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Short CV

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His main field of practice is industrial property law. Dr. Rahn organizes and coordinates multi-jurisdictional patent litigation and is active as a litigator in Germany. He has handled many multinational lawsuits in Germany, Europe, and Japan.

Having lived in Japan for fourteen years and studied Japanese law at Tokyo University, he counsels Japanese enterprises on German and European law as well as European enterprises on Japan.

From 1975 to 1992, Dr. Rahn headed the Japan and East Asia Department at the Max Planck Institute for Foreign and International Patent, Copyright and Competition Law in Munich.

Since 1998, he teaches a course on "Innovation and Intellectual Property Rights" at the Koblenz/Kellogg Graduate Schools of Management Joint Executive MBA Program.

Dr. Rahn is author of numerous articles on intellectual property law and Japan.

LICENSING IN THE EUROPEAN UNION

by Dr. Guntram Rahn

Contents

2. *from using a process which is the subject matter of the patent or, when the third party knows, or it is obvious in the circumstances, that the use of the process is prohibited without the consent of the patentee, from offering the process for use within the jurisdiction of this act;*
3. *from offering, putting on the market, using, or importing or stocking for these purposes the product obtained directly by a process which is the subject matter of the patent.*

However, the right to commercially exploit intellectual property is not limited to manufacturing, distributing and selling the protected innovative product. Many owners of intellectual property do not have the resources to engage in such activities, especially in foreign countries. Thus, intellectual property rights can also be exploited by authorizing third parties to use the intellectual property, in other words, by granting licenses. Sec. 15 (2) German Patent Act consequently provides:

> *The [right to the patent, the right to the grant of the patent and the rights deriving from the patent] may be licensed in whole and in part, exclusively or non-exclusively, for the whole or part of the territory to which this Act applies. Where a licensee contravenes a restriction of his license covered by sentence 1, the rights deriving from the patent may be invoked against him.*

The wheel had to be invented only once, but imagine how many times you could have licensed it. Many intellectual property owners therefore license their rights to other parties in order to realize a maximum of the financial potential of their intellectual property. This involves negotiating and entering into agreements which reflect the licensor's and licensee's commercial concerns. Due to the enlargement of the European Union on May 1, 2004, intellectual property licensing in the European Union will certainly also increase.

2. Contents of license agreements

The contents of such license agreements will be determined by the kind of intellectual property right licensed, but apart from that the basic provisions will

In order to protect the non-exclusive licensee against his contractual license becoming ineffective by a transfer of the patent right to a successor in right, Sec. 15 (3) of the German Patent Act provides that a transfer of the right (e.g. the assignment of the licensed patent right to a successor in right) or the grant of a further license shall not affect licenses which have been granted previously to third parties.

The non-exclusive licensee cannot transfer the non-exclusive license, i.e. his contractual position, to a successor in right without the consent of the licensor.

2.1.2.2 Exclusive License

Contrary to a non-exclusive license, an exclusive license is a right *in rem*, and therefore remains in effect against a purchaser of the licensed patent without having to apply Sec. 15 (3).

The exclusivity of the license may vary in extent or scope. A so-called monopolistic exclusive license will confer all rights to exploit and to enforce the patented invention on the exclusive licensee. Only the formal ownership of the patented invention remains with the licensor. In such case the licensor does not even retain a right to use the patented invention himself and he may have no standing to sue in case of a patent infringement.

In a less extreme type of exclusive license, the licensor may reserve a right to use the patented invention himself, so that the invention may be used by two authorized users, namely the licensor and the exclusive licensee.

However, if the contract does not contain a provision reserving the right to use for the licensor, then in case of granting an exclusive license one has to assume that he does not have the right to continue his own use.

The patentee may also grant an exclusive license which is restricted with respect to one or more of the criteria territory, type of use of the invention (manufacture, sale), field of technical application, or license period. Thus, several exclusive licenses granted under the same patent may coexist.

2.1.3.3 Royalties

Royalties can be calculated as

- a percentage of the turnover,
- a fixed amount per item,
- a lump sum.

The royalty based on turnover should be defined precisely as regards the basis of calculation. This is done by defining in the contract the permitted deductions such as freight, value added tax, insurance costs, duty and cost of packaging. A percentage of profit royalty is not practical in view of possible controversies over the method of determining profit.

The per unit royalty is a fixed amount which is paid per item sold. The advantage of this method is that it is independent of price changes. Also, it does not require a thorough examination of the accounting of royalty owed but merely of the number of items produced.

A lump sum royalty is advisable if the possibility of control with respect to the sales of the licensed product does not exist or is too burdensome. A special category of a lump sum license is the so-called paid-up license. It is based on sales-related royalties, but the payment obligation terminates if a specific amount has been reached. This is therefore an agreement of a maximum amount of royalty for the duration of the contract.

The agreement of a lump sum payment in addition to running royalty generally represents a participation of the licensee in the licensor's costs of developing the invention. If the contractual purpose of the lump sum is a one-time fee to be paid for entering into the contract, then the licensor may keep this amount even if the license is terminated prior to the agreed duration of the contract. However, a clarification is advisable, in order to avoid that the lump sum payment be interpreted as an anticipated royalty calculated for the duration of the patent, which then may be refundable.

2.1.3.4 Improvements

An obligation of the licensee to grant licenses for improvement inventions (grant back clause) is usually admissible under competition law, if the licensor has a corresponding obligation. Furthermore the license conditions have to correspond, i.e. the licenses either both have to be free or both have to be royalty bearing.

2.1.3.5 Most Favorite Terms

A non-exclusive licensee will generally request that a "most favoured license clause" be included in the agreement. Otherwise he bears the risk that when licenses are granted to competitors, he may be put at a disadvantage with respect to the royalty rate.

However, the disadvantages of such a clause for the licensor cannot be overlooked. Controversies may arise, for example, if a later licensee was granted better terms, because the licensor in an infringement suit with a parallel nullity procedure was willing to enter into a settlement. The most-favoured clause should be formulated in a precise manner, for example by excluding settlement contracts in case of patent infringement.

The licensor in addition runs a risk with a most-favoured license clause in case of infringement situations. The licensor cannot be forced to sue infringers, but he has the "burden of suit" (German: *Klagelast*). This may have the result that a licensee does not have to pay royalties anymore, if the licensor fails to take action against infringers who in such case practically have a free license.

2.1.3.6 Duration of the Agreement and Termination

The exclusive patent license agreement expires at latest with the expiration of the last of the licensed patents. A duration past that point is admissible under competition law only if secret know-how was licensed in addition to the patents.

A termination for cause is always admissible if the terminating party cannot in good faith be obligated to continue the contract. This, according to general

In case of a non-exclusive license, the licensee is not obligated to exercise his right to use if this is not specified in the agreement. Such an obligation can however be imposed on the non-exclusive licensee. As an alternative, or in addition, the payment of a minimum royalty can be agreed upon as well as a right of termination by the licensor, if certain minimum sales have not been reached.

2.1.3.8.2 Obligation to Purchase ("tie-ins")

An obligation to purchase raw material and component parts etc. from the licensor for producing the licensed products is generally only permissible under competition law if justified or necessary for a technically satisfactory exploitation of the invention.

2.1.3.8.3 Obligation to Defend

Even without an express provision, it is assumed in Germany that the exclusive licensee has the obligation to defend the patent, and the licensor is relieved insofar. If the licensee does not have the right to sue under national law, then the licensor is obligated to provide him with all powers and support. An obligation of the exclusive licensee to defend the licensed patent is interpreted in Germany to mean that he has no right to challenge the validity of the patent.

In case of a non-exclusive license, the licensor is under obligation to enforce the licensed patent only if a most-favoured clause has been agreed upon. In this case, to tolerate infringements would amount to a free license for infringers.

Since the non-exclusive licensee does not have standing for infringement litigation, he can comply with a contractual obligation to enforce the patent only if the patentee provides him with that power, or if an assignment of rights has been agreed upon.

The parties have to realize, however, that a provision enabling the licensee to proceed against each and every infringer enhances the risk of a nullity suit against the patent, because this is the normal reaction of an infringer in the case of important patents. Thus, if the licensor fears the risks of a nullity suit or would generally like to maintain an influence in the defense and enforcement of the

2.1.3.9.2 Warranty for Technical Utility

The only defect, the absence of which is presumed to be warranted by the licensor under German law, is the technical usefulness of the invention. However, a contractual provision to the contrary may be included in the license agreement. Technical usefulness relates to the operability of the invention as such, not to the invention being suited for specific applications, unless such suitability is contractually guaranteed.

If the licensor has guaranteed the technical usefulness of the invention and it later proves to be technically inoperable or not useful, the licensee has the right to rescind the agreement as long as the contract has not yet been performed. If the contract has already reached the stage of performance and the defect appears later, the licensee may only terminate effective for the future. In certain situations there is also the possibility of an adaptation of the contract to the changed circumstances by the courts under the general equity provision of Sec. 242 German Civil Code.

2.1.3.9.3 Commercial Exploitability

The risk of economic success in the exploitation of patents is generally borne by the licensee. Again a provision to the contrary is possible.

