrict competition significantly compared to the situation where the licensor would not grant an exclusive licence or would licence other undertakings.
127. 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 less risk there is that the parties will be able to individually exercise market power. However, if the number of competitors becomes rather small and their market position (size, costs, R & D potential, etc.) is rather similar, this market structure may increase the risk of collusion.
128. The *market position of buyers* provides an indication of whether or not one or more buyers possess buyer power. The first indicator of buying power is the market share of the buyer on the purchase market. This share reflects the importance of his demand for possible suppliers. Other indicators focus on the market position of the buyer on his resale market including characteristics such as a wide geographic spread of his outlets, and his image amongst final consumers. In some circumstances buyer power may prevent the licensor and/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 licensor or licensee on the product market and therefore not such as to solve the competition problem on that market⁽⁵⁰⁾.
129. *Entry barriers* are measured by the extent to which incumbent companies can increase their price above the competitive level without attracting entry. In the absence of entry barriers, easy and quick entry will render such price increases unprofitable. When effective entry, preventing or eroding the exercise of market power, is likely to occur within one or two years, entry barriers can, as a general rule, be said to be low. Entry barriers may result from a wide variety of factors such as economies of scale and scope, 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 and brand loyalty of consumers created by strong advertising over a period of time. Restrictive agreements entered into by undertakings may also work as an entry barrier by making access more difficult and foreclosing (potential) competitors. Entry barriers may be present at all stages of the research and development, production and distribution process. The question whether certain of these factors should be described as entry barriers depends on whether they are related to 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 in the assessment of a case than potential competition.
130. A *mature market* is a market that has existed for some time, where the technology used is well known and widespread and not changing very much and in which demand is relatively stable or declining. In such a market negative effects are more likely than in more dynamic markets.
131. In the assessment of particular restraints *other factors* may have to be taken into account. Such factors include the cumulative effect, i.e. the coverage of the market by similar agreements, the duration of the agreements, the regulatory environment and behaviour that may indicate or facilitate collusion like 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.

1.2. Negative effects of licence agreements

132. The negative effects on competition on the market that may result from technology transfer agreements are, in particular, the following:

1. reduction of inter-technology competition between the companies operating on a technology market or on a market for products incorporating the technologies in question, including facilitation of collusion, both explicit and tacit;
2. foreclosure of competitors by raising their costs, restricting their access to essential inputs or otherwise raising barriers to entry; and
3. reduction of intra-technology competition between undertakings that produce products on the basis of the same technology.

133. Technology transfer agreements may reduce inter-technology competition, i.e. competition between undertakings that licence or produce on the basis of substitutable technologies. This is particularly so in cases where reciprocal obligations are being imposed. For instance, where competitors transfer competing technologies to each other and impose a reciprocal obligation to provide each other with future improvements, competition on innovation between the parties is restricted, because neither competitor will be able to gain a technological lead over the other. Where the arrangement does not lead to an efficiency enhancing integration of technologies, which outweighs the restrictive effects, the agreement violates Article 81.

134. Licensing between competitors may also facilitate collusion. Collusion normally requires that the market is concentrated and that the undertakings concerned have similar views on what is in their common interest and how the coordination mechanisms function. For collusion to work the undertakings must also be able to monitor each other's market behaviour and react to and deter deviation from the common policy on the market. Agreements can facilitate collusion by increasing transparency in the market and by raising barriers to entry. Collusion can also be facilitated by licensing 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⁽⁵¹⁾. Use of the same technology may lead to a

high degree of commonality of costs. However, this is not necessarily the case. Even where production on the basis of the licensed technology makes up a substantial part of the cost structures of the undertakings concerned, individual undertakings may differ in efficiency in operating the technology and may also use different inputs, leading to different costs.

135. In the context of licence agreements royalties can be used as a direct means of collusion, cf. point 77 above. The risk of collusion is particularly high in the case of cross licensing between competitors. Similar risks may occur where one competitor licenses a technology to another competitor against payment of royalties and purchases from that competitor a component, which is incorporated into the product in respect of which they compete.

136. Licence agreements may also affect inter-technology competition by creating barriers to entry for and expansion by competitors. Such foreclosure effects may stem from restraints that prevent licensees from licensing from third parties or create disincentives for them to do so. Third parties may for instance be foreclosed where incumbent licensors impose non-compete obligations on licensees to such an extent that an insufficient number of licensees are available to third parties and where entry at the level of licensees is difficult. Suppliers of substitute technology may also be foreclosed where a licensor with a sufficient degree of market power ties together various parts of a technology and licenses them together as a package while only part of the package is essential to produce a certain product.

137. Licence agreements may also reduce intra-technology competition, i.e. competition between undertakings that produce on the basis of the same technology. An agreement imposing territorial restraints on licensees, preventing them from selling into each other's territory reduces competition between them. Intra-technology competition is also reduced where the licensor undertakes to appoint only one or a limited number of licensees or to limit their output to certain quantities. Such agreements foreclose potential licensees and may also reduce competition between existing licensees. Licence agreements may also reduce intra-technology competition by facilitating collusion between licensees. Moreover, licence agreements that reduce intra-technology competition may facilitate collusion between owners of competing technologies or reduce inter-technology competition by raising barriers to entry.