3. Applicable law

3.1. National civil law

License agreements in the countries of the European Union generally contain standard provisions as exemplified above in the case of a patent license agreement under German law. Nevertheless, there are legal issues as well as cultural issues which will vary from jurisdiction to jurisdiction.

The law applicable to license agreements usually depends on the nationality of the parties. If they are both of the same nationality, most probably their own national law will govern their license relationship. If the parties are of different nationalities, they will often choose and agree on the applicable law. Frequently, it

II. The Legal System of the European Union

Before discussing the specific effect of European competition law on licensing, let us take a short look at the history of what is popularly called the European Union today and the legal system governing it and relevant to intellectual property.

1. History

1.1 The three Communities

A recurrent dream of unification is part of the European cultural heritage. The Second World War finally demonstrated the futility of conquests and the vulnerability of the sovereign state concept. Interdependence of states rather than independence became the key to post-war international relations in Europe. This was also reflected in the trends of global international law, such as the concept and structure of the United Nations.

An admirable example of cooperation and practical application of the call for peace was the first instrument of European integration, the European Coal and Steel Community (ECSC) of 1951. It was built on the premise that, if the basic raw materials for war at that time, coal and steel, were removed from national control, war between the traditional enemies, France and Germany, would become impossible since they would be prevented from developing a war industry.

Some years later, in April 1957 in Rome, a treaty was signed to establish the European Economic Community (EEC), a common market in the six member states Belgium, France, Germany, Italy, Luxemburg and the Netherlands.

At the same time, a second Treaty of Rome which set up the European Community of Atomic Energy (EURATOM) was signed. Its purpose was the coordination of action of the member states in developing and marketing their nuclear resources.

These two Treaties of Rome added two new Communities to the Coal and Steel Community. However, the objectives of the European Economic Community were wider than the objectives of the other two Communities, because the EEC was not

In historical dimensions this development of European union in a time-span of little more than fifty years is truly incredible.

2. Community law

2.1 The three pillars of the EU

As a political entity, the European Union today rests on three pillars.

The main pillar is the EC Treaty, at present as amended by the treaty of Nice. It establishes the European Community as a subject of international law and provides the primary Community law.

The second pillar consists of political provisions to establish a common foreign and security policy of the EU member states (Title V, Arts J et seq. TEU).

The third pillar consists of political provisions on cooperation between the member states in the fields of justice and home affairs (Title VI, Arts K et seq. TEU).

The political provisions of the second and third pillar are not legally binding. This is because the member states were hesitant to transfer their core competencies of traditional sovereignty, e.g. defense, police and justice, to the European Community. These political provisions are practically waiting to be transformed into Community law. And this integration is presently taking place. But as far as Community law is concerned, the EC Treaty alone is relevant.

2.2 Primary and secondary Community law

The EC Treaty embodies what is called the "primary Community law". It contains the legal provisions on the principles of the Community, the citizenship of the Union, the Community policies and the institutions of the Community.

The EC Treaty also provides the legal basis for the so-called "secondary Community law", which are Regulations, Directives and Decisions.

III. The 4 Freedoms and Intellectual Property in the EU

1. Free movement of goods, persons, services and capital

The EC Treaty provides for "4 Freedoms" in the common market of the European Union, the free movement of goods, persons, services and capital (Art. 14 (2) EC).

The free movement of goods is realized by a customs union covering all trade in goods and the prohibition of customs duties on imports and exports between the member states and of all charges having equivalent effect as well as the adoption of a common customs tariff in the relation with third countries (Art. 23 (1) EC). Furthermore, quantitative restrictions on imports and all measures having equivalent effect are prohibited between member states (Art. 28 EC).

The freedom of movement of persons in the Community is provided for workers (Art. 39 EC) and also comprises the freedom of establishment of self-employed persons (Art. 43 EC). The freedom to provide services cross-border within the Community may also not be restricted in principle (Art. 49 EC), and all restrictions on the movement of capital between member states and between member states and third countries are prohibited (Art. 56 EC).

2. Intellectual Property in the EU

If you consider the nature of intellectual property rights in the member states of the European Union, a conflict between such rights and the basic principle of free movement of goods in a common market becomes apparent.

Intellectual property rights which are established by the national law of a member state are confined to the territory where they are granted. They are subject to the so-called "principle of territoriality". As long as a Community patent which affords uniform protection in the whole territory of the European Union does not exist, a Europe-wide protection for an invention can only be acquired by obtaining parallel national patents in all member states of the EU.

> *the prohibition, as between Member States, of customs duties and quantitative restrictions on the imports and exports of goods, and of all other measures having equivalent effect*

is mentioned in first place.

The basic provision regarding the prohibition of quantitative restrictions between member states is provided in Art. 28 EC.

Art. 28 EC reads:

> *Quantitative restrictions on imports and all measures having equivalent effect shall be prohibited between Member States.*

"Quantitative restrictions" is a term referring to customs quotas: only so many products A shall be imported from state B each year. An extreme quantitative restriction is a zero quota: no products A at all shall be imported. The right of the owner of an intellectual property right in one member state to prevent imports of the protected product into the territory where his IP right exists is a measure of equivalent effect to a zero quota: no IPR-protected products shall be imported without his consent. Art. 29 EC provides correspondingly for exports.

2. Art. 30 EC: Protection of industrial and commercial property

Exceptions to Articles 28 and 29 are provided in Art. 30 for measures justified on various grounds, including the protection of industrial property.

Art. 30 reads:

> *The prohibitions of Articles 28 and 29 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of **industrial and commercial property**. Such prohibitions or restrictions shall*

Sterling Drug and its Dutch licensee brought actions before a Dutch court requesting injunctions based on infringement of its Dutch patent and the "Negram" trademark.

The Dutch Supreme Court stayed proceedings in both cases and referred the following question to the ECJ:

> *Do the rules in the EEC Treaty concerning the free movement of goods prevent the IP right holder from exercising the right conferred to him by legislation of the member state to prevent the protected products from being marketed by others, even where these products were previously lawfully marketed in another country by the IP right holder or his licensee?*

Pursuant to Art. 234 EC a national court can ask the ECJ to give a ruling concerning the interpretation of the EC Treaty if it considers a decision on its question necessary to enable it to give a judgment in the case before it.

The ECJ held (summarized):

> *(1) The effect of the provisions of the Treaty on the free movement of goods, particularly Art. 28, is to prohibit between member states measures restricting imports and all measures of equal effect.*

> *(2) Pursuant to Art. 30, Art. 28 does not however prevent restrictions on imports justified on grounds of protection of industrial and commercial property.*

> *(3) But it appears from the same Art. as well as from the context that while the Treaty does not affect the* ***existence*** *of the rights in industrial and commercial property recognized by the law of a member state, the* ***exercise*** *of such rights may nonetheless affected by the prohibitions in the Treaty.*

> *(4) In so far as it makes an exception to one of the fundamental principles of the Common Market, Art. 30 allows derogations to the free movement of goods only to the extent that such derogations are justified for the protection of the* ***specific object*** *of such industrial or commercial property.*

member state by the owner of the IP right or with his consent, the IP right is exhausted and cannot be invoked when the product is imported into another member state.

2. ECJ, 14 July 1981 (Case 187/80) - *Merck v Stephar*

In *Merck v Stephar*, the ECJ held that while it is the specific object of a patent to accord the inventor an exclusive right of first putting the patented product into circulation to obtain the reward for his creative effort, this reward is not guaranteed under all circumstances. It is up to the patentee to decide in the light of all circumstances under what conditions he will sell his product. If he decides to market it in a member state where the law does not provide patent protection for the product in question, he must accept the consequences of his choice as regards the free movement of the product within the common market. National patent rights in the EU are exhausted when the product has been placed on the market by the patentee or with his consent in any member state regardless of whether patent protections exists in the state where the product was marketed. Thus Merck who had sold its drug in Italy at the time when drugs and their manufacturing processes were not patentable in that country was not able to prohibit, based on its Dutch patent, the import of the drug from Italy into the Netherlands by Stephar.

3. ECJ, 09 July 1985 (Case 19/84) - *Pharmon v Hoechst*

In *Pharmon v Hoechst*, however, the ECJ held that the doctrine of exhaustion of IP rights in the Common market does not apply when the product has been manufactured by the holder of a compulsory license. While Articles 28 and 30 of the EC Treaty preclude the application of national provisions which enable the patent owner to prevent importation and sales of a product which has been lawfully marketed in another member state by the patent owner himself or with his consent, these provisions do not preclude the application on legal provisions of a member state which give the patent owner the right to prevent the marketing in that state of a product which has been manufactured in another member state by the holder of a compulsory license, regardless whether the compulsory license fixes royalties payable to the patent owner. This is because where a compulsory license is granted to a third party, the patent owner is deprived of his right to

Exhaustion of parallel IP rights in the member states occurs if the protected product has been put into circulation in one member state by the IP owner or by a third party with his consent.

Parallel imports of such products from one member state into another member state can thus not be prevented by the IP owner or his licensee under the above circumstances.

V. Licensing Intellectual Property and Restraints of Competition

1. Art. 81(1) EC: Prohibition of agreements that restrain competition

As we have seen, the exercise of intellectual property rights may prevent the free movement of goods in the European Union and in order to safeguard this fundamental principle of the common market, the doctrine of Community exhaustion was established.