- 1.3. *Positive effects of restrictive licence agreements and the framework for analysing such effects*
138. Restrictive licence agreements may also produce pro-competitive effects in the form of efficiencies, which may outweigh their anti-competitive effects. This assessment takes place within the framework of Article 81(3), which contains an exception from the prohibition rule of Article 81(1). For this exception to be applicable the licence agreement must produce objective economic benefits, the restrictions on competition must be indispensable to attain the efficiencies, consumers must receive a fair share of the efficiency gains, and the agreement must not afford the parties the possibility of eliminating competition in respect of a substantial part of the products concerned.
139. As far as efficiencies are concerned, licence agreements have in particular the potential of bringing together complementary technologies and other assets allowing new or improved products to be put on the market or existing products to be produced at lower cost. Outside the context of hardcore cartels, licensing often occurs because it is more efficient for the licensor to licence the technology than exploiting it himself. This may particularly be the case where the licensee already has access to the necessary production assets. The agreement allows the licensee to gain access to a technology that can be combined with these assets, allowing him to exploit new or improved technologies. Another example of potentially efficiency enhancing licensing is where the licensee already has a technology and where the combination of this 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. Licence agreements may also give rise to efficiencies at the distribution stage in the same way as vertical distribution agreements. 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 Guidelines on Vertical Restraints⁽⁵²⁾. A further example of possible efficiency gains is agreements whereby technology owners assemble a technology package for licensing to third parties. Such pooling arrangements may in particular reduce transaction costs as licensees do not have to conclude separate licence agreements with each licensor.
140. In the application of the indispensability test contained in Article 81(3), 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 agreement or the restriction concerned. If the application of what would appear to be a less restrictive alternative would lead to a significant loss of efficiencies, the restriction in question is treated as indispensable. In some cases, however, it may also be necessary to examine whether the agreement as such is indispensable to achieve the efficiencies. This may for example be so in the case of technology pools that include complementary but non-essential technologies⁽⁵³⁾, in which case it must be examined to what extent such inclusion gives rise to particular efficiencies or whether the pool without a significant loss of efficiencies can be limited to technologies for which there are no substitutes. In the case of simple licensing between two parties it is as a general rule not necessary to go beyond an examination of the indispensability of individual restraints. Normally there is no less restrictive alternative to the licence agreement as such.
141. The condition that consumers must receive a fair share of the benefits implies that consumers of the products produced under the licence must at least be compensated for the negative effects of the agreement⁽⁵⁴⁾. This means that the efficiency gains must fully off-set the likely negative impact on prices and output caused by the agreement. It may do so by impacting on 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.
142. The last condition of Article 81(3), according to which the agreement must not afford the parties the possibility of eliminating competition in respect of a substantial part of the products concerned, presupposes an analysis of remaining competitive pressures on the market and the impact of the agreement on such sources of competition. In the application of the last condition of Article 81(3) the relationship between Article 81(3) and Article 82 must be taken into account. According to settled case law the application of Article 81(3) cannot prevent the application of Article 82 of the Treaty⁽⁵⁵⁾. Moreover, since Articles 81 and 82 both pursue the aim of maintaining effective competition on the market, consistency requires that Article 81(3) be interpreted as precluding any application of the exception rule to restrictive agreements that constitute an abuse of a dominant position⁽⁵⁶⁾.
143. The fact that the agreement substantially reduces one dimension of competition does not necessarily mean that competition is eliminated within the meaning of Article 81(3). A technology pool, for instance, can result in an industry standard, leading to a situation in which there is little competition in terms of the technological format. Once the main players in the market adopt a certain format, network effects may make it very difficult for alternative formats to survive. This does not

imply, however, that any creation of a *de facto* industry standard eliminates competition within the meaning of the last condition of Article 81(3). Within the standard suppliers may compete on price, quality and product features. However, in order for the agreement to comply with Article 81(3), it must be ensured that the agreement does not restrict such competition or unduly restrict future innovation.

2. The application of Article 81 to various types of licensing restraints

144. This section deals with various types of restraints that are common to licence agreements and which may be restrictive of competition. Restraints that have already been dealt with in the preceding parts of these guidelines, in particular sections III.4 and III.5, are only dealt with in the present section to a limited extent.

145. This section covers both agreements between non-competitors and agreements between competitors. In respect of the latter a distinction is made, where appropriate, between reciprocal and non-reciprocal agreements. No such distinction is 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, cross licensing is for all practical purposes no different than two separate licences. Cross licensing is defined as an arrangement whereby one party grants a licence to the other party and obtains a licence from that other party and both licensed technologies are for internal use. This term does not cover arrangements whereby the parties assemble a technology package, which is licensed to third parties. Such arrangements are defined as technology pools, which are dealt with in section 4.

146. This section does not deal with obligations in licence agreements that, irrespective of the circumstances of the case, are not restrictive of competition within the meaning of Article 81(1). These obligations include but are not limited to: (a) confidentiality obligations; (b) obligations on licensees not to sub-licence; (c) obligations not to use the licensed technology after the expiry of the agreement, provided that the licensed technology remains 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; and (f) obligations to use the

licensor's trade mark or indicate the name of the licensor on the product.

2.1. Royalty obligations

147. The parties to a licence agreement are normally free to determine the royalty payable by the licensee and its mode of payment without being caught by Article 81(1). This principle applies both to agreements between competitors and agreements between non-competitors subject to what has already been said about licensing between competitors in points 77 and 135 concerning reciprocal royalty payments and in point 78 concerning royalties on products that do not incorporate the licensed technology. In the context of cross-licensing between competitors royalty obligations may amount to price fixing and thus constitute a hardcore restriction of competition. When the royalty obligation extends to products produced with the licensee's own technology the agreement raises the licensee's costs and renders his technology less competitive.

148. 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. In cases where the licensed technology relates to an input, which is incorporated into a final product it as a general rule not restrictive of competition that royalties are calculated on the basis of the price of the final product, provided that it incorporates the licensed technology. The licensor can normally also apply different royalties to each licensee without falling foul of Article 81(1).

149. Notwithstanding the fact that the block exemption only applies as long as the technology is valid and in force, the parties can normally without falling foul of Article 81(1) agree to extend royalty obligations beyond the duration of the licensed intellectual property rights. Once these rights expire, third parties can legally exploit the technology in question and compete with the parties to the agreement. Such actual and potential competition will normally suffice to ensure that the obligation in question does not have appreciable anti-competitive effects. Exceptionally, however, Article 81(1) may be applicable where third parties are facing significant barriers to entry, which prevent or delay their entry as an effective competitive force on the market. In such circumstances the agreement may allow a licensor with substantial market power to preserve such market power by raising the costs of his (former) licensees, whose use of the technology no longer depends on the agreement.

150. In the case of agreements between non-competitors the block exemption covers agreements whereby royalties are calculated on the basis of all products irrespective of whether the licensed technology is being used. While such arrangements may facilitate the metering of royalties, they may also lead to foreclosure by increasing the cost of third party input and thus have similar effects as a non-compete obligation. If the licensee licences a technology from a third party, the cost of the licence is increased by the royalty payable to the licensor. Outside the scope of the block exemption it must therefore be examined whether the restriction has foreclosure effects. For that purpose it is appropriate to use the analytical framework set out in section 2.7. In the case of appreciable foreclosure effects such agreements are caught by Article 81(1) and unlikely to fulfil the conditions of Article 81(3).

2.2. Exclusive licensing and sales restrictions

151. A licence is exclusive for the present purposes where the licensor undertakes not to licence to any other licensee at all or not to licence to other licensees within a particular territory or in respect of a particular customer group. An exclusive licence as such does not imply that the licensor is restricted in where he produces products incorporating the licensed technology or that the licensor and other licensees are restricted in their sales into the exclusive territory or to an exclusive customer group. However, very often exclusive licensing is accompanied by sales restrictions. As regards these sales restrictions, there is an important distinction to be made between licensing between competitors and between non-competitors. Sales restrictions in licensing agreements between competitors are identified as hardcore restrictions under Article 4(1)(c) of the TTBER (see point 81). Sales restrictions in licensing agreements between non-competitors are dealt with below (see points 157 to 161).

152. Between competitors the restriction on the licensor not to license other licensees in general or for a particular territory or customer group, may have as its main anti-competitive effect foreclosure of other (potential) licensees. By limiting entry to the market this may, in addition, facilitate collusion between the parties and restrict inter-technology competition. This is particularly so where parties that have a significant position on the market conclude a reciprocal agreement granting each other an exclusive licence to their respective technologies. In that case the parties agree not to licence any third parties within the scope of the exclusivity.

153. Between non-competitors the restriction on the licensor not to licence other licensees, in general or in respect of a particular territory or customer group attributed to the

licensee, may have two main anti-competitive effects: (a) foreclosure of other (potential) licensees; and (b) reduced intra-technology competition between licensor and licensees and between licensees, in particular when combined with sales restrictions.

154. Exclusive licensing, however, may also give rise to efficiencies. For instance, exclusivity may induce the licensee to invest more quickly in the exploitation of the licensed technology. It may also promote continuous investment by avoiding free riding. The extent to which free riding is an issue depends on the nature of the products incorporating the licensed technology and the extent to which the licensee is involved in marketing and the provision of pre-sales services. Where the licensee sells the products under his own brand, the scope for free riding is more limited than where the products are sold under a common brand.

155. It follows from the above that the main anti-competitive risk attached to exclusive licensing without sales restrictions is foreclosure of potential licensees. In the case of agreements between competitors exclusive licensing is block exempted up to the market share threshold of 20%. Above the threshold exclusive licensing between competitors may in particular be caught by Article 81(1) where the licensee has a significant degree of market power, entry into the technology market is difficult and the licensed technology constitutes a real source of competition on the market. In such circumstances an exclusive licence may foreclose third parties and allow the licensee to preserve his market power. To prevent new entry or expansion of existing competitors the licensee is likely to be willing to share his profits with the licensor. Indeed, in order to preserve his market position the licensee may be willing to pay more for the exclusive licence than third parties that would face competition from the licensee. In such circumstances it is very unlikely that the conditions of Article 81(3) would be fulfilled. Even where the combination of the two technologies gives rise to efficiency gains, exclusivity is in particular unlikely to be indispensable.

156. In the case of a reciprocal agreement between competitors, whereby the parties grant each other an exclusive licence to each other's technologies, there is in addition to the risk of foreclosure of other licensees a risk that the agreement reduces inter-technology competition between the parties. In the absence of the exclusivity both parties could licence third parties which would constitute a new source of competition on the market. By agreeing not to do so, the parties ensure

- that they will remain the only sources of products incorporating the licensed technology. Such agreements are likely to be caught by Article 81(1) when the parties have an appreciable degree of market power. In order for the conditions of Article 81(3) to be satisfied, it would have to be demonstrated that the licences lead to an efficiency enhancing integration of technologies for the benefit of consumers and that exclusivity is necessary for these efficiencies to be attained. Exclusivity will normally only be considered necessary where the use of the licensed technology requires large sunk investments. In that case the risks facing the licensees may be such that exclusivity is required in order to induce them to make the investments.
157. In the case of agreements between non-competitors, exclusive licensing is block exempted up to the market share threshold of 30 %. Above the market share threshold exclusive licensing as such is unlikely to give rise to appreciable foreclosure effects unless there are only a limited number of viable technologies available on the market and most available technologies are licensed on exclusivity terms. The effects of foreclosure are more serious where two or more licensors in separate bilateral agreements grant exclusive licenses to the same licensee compared to the situation where the technologies are licensed to different licensees. Multiple exclusive licensing to the same licensee may also facilitate collusion between licensors that compete on the same technology market. Licensing the same licensee or licensees may allow the licensors to coordinate on royalties, i.e. the price for the licence. Such coordination, however, is likely to be more difficult in the case of licensing than in the case of distribution, where multiple exclusive dealerships may give rise to more serious competition concerns⁽⁵⁷⁾. However, as in the case of agreements between competitors, exclusivity may be necessary in order to induce the licensee to invest in the licensed technology in which case the conditions of Article 81(3) may be fulfilled. Where the licensee is facing substantial sunk investments, agreements granting an exclusive licence are likely to fulfil the conditions of Article 81(3) except where there are no real alternatives to the licensor's technology on the market or where most of the available technologies have been licensed to the same licensee.
158. Sales restrictions on the parties in the context of an exclusive licence are dealt with in section II.4. on the hardcore list contained in Article 4 of the TTBER and in point 151 above as far as exclusive licensing between competitors is concerned. As far as sales restrictions between non-competitors are concerned it is recalled that such restrictions are covered by Article 4(2)(b) of the TTBER (see points 90 to 96 above). Sales restrictions are in principle qualified as hardcore restrictions, but this classification is subject to a number of important exceptions.
159. It is recalled that in the case of agreements between non-competitors sales restrictions between the licensor and individual licensees are block exempted up to the market share threshold. Above the market share threshold restrictions on active and passive sales between territories or customer groups reserved for the licensor and territories and customer groups licensed to the licensee on an exclusive basis may be caught by Article 81(1). This may be the case both where the licensor individually has an appreciable degree of market power and in the case of a cumulative effect of similar agreements concluded by licensors which collectively hold a strong position on the market. However, where the parties are not competitors and where on the basis of objective factors, it can be concluded that in the absence of the sales restrictions, licensing would not occur, the agreement is not caught by Article 81(1). This may be the case where the licensor is active on the same product market as the licensee and where without the licence the licensee would not have been on the market. A technology owner cannot normally be expected to create direct competition with himself inside his own technology.
160. Sales restrictions on the licensor, when caught by Article 81(1), are likely to fulfil the conditions of Article 81(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 on active sales are likely to be indispensable in order 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 he would face direct competition from the licensor whose production costs are not burdened by royalty payments, possibly leading to sub-optimal levels of investment.
161. In between licensees, the TTBER block exempts restrictions on active selling between exclusive territories or exclusive customer groups. Above the market share threshold restrictions on active sales between licensees' exclusive territories and customer groups limit intra-technology competition and are likely to be caught by Article 81(1) when the individual licensee has an appreciable degree of market power. Such restrictions, however, may fulfil the conditions of Article 81(3) where they are necessary to prevent free riding and to induce the licensee to make the investment necessary for efficient exploitation of the licensed technology inside his territory and to promote sales of the licensed product. Restrictions on passive sales are covered by the hardcore list of Article 4(2)(b), cf. point 93. Such restrictions are unlikely to fulfil the conditions of Article 81(3).

162. Licence agreements whereby two or more parties cross licence technologies on an exclusive basis give rise to particular concerns when the package of technologies resulting from the cross licenses 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 agreement creates a closed standard reserved for the parties. The Commission will assess such arrangements according to the same principles as those applied to technology pools, see section 4. It will normally be required that the technologies, which support the standard, be licensed to third parties on reasonable terms⁽⁵⁸⁾. Where the parties to the arrangement compete with third parties on a product market and the licence agreements relate to that product market, an exclusivity arrangement between the parties is likely to have substantial exclusionary effects. This negative impact on competition can only be avoided by licensing also to third parties. Where the licensed technology allows the parties to create a new market and where accordingly the products produced with the licensed technology do not compete with existing products, exclusivity will be assessed in the same way as other licence agreements. Restrictions on the parties licensing their own technology may be caught by Article 81 but there will normally not be an obligation on the parties to collectively licence the whole package to third parties.