It is not difficult to imagine that the free movement of goods in the EU could also be prevented by agreements between undertakings, and such agreements can distort competition in the common market in many other ways. Thus it is also a basic objective of the Community pursuant to Art. 3 (1)(g) EC to establish

> *a system ensuring that competition in the internal market is not distorted.*

If trade between the member states could be affected, then the competition rules of the EU must be observed, even if the agreement, for example a license agreement, relates only to one member state.

The competition rules relating to agreements between undertakings are set out in Art. 81 EC.

Art. 81(1) prohibits agreements which have as their object or effect the prevention, restriction or distortion of competition within the common market. Art. 81(1) reads:

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:
(a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;
(b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

2.2 A license agreement merely permits the licensee to do something that would otherwise be unlawful. Thus it clearly does not violate Art. 81 (1) unless it is coupled with other obligations that have the object or the effect of restraining competition in some way. Most systems of anti-trust law have had difficulty in distinguishing permissible license clauses from those that constitute undue restraints on competition.

The EC Commission formerly took the view that any license other than a non-exclusive license for the whole common market was caught by the prohibition of Art. 81 (1). The Commission was prepared to carry out an analysis based on Art. 81 (3). However, individual exemptions from the prohibition of agreements under Art 81 (1) required a cumbersome and time-consuming proceeding which imposes heavy burdens on the limited personnel of the Commission.

Finally, a block exemption for patent license agreements based on Art. 85 (3) was adopted in 1984 (Regulation 2349/84). The basic scheme of the Regulation was that a "white list" of clauses was provided that normally do not violate Art. 81(1) and were exempted as well as a "black list", which specified clauses that prevented the application of the exemption.

In 1989, the Commission drafted a block exemption for know-how licenses (Regulation 556/89), which was very similar to that relating to patent licenses, but the white and black lists permitted more provisions to be included in an agreement which qualified for the exemption.

In 1996, the two block exemptions were combined into a single regulation covering technology transfer agreements (Regulation 240/96). The 5TTBER reflected a more liberal attitude of the Commission towards license agreements

2.3 The purpose of the TTBER is to provide "safe harbour" for companies licensing in Europe with regard to Article 81(1) and (2) EC.

The old regime of Block Exemption Regulation 240/96 distinguished between a white list of clearly exempt provisions of license agreements, a black list of prohibited provisions and a grey list of potentially exempted provisions. Economic criteria such as the market shares of the respective companies and whether they were competitors or non-competitors were irrelevant. The old TTBER was straightforward in listing exempted clauses and this resulted in companies merely copying them into their license agreements. The Regulation was therefore criticized as being prescriptive, formalistic and having a strait jacket effect.

The new regime of TTBER 772/04 states the need to simplify the regulatory framework and its application and announces an economics-based flexible approach to assess the impact of licensing agreements on the relevant market. It exempts clauses in license agreements of companies not exceeding a certain level of market power, specifies some severely anti-competitive restraints called "hardcore restrictions" which are not to be contained in such agreements and distinguishes between agreements between competitors and agreements between non-competitors. Although the new TTBER asserts that "the great majority of license agreements are compatible with Art. 81" and that it creates safe harbour for most agreements, the assessment of exemption of license clauses has become more complex and difficult. Opinion is therefore divided over whether the new TTBER is more restrictive than the old one or broader in scope.

Comparing the old and new TTBERs, it is still an open question which approach is better suited to ensure effective competition and provide adequate legal security for companies.

2.4 Pursuant to Art. 2 TTBER, which refers to Art. 81(3) EC, and subject to the provisions of the Regulation, Art. 81 (1) shall not apply to technology transfer agreements entered into between two undertakings and permitting the production of contract products. The further basic provisions of the TTBER are Articles 3, 4 and 5.

Article 5 finally stipulates restrictions which are generally excluded from exemption, namely

(1) licensee must exclusively license or assign severable improvements or new applications of the licensed technology,
(2) no challenge clause, and
(3) if the parties are not competitors, restrictions on licensee's RD or use of own technology.

But here as well exceptions are stipulated for the no challenge clause and the restrictions on licensee's RD or use of own technology.

The TTBER is applicable to technology transfer agreements in a broad sense. They concern the licensing of technology and comprise patent licensing agreements, know-how licensing agreements, software copyright licensing agreements and mixed agreements covering all or some of these intellectual property rights (Art. 1(b)). The term patent is to be understood broadly as well (Art. 1(1)(h)). Patents as subject matter of licensing with regard to the TTBER means

- patents,
- patent applications,
- utility models,
- utility model applications,
- designs,
- topographies for semiconductor products,
- SPCs, and
- plant breeder certificates.

Know-how is defined as a package of non-patented practical information, which is secret, substantial and identified (Art. 1(1)(i)).

Mixed agreements to which the TTBER is applicable may also include provisions relating to other intellectual property right if these are not the primary object of the license agreement. The TTBER defines intellectual property rights as including

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- **Obligation to assist licensor in enforcing licensed intellectual property rights** 155d

VI. Refusal to License and Restraints of Competition

1. Art. 82 EC: Prohibition of abuse of dominant position

The basic provisions of the EC competition rules are Art. 81 and Art. 82 EC. While Art. 81 controls agreements of undertakings, such as intellectual property licensing agreements, Art. 82 controls the conduct, unilateral or otherwise, of undertakings that are subject only to remote competitive pressure because of their dominant position in the market. The same conduct may violate both articles.

Art. 82 reads:

> *Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market in so far as it may affect trade between Member States.*
>
> *Such abuse may, in particular, consist in:*
> *(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;*
> *(b) limiting production, markets or technical development to the prejudice of consumers;*
> *(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;*
> *(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.*

Examples of abuse of a dominant position are conduct that oppresses buyers and sellers: charging too much, paying too little, or discriminating against specific firms and so making it difficult for them to compete. But owners of intellectual property also have to beware of Art. 82. Since intellectual property law is concerned with granting monopolies, owners of IP rights may be put in a dominant position, which must not be abused.

Magill TV Guide Ltd. wished to publish a comprehensive weekly guide but the TV stations obtained court injunctions against it based on their copyrights. Magill claimed that they were abusing their dominant position by refusing to grant licenses and thereby breaching Art. 82.

Referring to *Volvo*, the ECJ repeats that mere ownership of an intellectual propety right cannot confer a dominant position in the market. An intellectual property right constitutes a legal monopoly, not an economic monopoly. However, the market situation may be such that the IP owner enjoys a de facto monopoly which puts him in a position to prevent effective competition on the market. In the present case the three TV stations occupied a dominant position due to their copyrights in their TV program guides.

Considering the substance of an intellectual property right, the refusal to grant a license even by an undertaking in a dominant position cannot in itself constitute an abuse of the dominant position. But the exercise of an exclusive right by its owner may in "exceptional circumstances" involve abusive conduct. In *Magill*, the ECJ held that this is the case when

- there is no substitute product but consumer demand for the product intended by the potential licensee,
- the refusal to license prevents the appearance of a new product,
- there is no justification for the refusal by objective considerations, and
- as a result of the refusal all competition on the market in question is excluded.

These conditions were considered to be fulfilled in the present case: There existed no weekly TV guide covering all programs but a potential demand for such product on the part of consumers, the refusal of the TV stations to grant licenses prevented the publication of such a guide which the stations themselves did not offer, and there was no justification for their refusal which excluded all competition on the market since they denied access to the basic information indispensable for the compilation of a weekly TV guide.

prevents the development of a secondary market to the detriment of consumers. In other words:

> *...the refusal by an undertaking in a dominant position to allow access to a product protected by copyright, where that product is indispensable for operating on a secondary market, may be regarded as abusive only where the undertaking which requested the license does not intend to limit itself essentially to duplicating the goods or services already offered on the secondary market by the owner of the copyright, but intends to produce new goods or services not offered by the owner of the right and for which there is a potential customer demand.*

In the case at hand it was a question of facts still to be ascertained by the national court that had requested the preliminary ruling of the ECJ whether these conditions were fulfilled.

3. Outlook

The IMS Health decision of the ECJ addresses the appropriate balance to be struck between the protection of intellectual property rights and the freedom to license of the IPR owner and the freedom of competition in the European Union. The ECJ basically respects intellectual property rights, and the decision has made clear that licenses cannot be demanded for directly competing products even if the IPR owner has a dominant position on the market. But uncertainty remains because the ECJ did not spell out how new or different a secondary product has to be for the refusal to license to become abusive and Art. 82 EC to be applicable. Also it has not yet been clarified what objective considerations can justify the refusal in the given circumstances. These questions may be answered by national courts on the facts of the particular case.

VII. Summary

The regulatory system that governs licensing in the European Union is, as we have seen, the result of a constant balancing of interests. On the one side there is the protection of intellectual property and the economic freedom of the IPR owner,

PART ONE

PRINCIPLES

Article 1 (ex Article 1)

By this Treaty, the HIGH CONTRACTING PARTIES establish among themselves a EUROPEAN COMMUNITY.