2.3. Output restrictions

163. Output restrictions in licence agreements between competitors constitute a hardcore restriction covered by Article 4(1)(b) of the TTBER with the exception of non-reciprocal output restrictions imposed on the licensee. This latter restriction is not covered by the hardcore list but is excluded from the block exemption by way of condition, cf. Article 5(2) of the TTBER, cf. points 80 and 105 above. Output restrictions on the licensee may restrict competition where the market position of the licensee(s) is not insignificant and where the agreement imposes a real limitation on the licensee's total output. In that case the agreement appreciably restricts competition that existed prior to the agreement. In making this assessment it is relevant to compare the quantity restriction with the licensee's output prior to the agreement and expected market growth. It must also be taken into account to what extent it is likely that the licensee will switch entirely to the licensor's technology or, conversely, whether he will continue to employ his own technology on a stand alone basis or is actually doing so.

164. However, non-reciprocal output restrictions in agreements between competitors may also have pro-competitive effects. In particular, they may be necessary in order to induce the licensor to disseminate

his technology and to do so as widely as possible. For instance, a licensor may be reluctant to licence his competitors if he could not limit the licence to a particular production site with a specific capacity (a site licence). Where the licence agreement leads to a real integration of complementary assets output restrictions on the licensee may therefore fulfil the conditions of Article 81(3). However, this is unlikely to be the case where the parties have significant market power and where the agreement leads to a real limitation of the licensee's output.

165. Output restrictions in licence agreements between non-competitors are block exempted up to the market share threshold of 30 %, provided that the licensor is not obliged to limit the output of other licensees or the total output of all licensees. If so it is normally considered that the agreement is implementing a concerted practice limiting output at the level of the licensees.

166. The main anti-competitive risk flowing from output restrictions on licensees in agreements between non-competitors is reduced 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 imposes a real limitation on the sales of each licensee.

167. Output limitations may also be used to facilitate the partitioning of markets and to extend territorial protection beyond what is allowed under the TTBER and the present guidelines. The Commission, however, will not assume that quantity limitations as such serve this purpose. It will be otherwise, however, 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, differentiated royalty rates depending on the destination of the products, and the monitoring of the destination of products sold by individual licensees.

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

169. Output limitations imposed on licensees may also have pro-competitive effects by promoting the dissemination of technology. As a supplier of technology the licensor, like suppliers of physical goods, should normally be free to determine how much he sells. Since intellectual property is either incorporated into a production process or into a product, the way in which a licensor determines his output is by limiting the licensee's use of the licensed technology to a certain number of operations or a certain quantity. If the licensor were not free to determine the output of the licensee, a number of licence agreements might not be concluded in the first place, which would have a negative impact on the dissemination of new technology. This is particularly likely to be the case where the licensor is also a producer, since in that case the output of the licensees may find their way back into the licensor's main area of operation and thus have a direct impact on these activities. On the other hand, it is less likely that output restrictions are necessary in order to ensure dissemination of the licensor's technology when combined with sales restrictions on the licensee imposing on him not to sell into a territory or customer group reserved for the licensor.

2.4. Field of use restrictions

170. Under a field of use restriction the licence is either limited to one or more technical fields of application or one or more product markets. There are many cases in which the same technology can be used to make different products or can be incorporated into products belonging to different product markets. A new moulding technology may for instance be used to make plastic bottles and plastic glasses, each product belonging to separate product markets. The decisive factor is whether the products incorporating the licensed technology belong to separate product markets. A restriction on the licensee based on the use made by the buyer of the products incorporating the licensed technology is not a field of use restriction for the purposes of these guidelines. Such a restriction is a customer restriction. For instance, licence agreements whereby one licensee is licensed to produce vehicle transmissions for incorporation into cars having engines with four cylinders or less and another licensee is licensed to produce the same transmissions for incorporation into cars having engines with more than four cylinders allocates customers between the licensees and is not treated as a field of use restriction. Customer restrictions are covered by Article 4(1)(c) and Article 4(2)(b) of the TTBER and are dealt with in points 81 and 90 to 96.

171. In the case of agreements between competitors reciprocal field of use restrictions and non-reciprocal field of use restrictions on the licensor are hardcore under Article 4(1)(c) of the TTBER, cf. point 82. Field of use restrictions covered by Article 4(1)(c) are caught by Article 81(1) and

are very unlikely to fulfil the conditions of Article 81(3), in particular the third condition on indispensability.

172. Field of use restrictions on the licensee in a non-reciprocal licence between competitors are block exempted up to the market share threshold of 20 %. The main competitive concern in the case of such restrictions is the risk that the licensee ceases to be a competitive force within the scope of the field of use restriction. 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 covered by the field of use restriction. If in such cases the agreement is likely to have or has had a negative impact on the licensee's ability to exploit his own technology within the field of use restriction imposed by the licensor, causing him to reduce output, the agreement restricts competition that existed in the absence of the agreement. In that case the agreement is likely to be caught by Article 81(1) and is unlikely to fulfil the conditions of Article 81(3), as consumers of the products covered by the field of use restriction are unlikely to receive a fair share of the benefits⁽⁵⁹⁾. If in such cases the agreement is block exempted, the block exemption is likely to be withdrawn.

173. Field of use restrictions in agreements between non-competitors whereby the licensor reserves one or more product markets or technical fields of use for himself are generally either non-restrictive of competition or efficiency enhancing. They promote dissemination of new and valuable technology by giving the licensor an incentive to licence for exploitation in fields in which he does not want to exploit the technology himself. If the licensor could not prevent licensees from operating in fields where the licensor exploits the technology himself, it would likely create a disincentive for the licensor to licence.

174. The licensor is normally also entitled to grant licences to different licensees limited to one or more fields of use. Given that the products concerned belong to different product markets, cf. point 170, such restrictions do not give rise to the allocation of customers or territories. However, when combined with exclusivity, i.e. an obligation on the licensor not to grant other licences within a particular field of use, such restrictions limit intra-technology competition between licensees in the same way as exclusive licensing and are analysed in the same way, cf. point 2.2.