Article 2 (ex Article 2)

The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing common policies or activities referred to in Articles 3 and 4, to promote throughout the Community a harmonious, balanced and sustainable development of economic activities, a high level of employment and of social protection, equality between men and women, sustainable and non-inflationary growth, a high degree of competitiveness and convergence of economic performance, a high level of protection and improvement of the quality of the environment, the raising of the standard of living and quality of life, and economic and social cohesion and solidarity among Member States.

Article 3 (ex Article 3)

1. For the purposes set out in Article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein:

(a) the prohibition, as between Member States, of customs duties and quantitative restrictions on the import and export of goods, and of all other measures having equivalent effect;

(b) a common commercial policy;

(c) an internal market characterised by the abolition, as between Member States, of obstacles to the free movement of goods, persons, services and capital;

(d) measures concerning the entry and movement of persons as provided for in Title IV;

(e) a common policy in the sphere of agriculture and fisheries;

(f) a common policy in the sphere of transport;

(g) a system ensuring that competition in the internal market is not distorted;

(h) the approximation of the laws of Member States to the extent required for the functioning of the common market;

(i) the promotion of coordination between employment policies of the Member States with a view to enhancing their effectiveness by developing a coordinated strategy for employment;

(j) a policy in the social sphere comprising a European Social Fund;

(k) the strengthening of economic and social cohesion;

(l) a policy in the sphere of the environment;

Chapter 2

Prohibition of quantitative restrictions between Member States

Article 28 (ex Article 30)

Quantitative restrictions on imports and all measures having equivalent effect shall be prohibited between Member States.

Article 29 (ex Article 34)

Quantitative restrictions on exports, and all measures having equivalent effect, shall be prohibited between Member States.

Article 30 (ex Article 36)

The provisions of Articles 28 and 29 shall not preclude prohibitions or restrictions on imports, exports or goods in transit justified on grounds of public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property. Such prohibitions or restrictions shall not, however, constitute a means of arbitrary discrimination or a disguised restriction on trade between Member States.

Article 31 (ex Article 37)

1. Member States shall adjust any State monopolies of a commercial character so as to ensure that no discrimination regarding the conditions under which goods are procured and marketed exists between nationals of Member States.

The provisions of this Article shall apply to any body through which a Member State, in law or in fact, either directly or indirectly supervises, determines or appreciably influences imports or exports between Member States. These provisions shall likewise apply to monopolies delegated by the State to others.

2. Member States shall refrain from introducing any new measure which is contrary to the principles laid down in paragraph 1 or which restricts the scope of the Articles dealing with the prohibition of customs duties and quantitative restrictions between Member States.

3. If a State monopoly of a commercial character has rules which are designed to make it easier to dispose of agricultural products or obtain for them the best return, steps should be taken in applying the rules contained in this Article to ensure equivalent safeguards for the employment and standard of living of the producers concerned.

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:

(a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;

(b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

Article 82 (ex Article 86)

Any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it shall be prohibited as incompatible with the common market insofar as it may affect trade between Member States.

Such abuse may, in particular, consist in:

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;

(b) limiting production, markets or technical development to the prejudice of consumers;

(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

Article 83 (ex Article 87)

1. The appropriate regulations or directives to give effect to the principles set out in Articles 81 and 82 shall be laid down by the Council, acting by a qualified majority on a proposal from the Commission and after consulting the European Parliament.

2. The regulations or directives referred to in paragraph 1 shall be designed in particular:

(a) to ensure compliance with the prohibitions laid down in Article 81(1) and in Article 82 by making provision for fines and periodic penalty payments;

(b) to lay down detailed rules for the application of Article 81(3), taking into account the need to ensure effective supervision on the one hand, and to simplify administration to the greatest possible extent on the other;

(c) to define, if need be, in the various branches of the economy, the scope of the provisions of Articles 81 and 82;

Attachment II

COMMISSION REGULATION (EC) No 772/2004

of 27 April 2004

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

(Text with EEA relevance)

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]), and in particular Article 1 thereof,

Having published a draft of this Regulation ([2]),

After consulting 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 which fall 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 85(3) of the Treaty to certain categories of technology transfer agreements ([3]).

(3) On 20 December 2001 the Commission published an evaluation report on the transfer of technology block exemption Regulation (EC) No 240/96 ([4]). This generated a public debate on the application of Regulation (EC) No 240/96 and on the application in general of Article 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 is therefore appropriate to repeal Regulation (EC) No 240/96.

(4) This Regulation 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. Such agreements will usually improve economic efficiency and be pro-competitive as they can reduce duplication of research and development, strengthen the incentive for the initial research and development, spur incremental innovation, facilitate diffusion and generate product market competition.

(6) 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.

(7) This Regulation should only deal with agreements where the licensor permits the licensee to exploit the licensed technology, possibly after further research and development by the licensee, for the production of goods or services. It should not deal with licensing agreements for the purpose of subcontracting research and development. It should also not deal with licensing agreements to set up technology pools, that is to say, agreements for the pooling of technologies with the purpose of licensing the created package of intellectual property rights to third parties.

([1]) OJ 36, 6.3.1965, p. 533/65. Regulation as last amended by Regulation (EC) No 1/2003 (OJ L 1, 4.1.2003, p. 1).
([2]) OJ C 235, 1.10.2003, p. 10.
([3]) OJ L 31, 9.2.1996, p. 2. Regulation as amended by the 2003 Act of Accession.
([4]) COM(2001) 786 final.

(19) This Regulation should cover only technology transfer agreements between a licensor and a licensee. It should cover 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 should comply with the competition rules applicable to supply and distribution agreements. Supply and distribution agreements concluded between a licensee and its buyers should not be exempted by this Regulation.

(20) This Regulation is without prejudice to the application of Article 82 of the Treaty,

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 any 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 production of the contract products; assignments of patents, know-how, software copyright or a combination thereof where part of 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 produced 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) 'reciprocal agreement' means a technology transfer agreement where two undertakings grant each other, in the same or separate contracts, a patent licence, a know-how licence, a software copyright licence or a mixed patent, know-how or software copyright licence and where these licences concern competing technologies or can be used for the production of competing products;

(d) 'non-reciprocal agreement' means a technology transfer agreement where one undertaking grants another undertaking a patent licence, a know-how licence, a software copyright licence or a mixed patent, know-how or software copyright licence, or where two undertakings grant each other such a licence but where these licences do not concern competing technologies and cannot be used for the production of competing products;

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

(f) 'contract products' means products produced with the licensed technology;

(g) 'intellectual property rights' includes industrial property rights, know-how, copyright and neighbouring rights;

(h) '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;

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

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

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

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

(j) 'competing undertakings' means undertakings which compete on the relevant technology market and/or the relevant product market, that is to say:

(i) competing undertakings on the relevant technology market, being undertakings which license out competing technologies without infringing each others' intellectual property rights (actual competitors on the technology market); the relevant technology market includes technologies which are regarded by the licensees as interchangeable with or substitutable for the licensed technology, by reason of the technologies' characteristics, their royalties and their intended use, *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, except limitations on the output of contract products imposed on the licensee in a non-reciprocal agreement or imposed on only one of the licensees in a reciprocal agreement;

(c) the allocation of markets or customers except:

(i) the obligation on the licensee(s) to produce with the licensed technology only within one or more technical fields of use or one or more product markets,

(ii) the obligation on the licensor and/or the licensee, in a non-reciprocal agreement, not to produce with the licensed technology within one or more technical fields of use or one or more product markets or one or more exclusive territories reserved for the other party,

(iii) the obligation on the licensor not to license the technology to another licensee in a particular territory,

(iv) the restriction, in a non-reciprocal agreement, of active and/or passive sales by the licensee and/or the licensor into the exclusive territory or to the exclusive customer group reserved for the other party,

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

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

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

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

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

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

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

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

(ii) the restriction of passive sales into an exclusive territory or to an exclusive customer group allocated by the licensor to another licensee during the first two years that this other licensee is selling the contract products in that territory or to that customer group,

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

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

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

(vi) 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.

3. Where the undertakings party to the agreement are not competing undertakings at the time of the conclusion of the agreement but become competing undertakings afterwards, paragraph 2 and not paragraph 1 shall apply for the full life of the agreement unless the agreement is subsequently amended in any material respect.

Article 10

Transitional period

The prohibition laid down in Article 81(1) of the Treaty shall not apply during the period from 1 May 2004 to 31 March 2006 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 11

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, 27 April 2004.

For the Commission
Mario MONTI
Member of the Commission

Attachment III

COMMISSION NOTICE

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

(2004/C 101/02)

(Text with EEA relevance)

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 production of goods or services, as defined in Article 1(1)(b) of Commission Regulation (EC) No 773/2004 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 TTBER and the guidelines are without prejudice to the possible parallel application of Article 82 of the Treaty to licensing agreements (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. Examples given serve as illustrations only and are not intended to be exhaustive. The Commission will keep under review the functioning of the TTBER and the guidelines in the new enforcement system created by Regulation 1/2003 (3) to consider whether changes need to be made.

4. The present guidelines are without prejudice to the interpretation of Article 81 and the TTBER 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 (4) which may affect trade between Member States (5) and which have as their object or effect the prevention, restriction or distortion of competition (6). As an exception to this rule Article 81(3) provides that the prohibition contained in Article 81(1) may be declared inapplicable in the case of agreements between undertakings 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 (7) (principle of Community exhaustion). The right holder has no right under intellectual property laws to prevent sales by licensees or buyers of such products incorporating the licensed technology (8). The principle of Community 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 in particular applicable to agreements whereby the holder licenses another undertaking to exploit his intellectual property rights (9). 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 by putting pressure on undertakings to innovate. Therefore, both intellectual property rights and competition are necessary to promote innovation and ensure a competitive exploitation thereof.

Claims that in the absence of a restraint 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.

13. In the application of the analytical framework set out in the previous paragraph it must be taken into account that Article 81(1) distinguishes between those agreements that have a restriction of competition as their object and those agreements that have a restriction of competition as their effect. An agreement or contractual restraint is only prohibited by Article 81(1) if its object or effect is to restrict inter-technology competition and/or intra-technology competition.

14. 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 have such a high potential for negative effects on competition that it is not necessary for the purposes of applying Article 81(1) to demonstrate any actual effects on the market [14]. 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 a 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 [15]. In other words, an examination of the facts underlying the agreement and the specific circumstances in which it operates may be required before it can be concluded whether a particular restriction constitutes a hardcore restriction of competition. 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.

15. If an agreement is not restrictive of competition by object it is necessary to examine whether it has restrictive effects on competition. Account must be taken of both actual and potential effects [16]. In other words the agreement must have likely anti-competitive effects. For licence agreements to be restrictive of competition by effect they must affect actual or potential 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 [17]. Appreciable 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 not insignificant period of time. The degree of market power normally required for a finding of an infringement under Article 81(1) is less than the degree of market power required for a finding of dominance under Article 82.

16. For the purposes of analysing restrictions of competition by effect 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. In some cases, however, it may be possible to show anti-competitive effects directly by analysing the conduct of the parties to the agreement on the market. It may for example be possible to ascertain that an agreement has led to price increases.

17. Licence agreements, however, also have substantial pro-competitive potential. Indeed, the vast majority of licence agreements are pro-competitive. Licence agreements may promote innovation by allowing innovators to earn returns to cover at least part of their research and development costs. Licence agreements also lead to a dissemination of technologies, which may create 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 often stem from a combination of the licensor's technology with the assets and technologies of the licensee. Such integration of complementary assets and technologies 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. Licensing may also serve the pro-competitive purpose of removing obstacles to the development and exploitation of the licensee's own technology. In particular in sectors where large numbers of patents are prevalent licensing often occurs in order to create design freedom by removing the risk of infringement claims by the licensor. When the licensor agrees not to invoke his intellectual property rights to prevent the sale of the licensee's products, the agreement removes an obstacle to the sale of the licensee's product and thus generally promotes competition.

24. Moreover, outside the safe harbour of the TTBER it must also be taken into account that market share may not always be a good indication of the relative strength of available technologies. The Commission will therefore, *inter alia*, also have regard to the number of independently controlled technologies available in addition to the technologies controlled by the parties to the agreement that may be substitutable for the licensed technology at a comparable cost to the user (see paragraph 131 below).

25. Some licence agreements may affect innovation markets. 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 [21]. Competition on such markets may be affected by agreements that delay the introduction of improved products or new products that over time will replace existing products. In such cases innovation is a source of potential competition which must be taken into account when assessing the impact of the agreement on product markets and technology markets. In a limited number of cases, however, it may be useful and necessary to also 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 [22]. 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

26. In general, agreements between competitors pose a greater risk to competition than agreements between non-competitors. However, competition between undertakings that use the same technology (intra-technology competition between licensees) constitutes an important complement to competition between undertakings that use competing technologies (inter-technology competition). For instance, intra-technology competition may lead to lower prices for the products incorporating the technology in question, which may not only produce direct and immediate benefits for consumers of these products, but also spur further competition between undertakings that use competing technologies. In the context of licensing 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.

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

28. Where the licensor and the licensee are both active on the same product market or the same technology market without one or both parties infringing the intellectual property rights of the other party, they are actual competitors on the market concerned. The parties are deemed to be actual competitors on the technology market if the licensee is already licensing out his technology and the licensor enters the technology market by granting a license for a competing technology to the licensee.

29. The parties are considered to be potential competitors on the product market if in the absence of the agreement and without infringing the intellectual property rights of the other party it is likely that they would have undertaken the necessary additional investment to enter the relevant market in response to a small but permanent increase in product prices. In order to constitute a realistic competitive constraint entry has to be likely to occur within a short period. Normally a period of one to two years is appropriate. However, in individual cases longer periods can be taken into account. The period of time needed for undertakings already on the market to adjust their capacities can be used as a yardstick to determine this period. For instance, the parties are 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 licensed competing technology. In such circumstances, it is likely that the licensee would have been able to enter the second geographic market on the basis of its own technology, unless such entry is precluded by objective factors, including the existence of blocking patents (see paragraph 32 below).

30. The parties are considered to be potential competitors on the technology market where they own substitutable technologies if in the specific case the licensee is not licensing his own technology, provided that he would be likely to do so in the event of a small but permanent increase in technology prices. However, for the application of the TTBER potential competition on the technology market is not taken into account (see paragraph 66 below).

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 excluded restrictions (Article 5) set out in the TTBER aim at ensuring that only restrictive agreements that can reasonably be presumed to fulfil the four conditions of Article 81(3) are block exempted.

36. As set out in section IV below, many 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 [23]. 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) [24].

37. Outside the scope of the block exemption it is 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 caught by Article 81(1) or fail to satisfy the conditions of Article 81(3). In particular, the mere fact that the market shares of the parties exceed the market share thresholds set out in Article 3 of the TTBER is not a sufficient basis for finding that the agreement is caught by Article 81(1). Individual assessment of the likely effects of the agreement 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

38. 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 [25]. The decisive factor in terms of distinguishing between agreements between two undertakings and multiparty agreements is whether the agreement in question is concluded between more than two undertakings.

39. Agreements concluded by two undertakings 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 [26].

40. Licence agreements concluded between more than two undertakings often give rise to the same issues as licence agreements of the same nature concluded between two undertakings. In its individual assessment of licence agreements which are of the same nature as those covered by the block exemption but which are concluded between more than two undertakings, the Commission will apply by analogy the principles set out in the TTBER.

2.2. Agreements for the production of contract products

41. It follows from Article 2 that for licence agreements to be covered by the TTBER they must concern 'the production of contract products', i.e. products incorporating or produced with the licensed technology. In other words, to be covered by the TTBER the licence must permit the licensee to exploit the licensed technology for production of goods or services (see recital 7 of the TTBER). 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 license them as a package. The notion of technology pools also covers arrangements whereby two or more undertakings agree to license a third party and authorise him to license on the package of technologies. Technology pools are dealt with in section IV.4 below.

42. The TTBER applies to licence agreements for the production of contract products whereby the licensee is also permitted to sublicense the licensed technology to third parties provided, however, that the production of contract products constitutes the primary object of the agreement. Conversely, the TTBER does not apply to agreements that have sublicensing as their primary object. 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.

43. The term 'contract products' encompasses goods and services produced 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. It is sufficient in this respect that the licensor undertakes not to exercise his intellectual property rights against the licensee. Indeed, the essence of a pure patent licence is the right to operate inside the scope of the exclusive right of the patent. It follows that the TTBER also covers so-called non-assertion agreements and settlement agreements whereby the licensor permits the licensee to produce within the scope of the patent.

49. The TTBER only applies to agreements that have as their primary object the transfer of technology as defined in that Regulation 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 equipment or process input which is specifically tailored to efficiently exploit the licensed technology. 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 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.

50. 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 ([29]).

51. 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 a similar nature as technology transfer agreements and normally raise comparable issues. Although the TTBER does not cover copyright other than software copyright, the Commission will as a general rule apply the principles set out in the TTBER and these guidelines when assessing such licensing of copyright under Article 81.

52. 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 films, 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 ([30]). For instance, resale restrictions may give rise to less competition concerns whereas particular concerns may arise where licensors impose on their licensees to extend to each of the licensors more favourable conditions obtained by one of them. The Commission will therefore not apply the TTBER and the present guidelines by way of analogy to the licensing of these other rights.

53. The Commission will also not extend the principles developed in the TTBER and these guidelines to trademark licensing. 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 ([31]).

2.4. Duration

54. Subject to the duration of the TTBER, the block exemption applies for as long as the licensed property right has not lapsed, 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 action by the licensee, in which case the exemption shall apply for the duration of the agreement (cf. Article 2 of the TTBER).

block exempted, comply with Regulation 2790/1999. For instance, the licensor can oblige the licensee to establish a system based on exclusive distribution in accordance with specified rules. However, it follows from Article 4(b) of Regulation 2790/1999 that distributors must be free to make passive sales into the territories of other exclusive distributors.

64. 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. This is because for the purposes of Regulation 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 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

65. 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 although they may be restrictive of competition can generally be presumed to fulfil the conditions of Article 81(3). Outside the safe harbour created by the market share thresholds individual assessment is required. The fact that market shares exceed the thresholds does not give rise to any presumption either that the agreement is caught by Article 81(1) or that the agreement does not fulfil the conditions of Article 81(3). In the absence of hardcore restrictions, market analysis is required.