2.5. Captive use restrictions

175. A captive use restriction can be defined as an obligation on the licensee to limit his production of the licensed product to the quantities required for the production of his own products and for the maintenance and repair of his own products. In other words, this type of use restriction takes the form of an obligation on the licensee to use the products incorporating the licensed technology only as an input for incorporation into his own production, whereas it does not cover the sale of the licensed product for incorporation into the products of other producers.
176. Captive use restrictions are block exempted up to the respective market share thresholds of 20 % and 30 %. Outside the scope of the block exemption it must be examined what are the pro-competitive and anti-competitive effects of the restraint. In this respect it is necessary to distinguish agreements between non-competitors from agreements between competitors.
177. In the case of licence agreements between competitors a restriction that imposes on the licensee to produce under the licence only for incorporation into his own products prevents him from being a supplier of components to third party producers. If prior to the conclusion of the agreement, the licensee was not an actual or likely potential supplier of components to other producers, the captive use restriction does not change anything compared to the pre-existing situation. In those circumstances the restriction is treated in the same way as in the case of agreements between non-competitors. If, on the other hand, the licensee is an actual or likely component supplier, the restriction restricts competition that existed prior to the agreement and may result in serious negative market effects. A captive use restriction between competing component suppliers may have as effect to share markets between them, in particular in case of cross licensing with a reciprocal captive use restraint. Moreover, if not only the use of the licensed technology would be limited but also the use of the licensee's own technology it would amount to a hardcore restriction under Article 4(1)(c) of the TTBER.
178. In the case of licence agreements between non-competitors there are two main competitive risks stemming from captive use restrictions: (a) a restriction of intra-technology competition on the market for the supply of inputs and (b) an exclusion of arbitrage between licensees enhancing the possibility for the licensor of imposing discriminatory royalties on licensees.
179. Captive use restrictions, however, may also promote pro-competitive licensing. If the licensor is a supplier of components, the restraint may be necessary in order for the dissemination of technology to occur. If on the basis of objective factors it is likely that in the absence of the restraint, the licensor would not grant the licence, because doing so would create direct competition to the licensor on the component market, the restraint is not caught by Article 81(1) in the first place. It is a condition, however, that the licensee is not restricted in selling the licensed product as replacement parts for his own products. The licensee must be able to serve the after market, including independent service organisations that service and repair the products produced by the licensee.
180. Where the licensor is not a component supplier on the relevant 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 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 normally not necessary for the dissemination of technology to take place.
181. Captive use restrictions may in addition promote licensing by allowing the licensor to more effectively monitor the payment of royalties. Monitoring may be easier when royalties can be charged on each product incorporating the input produced on the basis of the licensed technology. However, where the licensor has a significant degree of market power, any such efficiency is unlikely to outweigh the anti-competitive effects.

2.6. Tying

182. 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 him (the tied product). There is no tying where the tying product is not distinct from the tied product. Technologies or products are considered to be distinct where, in the absence of the tie, from the licensee's/buyer's perspective the technologies or products belong to different markets. This is normally not the case where the technologies or products are linked in such a way that the licensed technology cannot be exploited without the tied product.

183. Tying is block exempted in the case of agreements between competitors up to the market share threshold of 20 % and in the case of agreements between non-competitors up to the market share threshold of 30 %. Above the market share threshold it is necessary to balance the anti-competitive and pro-competitive effects of tying.
184. 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 analysed as non-compete or quantity forcing, reflecting the fact that any competition problem has its origin on the market for the 'tied' product and not on the market for the 'tying' product⁽⁶⁰⁾. Article 3 of the TTBER, which subjects the application of the block exemption to market share thresholds, ensures that such agreements are not block exempted above the market share thresholds of respectively 20 % and 30 %. The market share thresholds apply to any relevant technology or product market, including the market for the tied product.
185. The main restrictive effect of tying is foreclosure of competing suppliers of the tied product. However, tying may also allow the licensor to increase royalties, in particular when the tying product and the tied product are partly substitutable and the two products are not used in fixed proportion. Tying prevents the licensee from switching to substitute inputs in the face of increased royalties 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 market power in the tying product the licensor cannot use his technology for the anti-competitive purpose of foreclosing suppliers of the tied product. Furthermore, as in the case of non-compete obligations the tie must cover a certain proportion of the market for the tied product for foreclosure effects to occur.
186. 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 is normally either not restrictive of competition or covered by Article 81(3). Where the 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 are such that it does not undermine the value of his technology or his reputation as an economic operator. Moreover, where it is known to consumers that the licensees (and the licensor) produce on the basis of the same technology it is unlikely that licensees would be willing to take a licence unless the technology is exploited by all in a technically satisfactory way.
187. Tying is also likely to be pro-competitive where the tied product allows the licensee to exploit the licensed technology significantly more efficiently than other available alternatives. For instance, where the licensor licenses a particular process technology, the parties can also agree that the licensee buy a catalyst from the licensor, which is developed for use with the licensed technology and which allows the technology to be exploited more efficiently than in the case of other catalysts. Where in such cases the restriction is caught by Article 81(1), the conditions of Article 81(3) are likely to be fulfilled also above the market share thresholds.
- 2.7. *Non-compete obligations*
188. Non-compete obligations in the context of technology licensing take the form of an obligation on the licensee not to use third party technologies, which compete with the licensed technology. To the extent that a non-compete obligation covers a product or additional technology supplied by the licensor the obligation is dealt with in the preceding section on tying.
189. The TTBER exempts non-compete obligations both in the case of agreements between competitors and in the case of agreements between non-competitors up to the market share thresholds of 20 % and 30 % respectively.
190. The main competitive risk presented by non-compete obligations is foreclosure of third party technologies. Non-compete obligations may also facilitate collusion between licensors in the case of cumulative use. Foreclosure of competing technologies reduces competitive pressure on royalties charged by the licensor and reduces competition between the incumbent technologies by limiting the possibilities for licensees to substitute

between 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 of agreements between non-competitors. However, in case of cross licensing between competitors where both agree not to use third party technologies the agreement may facilitate collusion between them on the product market, thereby justifying the lower market share threshold of 20 %.

191. Foreclosure may arise where a substantial part 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 by a cumulative effect of agreements concluded by several licensors, even where each individual agreement or network of agreements is covered by the TTBER. In that case, however, a serious cumulative effect is unlikely to arise as long as less than 50 % of the market is tied. Above this 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 entry and expansion by third parties it is necessary also 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 IV.2.1 of the Guidelines on Vertical Restraints ⁽⁶¹⁾.

192. When the licensor has a significant degree of 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 must not necessarily cover a substantial part of the market. Even in the absence thereof, appreciable foreclosure effects may occur where non-compete obligations are targeted at undertakings that are the most likely to licence competing technologies. The risk of foreclosure is particularly high where there are only a limited number of potential licensees and the licence agreement concerns a technology which is used by the licensees to make an input for their own use. In such cases demand on the market is limited to the licensees. Foreclosure is less likely in cases where the technology is used to make a product that is sold to

third parties, since in this case the restriction ties only production capacity but not demand for the product incorporating the licensed technology. To enter the market in the latter case, licensors only need access to licensees that have suitable production capacity and unless only few undertakings possess or are able to obtain the assets required to take a licence, it is unlikely that by imposing non-compete obligations on its licensees the licensor is able to deny competitors access to efficient licensees.

193. Non-compete obligations may also produce pro-competitive effects. First, such obligations may promote dissemination of technology by reducing the risk of misappropriation of the licensed technology, in particular know-how. If a licensee is entitled to licence competing technologies from third parties there is a risk that particularly licensed know-how would be used in the exploitation of competing technologies and thus benefit competitors. When a licensee also exploits competing technologies, it normally also makes monitoring of royalty payments more difficult, which may act as a disincentive to licensing.

194. Second, non-compete obligations may be necessary to ensure that the licensee has an incentive to invest in and exploit the licensed technology effectively. Often, however, it will in cases where the agreement is caught by Article 81(1) be sufficient for that purpose to impose minimum output or royalty obligations, which normally have less potential to foreclose competing technologies.