66. The market share threshold to be applied for the purpose of the safe harbour of the TTBER depends on whether the agreement is concluded between competitors or non-competitors. For the purposes of the TTBER undertakings are competitors on the relevant technology market when they license competing technologies. Potential competition on the technology market is not taken into account for the application of the market share threshold or the hardcore list. Outside the safe harbour of the TTBER potential competition on the technology market is taken into account but does not lead to the application of the hardcore list relating to agreements between competitors (see also paragraph 31 above).

67. Undertakings are competitors on the relevant product market where both undertakings are active on the same 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 be likely, on realistic grounds, to undertake the necessary additional investments or other necessary switching costs to enter the relevant product and geographic market(s) within a reasonably short period of time (37) in response to a small and permanent increase in relative prices (potential competitors).

68. It follows from paragraphs 66 and 67 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 a competing technology and produces on the basis of that technology. However, the parties 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. In that case the hardcore list relevant for agreements between non-competitors will continue to apply to the agreement unless the agreement is subsequently amended in any material respect, see Article 4(3) of the TTBER and paragraph 31 above.

69. 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 neither party exceeds 30 % on the affected 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 do not exceed 20 % on the relevant technology and product markets. 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 an affected relevant market, the block exemption does not apply to the agreement for that relevant market. For instance, if the licence agreement concerns two separate product markets or two separate geographic markets, the block exemption may apply to one of the markets and not to the other.

Example 2

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

In this case, A's market share on the 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 2, 15 % in year 3 and 40 % thereafter. B's market share is 25 % in year 2, 30 % in year 3 and 40 % thereafter. In year 2 and 3 both A's and B's market share does not exceed the 30 % threshold. The threshold is however exceeded from year 4 and this means that, in line with Article 8(2) of the TTBER, after year 6 the licence agreement between A and B can no longer benefit from the safe harbour but has to be assessed on an individual basis.

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

Licensing between competitors

Example 3

Companies A and B are active on the same relevant product and geographic market for a certain chemical product. They also each own a patent on different technologies used to produce this product. In year 1 A and B sign a cross licence agreement licensing each other to use their respective technologies. In year 1 A and B produce only with their own technology and A sells EUR 15 million of the product and B sells EUR 20 million of the product. From year 2 they both use their own and the other's technology. From that year onward A sells EUR 10 million of the product produced with its own technology and EUR 10 million of the product produced with B's technology. B sells from year 2 EUR 15 million of the product produced with its own technology and EUR 10 million of the product produced with A's technology. 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, by both A and B, with A's technology. In year 2 the market share of A on the technology market is therefore 15 %, reflecting its own production and sales of EUR 15 million in year 1. From year 3 A's market share on the technology market is 20 %, reflecting the EUR 20 million sale of the product produced with A's technology and produced and sold by A and B (EUR 10 million each). Similarly, in year 2 B's market share on the technology market is 20 % and thereafter 25 %.

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

As the agreement is between competitors, their combined market share, both on the technology and on the product market, has to be below the 20 % market share threshold in order to benefit from the 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 2 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

74. 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 [39] such a restriction may result from the clear objective of the agreement or from the circumstances of the individual case (cf. paragraph 14 above).

79. 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, including the products incorporating the licensed technology. 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 is immaterial whether the agreement concerns fixed, minimum, maximum or recommended prices. Price fixing can also be implemented indirectly by applying disincentives to deviate from an agreed price level, for example, by providing that the royalty rate will increase if product prices are reduced below a certain level. However, an obligation on the licensee to pay a certain minimum royalty does not in itself amount to price fixing.

80. 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 [40]. Competitors can therefore use cross licensing with reciprocal running royalties as a means of co-ordinating prices on downstream product markets [41]. However, the Commission will only treat cross licences with reciprocal running royalties as price fixing where the agreement is devoid of any pro-competitive purpose and therefore does not constitute a bona fide licensing arrangement. In such cases where the agreement does not create any value and therefore has no valid business justification, the arrangement is a sham and amounts to a cartel.

81. 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 paragraph 95 below). In general such agreements 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 [42]. 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.

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

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

84. 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 have as their object the restriction of competition. It is a hardcore restriction where competitors in a reciprocal agreement agree not to produce in certain territories or not to sell actively and/or passively into certain territories or to certain customers reserved for the other party.

85. 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 to produce a given product, it may be costly to maintain a separate production line using another technology in order to serve customers covered by the restrictions. Moreover, given the anti-competitive potential of the restraint the licensee may have little incentive to produce under his own technology. Such restrictions are also highly unlikely to be indispensable for pro-competitive licensing to occur.

93. Finally, Article 4(1)(c)(vii) excludes from the hardcore list an obligation on the licensee in a non-reciprocal agreement to produce the contract products only for a particular customer with a view to creating an alternative source of supply for that customer. It is thus a condition for the application of Article 4(1)(c)(vii) that the licence is limited to creating an alternative source of supply for that particular customer. It is not a condition, however, that only one such licence is granted. Article 4(1)(c)(vii) also covers situations where more than one undertaking is licensed to supply the same specified customer. The potential of such agreements to share markets is limited where the licence is granted only for the purpose of supplying a particular customer. In particular, in such circumstances it cannot be assumed that the agreement will cause the licensee to cease exploiting his own technology.

94. The hardcore restriction of competition set out in Article 4(1)(d) covers firstly restrictions on any of the parties' ability 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. However, the mere fact that the parties agree to provide each other with future improvements of their respective technologies does not amount to a restriction on independent research and development. The effect on competition of such agreements must be assessed in light of the circumstances of the individual case. Article 4(1)(d) also does not 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. In order to be covered by the exception, the restrictions imposed to protect the licensor's know-how against disclosure must be necessary and proportionate to ensure such protection. For instance, where the agreement designates particular employees of the licensee to be trained in and responsible for the use of the licensed know-how, it may be sufficient to oblige the licensee not to allow those employees to be involved in research and development with third parties. Other safeguards may be equally appropriate.

95. 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. paragraph 81 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.

4.3. Agreements between non-competitors

96. 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 passively sell the contract products, except:

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

(ii) the restriction of passive sales into an exclusive territory or to an exclusive customer group allocated by the licensor to another licensee during the first two years that this other licensee is selling the contract products in that territory or to that customer group;

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

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

101. Restrictions on passive sales by licensees into an exclusive territory or customer group allocated to another licensee are block exempted for two years calculated from the date on which the protected licensee first markets the products incorporating the licensed technology inside his exclusive territory or to his exclusive customer group (cf. Article 4(2)(b)(ii)). 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 often the case that licensees would not enter into the licence agreement without protection for a certain period of time against (active and) passive sales into their territory by other licensees. Restrictions on passive sales into the exclusive territory of a licensee by other licensees therefore often fall outside Article 81(1) for a period of up to two years from the date on which the product incorporating the licensed technology was first put on the market in the exclusive territory by the licensee in question. However, to the extent that in individual cases such restrictions are caught by Article 81(1) they are block exempted. After the expiry of this two-year period restrictions on passive sales between licensees constitute hardcore restrictions. Such restrictions are generally caught by Article 81(1) and are unlikely to fulfil the conditions of Article 81(3). In particular, passive sales restrictions are unlikely to be indispensable for the attainment of efficiencies [46].

102. 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 producers. The licensee must however be able to actively and passively 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.

103. As in the case of agreements between competitors (cf. paragraph 93 above) the block exemption also applies to agreements whereby the licensee is obliged to produce the contract products only for a particular customer in order to provide that customer with an alternative source of supply (cf. Article 4(2)(b)(iv)). In the case of agreements between non-competitors, such restrictions are unlikely to be caught by Article 81(1).

104. Article 4(2)(b)(v) 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) [47].

105. Finally Article 4(2)(b)(vi) 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)(v) (cf. the previous paragraph).

106. It is recalled (cf. paragraph 39 above) that the block exemption covers licence agreements whereby the licensor imposes obligations which the licensee must or may impose on his buyers, including distributors. 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 2790/1999 (cf. section 2.5.2 above).

5. Excluded restrictions

107. Article 5 of the TTBER lists four 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.

108. Article 5(1) provides that the block exemption shall not apply to the following three obligations:

(a) Any direct or indirect obligation on the licensee 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.

prevented from using it or are only able to use it against payment of royalties ([48]). In such cases the conditions of Article 81(3) are unlikely to be fulfilled ([49]). However, the Commission takes a favourable view of non-challenge clauses relating to know-how where once disclosed it is likely to be impossible or very difficult to recover the licensed know-how. In such cases, an obligation on the licensee not to challenge the licensed know-how promotes dissemination of new technology, in particular by allowing weaker licensors to license stronger licensees without fear of a challenge once the know-how has been absorbed by the licensee.

113. The TTBER covers 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.

114. Article 5(2) 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 paragraphs 94 and 95 above. However, in the case of agreements between non-competitors it cannot be considered that such restrictions generally have negative effects on competition or that the conditions of Article 81(3) are generally not satisfied ([50]). Individual assessment is required.