195. Third, in cases where the licensor undertakes to make significant client specific investments for instance in training and tailoring of the licensed technology to the licensee's needs, non-compete obligations or alternatively minimum output or minimum royalty obligations may be necessary to induce the licensor to make the investment and to avoid hold-up problems. However, normally the licensor will be able to charge directly for such investments by way of a lump sum payment, implying that less restrictive alternatives are available.

3. Settlement and non-assertion agreements

196. Technology transfer agreements concern the transfer of technology from licensor to licensee in order to allow the licensee to exploit the licensor's technology. However, in

some sectors licensing is becoming increasingly important as a means of settling conflicts or avoiding that one party exercises his intellectual property rights to prevent the other party from exploiting his own technology. Cross licensing in the context of settlement agreements and non-assertion agreements is not as such restrictive of competition since they allow the parties to compete *ex post*. However, the individual terms and conditions of such agreements may be caught by Article 81(1).

197. Agreements that impose restrictions on the parties concerning the use of their respective technologies, including licensing to third parties, are likely to be caught by Article 81(1). Even if the parties are deemed to be non-competitors due to the existence of a two-way blocking position, cf. point 25, such a restraint is likely to be caught by Article 81(1) for lack of objective necessity, cf. point 14. Moreover, such agreements are unlikely to fulfil the conditions of Article 81(3). The main benefit of the agreement is the bringing to an end of the dispute or the avoidance of future disputes. Cross licensing without any restraints is sufficient to achieve this.

198. Where under the agreement the parties are entitled to use each other's technology and the agreement extends to future developments, it needs to be assessed what is the impact of the agreement on the parties' incentive to innovate. In cases where the parties have an appreciable degree of market power and where the agreement prevents the parties from gaining a competitive lead over each other, the agreement is likely to be caught by Article 81(1) and is unlikely to fulfil the conditions of Article 81(3), in particular the condition of indispensability. 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.

199. Royalty obligations and other payment schemes in the context of settlement and non-assertion agreements may be caught by Article 81(1) when they allow the parties to coordinate their pricing and are assessed in the same way as in the case of agreements between competitors, cf. points 77 and 147. Licenses should be royalty free or, where the objective value of the technologies in question

is different, provide for one-way (lump sum) royalties, reflecting the objective difference in value.

200. In the context of settlement and non-assertion agreements, non-challenge clauses are considered to generally fall outside Article 81(1). It is inherent in such agreements that the parties agree not to challenge *ex post* the intellectual property rights covered by the agreement. Indeed, the very purpose of the agreement is to settle existing disputes and/or to avoid future disputes.

201. The block exemption applies provided that the agreement does not contain any hardcore restrictions of competition as set out in Article 4 of the TTBER. It is recalled, however, cf. point 34, that according to Article 2 of the TTBER the block exemption only applies where the licence is entered into between two undertakings for the production of products incorporating the licensed technology. It follows that the block exemption does not apply where licenses are granted only for the purpose of settling a dispute or avoiding future disputes and not for the purpose of production.

4. Technology pools

202. Technology pools are defined as arrangements whereby two or more parties assemble a package of technology which is not only licensed to members of the pool but which is also licensed to third parties. In terms of their structure technology pools can take the form of simple arrangements between a limited number of parties and elaborate organisational 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 operate on the market on the basis of a single licence.

203. In some cases the technologies in the pool support (wholly or partly) a *de facto* or *de jure* industry standard. However, there is no inherent link between technology pools and standards. When technology pools do support an industry standard they do not necessarily support a single standard. Technology pools may support competing standards⁽⁶²⁾.

204. Agreements establishing technology pools and setting out the terms and conditions for their operation are not, irrespective of the number of parties, covered by the block exemption, cf. section III.2.2. Such agreements are subject only to these guidelines. Pooling arrangements give rise to a number of particular issues regarding the selection of the included technologies and the operation of the pool, which do not arise in the context of other types of licensing. The individual licences granted by the pool to third party licensees, however, are treated like other licence agreements, which are block exempted when the conditions set out in the TTBER are fulfilled, including the requirements of Article 4 of the TTBER containing the list of hardcore restrictions.
205. Technology pools may 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 of substitute technologies amounts to a price fixing cartel. Moreover, in addition to reducing competition between the parties, technology pools may also, in particular when supporting an industry standard or establishing a *de facto* industry standard, restrict competition in innovation by foreclosing alternative technologies. The existence of the standard and the related technology pool may make it more difficult for new and improved technologies to enter the market.
206. Technology pools can also produce pro-competitive effects, in particular by reducing transaction costs. The creation of a pool allows for one-stop licensing of the technologies covered by the pool. This is particularly important in sectors where intellectual property rights are prevalent and where in order to operate on the market licenses need to be obtained from a significant number of licensors. In cases where licensees receive on-going services concerning the application of the licensed technology, joint licensing and servicing can lead to further cost reductions.
- 4.1. *The nature of the pooled technologies*
207. The competitive risks and the efficiency enhancing potential of technology pools depend to a large extent on the relationship between the pooled technologies and their relationship with technologies outside the pool. Two basic distinctions must be made, namely between (a) technological complements and technological substitutes; and (b) essential and non-essential technologies.
208. Two technologies are *complements* as opposed to *substitutes* when they are both required from a technological point of view to produce the product or carry out the process to which the technologies relate. Conversely, two technologies are substitutes when from a technological point of view either technology allows the holder to produce the product or carry out the process to which the technologies relate. A technology is *essential* as opposed to *non-essential* if there are no substitutes for that technology inside and outside the pool and the technology in question constitutes a necessary part of the package of technologies for the purposes of producing the product(s) or carrying out the process(es) to which the pool relates. Technologies that are essential are by necessity also complements.
209. 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 arrangement reduces transaction costs and may lead to lower overall royalties because the parties are in a position to fix a common royalty for the package as opposed to each fixing a royalty, which does not take account of the royalty fixed by others.
210. The distinction between complement 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 employing both technologies as opposed to employing only one of them.
211. From a legal point of view, two technologies are also complements when they are in a two-way blocking position. However, as a general rule the Commission will not consider that the creation of a pool is required to unblock the blocking positions. As indicated in section 3, the parties can solve the blocking position by granting a cross licence or concluding a non-assertion agreement

that allows them both to exploit their respective technologies independently. The Commission will therefore treat technology pools comprising blocking patents in the same way as technology pools comprising substitutes.

212. The inclusion in the pool of substitute technologies restricts inter-technology competition inside the pools and amounts to collective tying. Moreover, where the predominant part of the pool is composed of substitute technologies, the arrangement amounts to price fixing between competitors. As a general rule the Commission considers that the inclusion in the pool of substitute technologies constitutes a violation of Article 81(1). The Commission also considers that it is unlikely that the conditions of Article 81(3) will be fulfilled in the case of pools comprising substitute technologies. 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. It is not sufficient that the parties remain free to licence independently. In order not to undermine the pool, which allows them to jointly exercise market power, the parties are likely to have little incentive to do so.