115. 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 license 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 ([51]). In such cases it is important to ensure that the licensee is not restricted in his ability to exploit his own technology and further develop it. This technology constitutes a competitive constraint in the market, which should be preserved. In such a situation restrictions on the licensee's use of his own technology or on research and development are normally considered to be restrictive of competition and not to satisfy the conditions of Article 81(3). For instance, an obligation on the licensee to pay royalties not only on the basis of products it produces with the licensed technology but also on the basis of products it produces with its own technology will generally limit the ability of the licensee to exploit its own technology and thus be excluded from the scope of the block exemption.

116. 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 an appreciable 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. Moreover, Article 81(1) only applies where the agreement reduces the licensee's incentive to improve and exploit his own technology. This is for instance not likely to be the case where the licensor is entitled to terminate the licence agreement once the licensee commences to produce on the basis of his own competing technology. Such a right does not reduce the licensee's incentive to innovate, since the agreement can only be terminated when a commercially viable technology has been developed and products produced on the basis thereof are ready to be put on the market.

124. 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 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 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.

125. 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.

126. 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.

127. 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 will be taken into account for the purpose 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 ([53]).

128. 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.

129. 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 OF ARTICLE 81(1) AND 81(3) OUTSIDE THE SCOPE OF THE BLOCK EXEMPTION REGULATION

1. The general framework for analysis

130. 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 that Article 81(1) applies merely because the market share thresholds are exceeded. Individual assessment based on the principles described in these guidelines is required.

131. In order to promote predictability beyond the application of the TTBER and to confine detailed analysis to cases that are likely to present real competition concerns, the Commission takes the view that outside the area of hardcore restrictions Article 81 is unlikely to be infringed where there are four or more independently controlled technologies in addition to the technologies controlled by the parties to the agreement that may be substitutable for the licensed technology at a comparable cost to the user. In assessing whether the technologies are sufficiently substitutable the relative commercial strength of the technologies in question must be taken into account. The competitive constraint imposed by a technology is limited if it does not constitute a commercially viable alternative to the licensed technology. For instance, if due to network effects in the market consumers have a strong preference for products incorporating the licensed

138. Entry barriers are measured by the extent to which incumbent companies can increase their price above the competitive level without attracting new entry. In the absence of entry barriers, easy and quick entry would render price increases unprofitable. 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 or brand loyalty of consumers created by strong advertising over a period of time. Restrictive agreements entered into by undertakings may also work as an 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 particularly on whether they entail sunk costs. Sunk costs are those costs which have to be incurred to enter or be active on a market but which are lost when the market is exited. The more costs are sunk, the more potential entrants have to weigh the risks of entering the market and the more credibly incumbents can threaten that they will match new competition, as sunk costs make it costly for incumbents to leave the market. In general, entry requires sunk costs, sometimes minor and sometimes major. Therefore, actual competition is in general more effective and will weigh more heavily in the assessment of a case than potential competition.

139. 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 restrictions of competition are more likely to have negative effects than in more dynamic markets.

140. In the assessment of particular restraints other factors may have to be taken into account. Such factors include cumulative effects, 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 restrictive licence agreements

141. The negative effects on competition on the market that may result from restrictive technology transfer agreements include 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.

142. Technology transfer agreements may reduce inter-technology competition, i.e. competition between undertakings that license or produce on the basis of substitutable technologies. This is particularly so where reciprocal obligations are imposed. For instance, where competitors transfer competing technologies to each other and impose a reciprocal obligation to provide each other with future improvements of their respective technologies and where this agreement prevents either competitor from gaining a technological lead over the other, competition in innovation between the parties is restricted (see also paragraph 208 below).

143. Licensing between competitors may also facilitate collusion. The risk of collusion is particularly high in concentrated markets. Collusion requires that the undertakings concerned have similar views on what is in their common interest and on how the co-ordination mechanisms function. For collusion to work the undertakings must also be able to monitor each other's market behaviour and there must be adequate deterrents to ensure that there is an incentive not to depart from the common policy on the market, while entry barriers must be high enough to limit entry or expansion by outsiders. Agreements can facilitate collusion by increasing transparency in the market, by controlling certain behaviour and by raising barriers to entry. Collusion can also exceptionally 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 ([55]).

would be significantly less efficient. If the application of what appears to be a commercially realistic and less restrictive alternative would lead to a significant loss of efficiencies, the restriction in question is treated as indispensable. In some cases, it may also be necessary to examine whether the agreement as such is indispensable to achieve the efficiencies. This may for example be so in the case of technology pools that include complementary but non-essential technologies ([59]), in which case it must be examined to what extent such inclusion gives rise to particular efficiencies or whether, without a significant loss of efficiencies, the pool could be limited to technologies for which there are no substitutes. In the case of simple licensing between two parties it is generally 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.

150. 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 ([60]). This means that the efficiency gains must fully off-set the likely negative impact on prices, output and other relevant factors caused by the agreement. They may do so by changing the cost structure of the undertakings concerned, giving them an incentive to reduce price, or by allowing consumers to gain access to new or improved products, compensating for any likely price increase ([61]).

151. 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 ([62]). 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 ([63]).

152. 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 the creation of a de facto industry standard always 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 unduly restrict competition and does not unduly restrict future innovation.

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

153. This section deals with various types of restraints that are commonly included in licence agreements. Given their prevalence it is useful to provide guidance as to how they are assessed outside the safe harbour of the TTBER. 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 briefly in the present section.

154. 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, a reciprocal licence is for all practical purposes no different from two separate licences. Arrangements whereby the parties assemble a technology package, which is then licensed to third parties, are technology pools, which are dealt with in section 4 below.

155. This section does not deal with obligations in licence agreements that are generally 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-license;

(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;

163. Reciprocal exclusive licensing between competitors falls under Article 4(1)(c), which identifies market sharing between competitors as a hardcore restriction. Reciprocal sole licensing between competitors is block exempted up to the market share threshold of 20 %. Under such an agreement the parties mutually commit not to license their competing technologies to third parties. In cases where the parties have a significant degree of market power such agreements may facilitate collusion by ensuring that the parties are the only sources of output in the market based on the licensed technologies.

164. Non-reciprocal exclusive licensing between competitors is block exempted up to the market share threshold of 20 %. Above the market share threshold it is necessary to analyse what are the likely anti-competitive effects of such exclusive licensing. Where the exclusive licence is world-wide it implies that the licensor leaves the market. In cases where exclusivity is limited to a particular territory such as a Member State the agreement implies that the licensor abstains from producing goods and services inside the territory in question. In the context of Article 81(1) it must in particular be assessed what is the competitive significance of the licensor. If the licensor has a limited market position on the product market or lacks the capacity to effectively exploit the technology in the licensee's territory, the agreement is unlikely to be caught by Article 81(1). A special case is where the licensor and the licensee only compete on the technology market and the licensor, for instance being a research institute or a small research based undertaking, lacks the production and distribution assets to effectively bring to market products incorporating the licensed technology. In such cases Article 81(1) is unlikely to be infringed.

165. Exclusive licensing between non-competitors — to the extent that it is caught by Article 81(1) ([64]) — is likely to fulfil the conditions of Article 81(3). The right to grant an exclusive licence is generally necessary in order to induce the licensee to invest in the licensed technology and to bring the products to market in a timely manner. This is in particular the case where the licensee must make large investments in further developing the licensed technology. To intervene against the exclusivity once the licensee has made a commercial success of the licensed technology would deprive the licensee of the fruits of his success and would be detrimental to competition, the dissemination of technology and innovation. The Commission will therefore only exceptionally intervene against exclusive licensing in agreements between non-competitors, irrespective of the territorial scope of the licence.

166. The main situation in which intervention may be warranted is where a dominant licensee obtains an exclusive licence to one or more competing technologies. Such agreements are likely to be caught by Article 81(1) and unlikely to fulfil the conditions of Article 81(3). It is a condition however that 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 party licensees and allow the licensee to preserve his market power.

167. Arrangements whereby two or more parties cross licence each other and undertake not to licence third parties give rise to particular concerns when the package of technologies resulting from the cross licences 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 below). It will normally be required that the technologies which support such a standard be licensed to third parties on fair, reasonable and non-discriminatory terms ([65]). Where the parties to the arrangement compete with third parties on an existing product market and the arrangement relates to that product market a closed standard is likely to have substantial exclusionary effects. This negative impact on competition can only be avoided by licensing also to third parties.

2.2.2. *Sales restrictions*

168. Also as regards sales restrictions there is an important distinction to be made between licensing between competitors and between non-competitors.

169. Restrictions on active and passive sales by one or both parties in a reciprocal agreement between competitors are hardcore restrictions of competition under Article 4(1)(c). Sales restrictions on either party in a reciprocal agreement between competitors are caught by Article 81(1) and are unlikely to fulfil the conditions of Article 81(3). Such restrictions are generally considered market sharing, since they prevent the affected party from selling actively and passively into territories and to customer groups which he actually served or could realistically have served in the absence of the agreement.

170. In the case of non-reciprocal agreements between competitors the block exemption applies to restrictions on active and passive sales by the licensee or the licensor into the exclusive territory or to the exclusive customer group reserved for the other party (cf. Article 4(1)(c)(iv). Above the market share threshold of 20 % sales restrictions between licensor and licensee are caught by

that case the effect of the output limitation is limited even in markets where demand is growing. In the application of Article 81(3) it must also be taken into account that such restrictions may be necessary in order to induce the licensor to disseminate his technology as widely as possible. For instance, a licensor may be reluctant to license his competitors if he cannot 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 substantial market power.