213. When a pool is composed only of technologies that are essential and therefore by necessity also complements the creation of the pool as such generally falls outside Article 81(1) irrespective of the market position of the parties. However, the conditions on which licences are granted may be caught by Article 81(1).

214. Where non-essential but complementary patents are included in the pool, there is a risk of foreclosure of third party technologies. Once a technology is included in the pool and is licensed as part of the package, licensees are likely to have little incentive to licence 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 also forces licensees to pay for technology that they may not need. The inclusion of complementary patents thus amounts to collective tying. When a pool encompasses non-essential technologies the agreement is likely to be caught by Article 81(1) where the pool has a significant position on any relevant market.

215. In the assessment of technology pools comprising non-essential technologies, i.e. technologies for which substitutes exist outside the pool or which are not necessary in order to produce one or more products to which the pool relates the Commission will, *inter alia*, take account of the following factors:

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

(b) whether the licensors remain free to licence their respective technologies independently. Where the pool is composed of a limited number of technologies and there are substitute technologies outside the pool, it may be a viable option for licensees to put together their own technological package composed partly of technology forming part of the pool partly of technology owned by third parties;

(c) whether the pooled technology is 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. This possibility is not only relevant in cases where the pool includes non-essential technologies but also where the pooled technologies find different applications some of which do not require use of all of the pooled technologies. In the former case, a right to obtain a licence for only part of the package reduces the risk of foreclosure of third party technologies outside the pool. In the latter case, the right to licence only part of the package avoids that technologies that are not essential to a particular product or process are tied to essential technologies. Licensing of part of the package is only a real option if 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, it must also be taken into account that the pool may foreclose access to the market of new substitute technologies. In assessing the risk of foreclosure in such cases, it is relevant to take into account whether or not licensees have the right to terminate at reasonable notice part of the licence and obtain a corresponding reduction of royalties.

4.2. Assessment of individual restraints

216. The purpose of this section is to address a certain number of restraints that in one form or another are commonly found in technology pools and which need to be assessed in the overall context of the pool. It is recalled, cf. point 204, that the TTBER applies to licence agreements concluded between the pool and third party licensees, including the list of hardcore restrictions contained in Article 4 of the TTBER. This section is therefore limited to addressing the creation of the pool and licensing issues that are particular to licensing in the context of technology pools.
217. In making its assessment the Commission will be guided by the following main principles:
1. The stronger the market position of the pool, the greater the risk of anti-competitive effects.
 2. Pools that hold a strong position on the market should be open and non-discriminatory.
 3. Pools should not unduly foreclose third party technologies or limit the creation of alternative pools.
218. Undertakings setting up a technology pool are normally free to negotiate and fix royalties for the technology package and each technology's share of the royalties. Such agreement is inherent in the establishment of the pool and cannot in itself be considered restrictive of competition. Indeed, where the selection of the technologies to be included in the pool is carried out by an independent expert, it may allow competition to take place between available technological solutions. On the other hand, licensees must be free to determine the price and the quantity of products produced under the licence.
219. Where the pool has a strong position on the market royalties and other licensing terms should be non-discriminatory and licenses should be non-exclusive. Both requirements are necessary to ensure that the pool is open and does not lead to foreclosure and other anti-competitive effects on down stream markets. These requirements, however, do not preclude different royalties 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 should not depend on whether they are licensors or not. The Commission will therefore take into account whether licensors are also subject to royalty obligations.
220. Licensors and licensees must be free to develop competing products and standards and must also be free to licence outside the pool. These requirements are necessary in order 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 a pool creates 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.
221. Grant back obligations should be non-exclusive and be limited to developments that are essential to the use of the pooled technology. This allows the pool to benefit from improvements that are closely related to the pooled technology, while leaving the owners free not to licence severable improvements to the pool. It is legitimate for the parties to ensure that the exploitation of the pooled technology cannot be held up by licensees that hold or obtain essential patents.
222. One of the problems identified with regard to patent pools is the risk that they shield invalid patents. Pooling raises the costs/risks for a successful challenge, because the challenge fails 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 may also prevent innovation in the field covered by an invalid patent. In order to limit this risk any right to terminate a licence in the case of a challenge must be limited to the technology owned by the licensor, who is the addressee of the challenge and must not extend to the entire package of pooled technologies.
- #### 4.3. The institutional framework governing the pool
223. 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 provide assurances to the effect that the arrangement is pro-competitive.

224. When participation in the process is open to all interested parties representing different interests, it is more likely that technologies for inclusion into the pool are selected on the basis of price/quality considerations than when the pool is set up by a limited group of technology owners. Similarly, when the relevant bodies of the pool are composed of persons representing different interests, it is more likely that licensing terms and conditions, including royalties, will be open and non-discriminatory and reflect the value of the licensed technology than when the pool is controlled by licensor representatives.
225. Another relevant factor is the extent to which independent experts are involved in the creation and operation of the pool. For instance, the assessment of whether or not a technology is essential to a pool is often a complex matter that requires special expertise. The involvement in the selection process of independent experts can go a long way in ensuring that a commitment to include only essential technologies is implemented in practice.
226. The Commission will take into account how experts are selected and what are the exact functions that they are to perform. Experts must be independent from the undertakings that have formed the pool. If experts are in any way connected to the licensors or otherwise depend on them, the involvement of the expert will be given no 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, an assessment of whether or not technologies put forward for inclusion into the pool are valid and whether or not they are essential to the technological package that is being assembled, i.e. whether the technologies are necessary for the purpose of producing the product(s) or carrying out the process(es) to which the pool relates.
227. It is also relevant to consider the arrangements for exchanging sensitive information among the parties. In oligopolistic markets exchanges of sensitive information such as pricing and output data may facilitate collusion⁽⁶³⁾. In such cases, the Commission will take into account to what extent safeguards have been put in place, which ensure that sensitive information is not exchanged. An independent expert or licensing body 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 undertakings that compete on affected markets.
228. Finally, it is relevant to take account of the dispute resolution mechanism foreseen in the instruments setting up the pool. The more dispute resolution is entrusted to bodies or persons that are independent of the pool and the members thereof, the more likely it is that the dispute resolution will operate in a neutral way.

(1) OJ L ... The TTBER replaces Commission Regulation (EC) No 240/96 of 31 January 1996 on the application of Article 81(3) of the Treaty to certain categories of technology transfer agreements (OJ L 31, 9.2.1996, p. 2).

(2) See Joined Cases C-395/96 P and C-396/96 P, *Compagnie Maritime Belge*, [2000] ECR I-1365, paragraph 130, and point 94 of the Commission Guidelines on the application of Article 81(3) of the Treaty (OJ C ...).

(3) In the following the term 'agreement' includes concerted practices and decisions of associations of undertakings.

(4) See Commission Notice on the concept of effect on trade between Member States contained in Articles 81 and 82 of the Treaty (OJ C ...).

(5) In the following the term 'restriction' includes the prevention and distortion of competition.

(6) This principle of Community exhaustion is for example enshrined in Article 7(1) of Directive 104/89/EEC to approximate the laws of the Member States relating to trade marks (OJ L 40, 11.2.1989, p. 1), which provides that the trade mark shall not entitle the proprietor to prohibit its use in relation to goods which have been put on the market in the Community under that trade mark by the proprietor or with his consent.

(7) See in this respect Case 158/86, *Warner Brothers and Metronome Video*, [1988] ECR 2605, and Case C-61/97, *Foreningen af danske videogram-distributører*, [1998] ECR I-5171.

(8) See, e.g. Joined Cases 56/64 and 58/64, *Consten and Grundig*, [1966] ECR 429.

(9) The methodology for the application of Article 81(3) is set out in the Commission Guidelines on the application of Article 81(3) of the Treaty cited in note 2.

(10) See in this respect Case C-49/92 P, *Anic Partecipazioni*, [1999] ECR I-4125, paragraph 99.

(11) See Joined Cases 29/83 and 30/83, *CRAM and Rheinzink*, [1984] ECR 1679, paragraph 26, and Joined Cases 96/82 and others, *ANSEAU-NAVEWA*, [1983] ECR 3369, paragraphs 23-25.

(12) Guidance on the issue of appreciability can be found in Commission notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty (OJ C 368, 22.12.2001, p. 13). The notice defines appreciability in a negative way. Agreements, which fall outside the scope of the *de minimis* notice, do not necessarily have appreciable restrictive effects. An individual assessment is required.

(13) See Case 56/65, *Société Technique Minière*, [1966] ECR 337, and Case C-7/95 P, *John Deere*, [1998] ECR I-3111, paragraph 76.

(14) See in this respect Joined Cases 56/64 and 58/66, *Consten and Grundig*, [1966] ECR p. 429.

(15) See Article 1(2) of Council Regulation (EC) No 1/2003 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).

(16) Commission notice on the definition of the relevant market for the purposes of Community competition law (OJ C 372, 9.12.1997, p. 5).

- (17) As to these distinctions see also Commission Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements (OJ C 3, 6.1.2001, p. 2, points 44 to 52).
- (18) See, e.g. point 98 of the Commission Guidelines on Vertical Restraints (OJ C 291, 13.10.2000, p. 1).
- (19) See to that effect points 50 to 52 of the Guidelines on horizontal cooperation agreements, cited in note 17.
- (20) *Idem*, point 51.
- (21) See in this respect the Notice on agreements of minor importance cited in note 12.
- (22) According to Article 3(2) of Regulation (EC) No 1/2003 agreements which may affect trade between Member States but which are not prohibited by Article 81 cannot be prohibited by national competition law.
- (23) See recital 19 of the TTBER.
- (24) The present guidelines replace the Commission Notice concerning the assessment of certain subcontracting agreements in relation to Article 81(1) of the Treaty (OJ C 1, 3.1.1979, p. 2).
- (25) See in this respect Commission Decision in *Moosehead/Whitbread* (OJ L 100, 20.4.1990, p. 32).
- (26) See in this respect Case 262/81, *Coditel* (II), [1982] ECR 3381.
- (27) OJ L 336, 29.12.1999, p. 21.
- (28) OJ L 304, 5.12.2000, p. 3.
- (29) OJ L 304, 5.12.2000, p. 7.
- (30) See note 27.
- (31) See the guide 'Competition policy in Europe — The competition rules for supply and distribution agreements', 2002.
- (32) See notes 18 and 27.
- (33) The reasons for this calculation rule are explained in point 21.
- (34) See, e.g. the case law cited in note 11.
- (35) See in this respect point 86 of the Guidelines on the application of Article 81(3) of the Treaty cited in note 2.
- (36) This 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.
- (37) See in this respect Case 193/83, *Windsurfing International*, [1986] ECR 611, paragraph 67 and point 14 above, where it is stated that agreements which restrict actual or potential competition that would have existed in the absence of the agreement are caught by Article 81(1).
- (38) Cross licensing of different non-competing technologies is treated as two non-reciprocal licenses.
- (39) Field of use restrictions are defined in section IV.2.4 below.
- (40) Captive use restrictions are also dealt with in section IV.2.5 below.
- (41) As to the distinction between active and passive sales, see the Guidelines on Vertical Restraints cited in note 18, point 50.
- (42) See in this respect point 116 of the Guidelines on Vertical Restraints cited in note 18.
- (43) See in this respect Case 258/78, *Nungesser*, [1982] ECR 2015, paragraph 77.
- (44) See in this respect Case 26/76, *Metro* (I), [1977] ECR 1875.
- (45) If the licensed technology is outdated no restriction of competition arises, see in this respect Case 65/86, *Bayer v Sülthofer*, [1988] ECR, p. 5249.
- (46) See point 10.
- (47) See point 66.
- (48) See in this respect point 38 of the Guidelines on the application of Article 81(3) of the Treaty, cited in note 2.
- (49) See in this respect point 8 of the Commission Notice on agreements of minor importance, cited in note 12.
- (50) See in this respect Case T-228/97, *Irish Sugar*, [1999] ECR II-2969, paragraph 101.
- (51) See in this respect point 23 of the Guidelines on horizontal cooperation agreements, cited in note 17.
- (52) Cited in note 18. See in particular points 115 *et seq.*
- (53) As to these concepts see section IV.4.1
- (54) See point 74 of the Guidelines on the application of Article 81(3) of the Treaty, cited in note 2.
- (55) See paragraph 130 of the judgment cited in note 2. Similarly, the application of Article 81(3) does not prevent the application of the Treaty rules on the free movement of goods, services, persons and capital. These provisions are in certain circumstances applicable to agreements, decisions and concerted practices within the meaning of Article 81(1), see to that effect Case C-309/99, *Wouters*, [2002] ECR I-1577, paragraph 120.
- (56) See in this respect Case T-51/89, *Tetra Pak* (I), [1990] ECR II-309. See also point 95 of the Guidelines on the application of Article 81(3) of the Treaty cited in note 2 above.
- (57) See point 164 of the Guidelines on Vertical Restraints cited in note 18.
- (58) See in this respect the Commission's Notice in the Canon/Kodak Case (OJ C 330, 1.11.1997, p. 10).
- (59) Benefits for one group of consumers cannot be balanced against harms to another distinct group of consumers, see point 39 of the Guidelines on the application of Article 81(3) cited in note 2.
- (60) For the applicable analytical framework see points 138 *et seq.* of the Guidelines on Vertical Restraints cited in note 18.
- (61) See note 18.
- (62) See in this respect the Commission's press release IP/02/1651 concerning the licensing of patents for third generation (3G) mobile services. This case involved five technology pools creating five different technologies, each of which could be used to produce 3G equipment.
- (63) See in this respect the judgment in *John Deere* cited in note 13.