176. Output restrictions in licence agreements between non-competitors are block exempted up to the market share threshold of 30 %. 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 prevents the licensee from satisfying demand for the products incorporating the licensed technology.

177. 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.

178. Output limitations imposed on the licensee in agreements between non-competitors may also have pro-competitive effects by promoting the dissemination of technology. As a supplier of technology, the licensor should normally be free to determine the output produced with the licensed technology by the licensee. If the licensor were not free to determine the output of the licensee, a number of licence agreements might not come into existence 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 prohibiting him from selling into a territory or customer group reserved for the licensor.

2.4. Field of use restrictions

179. 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. However, a single product market may encompass several technical fields of use. For instance a new engine technology may be employed in four cylinder engines and six cylinder engines. Similarly, a technology to make chipsets may be used to produce chipsets with up to four CPUs and more than four CPUs. A licence limiting the use of the licensed technology to produce say four cylinder engines and chipsets with up to four CPUs constitutes a technical field of use restriction.

180. Given that field of use restrictions are block exempted and that certain customer restrictions are hardcore restrictions under Articles 4(1)(c) and 4(2)(b) of the TTBER, it is important to distinguish the two categories of restraints. A customer restriction presupposes that specific customer groups are identified and that the parties are restricted in selling to such identified groups. The fact that a technical field of use restriction may correspond to certain groups of customers within a product market does not imply that the restraint is to be classified as a customer restriction. For instance, the fact that certain customers buy predominantly or exclusively chipsets with more than four CPUs does not imply that a licence which is limited to chipsets with up to four CPUs constitutes a customer restriction. However, the field of use must be defined objectively by reference to identified and meaningful technical characteristics of the licensed product.

181. A field of use restriction limits the exploitation of the licensed technology by the licensee to one or more particular fields of use without limiting the licensor's ability to exploit the licensed technology. In addition, as with territories, these fields of use can be allocated to the licensee under an exclusive or sole licence. Field of use restrictions combined with an exclusive or sole licence also restrict the licensor's ability to exploit his own technology, by preventing him from exploiting it himself, including by way of licensing to others. In the case of a sole license only licensing to third parties is restricted. Field of use restrictions combined with exclusive and sole licences are treated in the same way as the exclusive and sole licenses dealt with in section 2.2.1 above. In particular, for licensing between competitors, this means that reciprocal exclusive licensing is hardcore under Article 4(1)(c).

188. 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 to impose discriminatory royalties on licensees.

189. 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 between non-competitors to occur. In the absence of the restraint the licensor may not grant the licence or may do so only against higher royalties, because otherwise he would create direct competition to himself on the component market. In such cases a captive use restriction is normally either not restrictive of competition or covered by Article 81(3). 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 for his own products, including independent service organisations that service and repair the products produced by him.

190. 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.

2.6. Tying and bundling

191. 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). Bundling occurs where two technologies or a technology and a product are only sold together as a bundle. In both cases, however, it is a condition that the products and technologies involved are distinct in the sense that there is distinct demand for each of the products and technologies forming part of the tie or the bundle. This is normally not the case where the technologies or products are by necessity linked in such a way that the licensed technology cannot be exploited without the tied product or both parts of the bundle cannot be exploited without the other. In the following the term 'tying' refers to both tying and bundling.

192. Article 3 of the TTBER, which limits the application of the block exemption by market share thresholds, ensures that tying and bundling are not block exempted above the market share thresholds of 20 % in the case of agreements between competitors and 30 % in the case of agreements between non-competitors. The market share thresholds apply to any relevant technology or product market affected by the licence agreement, including the market for the tied product. Above the market share thresholds it is necessary to balance the anti-competitive and pro-competitive effects of tying.

193. The main restrictive effect of tying is foreclosure of competing suppliers of the tied product. Tying may also allow the licensor to maintain market power in the market for the tying product by raising barriers to entry since it may force new entrants to enter several markets at the same time. Moreover, tying may 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 appreciable foreclosure effects to occur. In cases where the licensor has market power on the market for the tied product rather than on the market for the tying product, the restraint is 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 [66].

194. 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.

201. 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 license 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.

202. Second, non-compete obligations possibly in combination with an exclusive territory may be necessary to ensure that the licensee has an incentive to invest in and exploit the licensed technology effectively. In cases where the agreement is caught by Article 81(1) because of an appreciable foreclosure effect, it may be necessary in order to benefit from Article 81(3) to choose a less restrictive alternative, for instance to impose minimum output or royalty obligations, which normally have less potential to foreclose competing technologies.

203. 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

204. Licensing may serve as a means of settling disputes or avoiding that one party exercises his intellectual property rights to prevent the other party from exploiting his own technology. Licensing including cross licensing in the context of settlement agreements and non-assertion agreements is not as such restrictive of competition since it allows the parties to exploit their technologies post agreement. However, the individual terms and conditions of such agreements may be caught by Article 81(1). Licensing in the context of settlement agreements is treated like other licence agreements. In the case of technologies that from a technical point of view are substitutes, it is therefore necessary to assess to what extent it is likely that the technologies in question are in a one-way or two-way blocking position (cf. paragraph 32 above). If so, the parties are not deemed to be competitors.

205. 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. The hardcore list of Article 4(1) may in particular apply where it was clear to the parties that no blocking position exists and that consequently they are competitors. In such cases the settlement is merely a means to restrict competition that existed in the absence of the agreement.

206. In cases where it is likely that in the absence of the licence the licensee could be excluded from the market, the agreement is generally pro-competitive. Restrictions that limit intra-technology competition between the licensor and the licensee are often compatible with Article 81, see section 2 above.

207. Agreements whereby the parties cross license each other and impose restrictions on the use of their technologies, including restrictions on the licensing to third parties, may be caught by Article 81(1). Where the parties have a significant degree of market power and the agreement imposes restrictions that clearly go beyond what is required in order to unblock, the agreement is likely to be caught by Article 81(1) even if it is likely that a mutual blocking position exists. Article 81(1) is particularly likely to apply where the parties share markets or fix reciprocal running royalties that have a significant impact on market prices.

208. Where under the agreement the parties are entitled to use each other's technology and the agreement extends to future developments, it is necessary to assess what is the impact of the agreement on the parties' incentive to innovate. In cases where the parties have a significant degree of market power the agreement is likely to be caught by Article 81(1) where the agreement prevents the parties from gaining a competitive lead over each other. Agreements that eliminate or substantially reduce the possibilities of one party to gain a competitive lead over the other reduce the incentive to innovate and thus adversely affect an essential part of the competitive process. Such agreements are also unlikely to satisfy the conditions of Article 81(3). It is particularly unlikely that the restriction can be considered indispensable within the meaning of the third condition of Article 81(3). The achievement of the objective of the agreement, namely to ensure that the parties can continue to exploit their own technology without being blocked by the other party, does not require that the parties agree to share future innovations. However, the parties are unlikely to be prevented from gaining a competitive lead over each other where the purpose of the licence is to allow the parties to develop their respective technologies and where

217. 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.

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

219. The inclusion in the pool of substitute technologies restricts inter-technology competition and amounts to collective bundling. Moreover, where the pool is substantially composed of substitute technologies, the arrangement amounts to price fixing between competitors. As a general rule the Commission considers that the inclusion of substitute technologies in the pool 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 to a significant extent 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 license 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.

220. 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).

221. 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 license a competing technology when the royalty paid for the package already covers a substitute technology. Moreover, the inclusion of technologies which are not necessary for the purposes of producing the product(s) or carrying out the process(es) to which the technology pool relates also forces licensees to pay for technology that they may not need. The inclusion of complementary patents thus amounts to collective bundling. 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.

222. Given that substitute and complementary technologies may be developed after the creation of the pool, the assessment of essentiality is an on-going process. A technology may therefore become non-essential after the creation of the pool due to the emergence of new third party technologies. One way to ensure that such third party technologies are not foreclosed is to exclude from the pool technologies that have become non-essential. However, there may be other ways to ensure that third party technologies are not foreclosed. 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 in its overall assessment, *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 license their respective technologies independently. Where the pool is composed of a limited number of technologies and there are substitute technologies outside the pool, licensees may want to put together their own technological package composed partly of technology forming part of the pool and partly of technology owned by third parties;

228. Grant back obligations should be non-exclusive and be limited to developments that are essential or important to the use of the pooled technology. This allows the pool to feed on and benefit from improvements to the pooled technology. 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.

229. 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 technologies owned by the licensor who is the addressee of the challenge and must not extend to the technologies owned by the other licensors in the pool.

4.3. The institutional framework governing the pool

230. 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.

231. When participation in a standard and pool creation 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.

232. 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 standard supported by 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.

233. The Commission will take into account how experts are selected and what are the exact functions that they are to perform. Experts should be independent from the undertakings that have formed the pool. If experts are connected to the licensors or otherwise depend on them, the involvement of the expert will be given less weight. Experts must also have the necessary technical expertise to perform the various functions with which they have been entrusted. The functions of independent experts may include, in particular, an assessment of whether or not technologies put forward for inclusion into the pool are valid and whether or not they are essential.

234. 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 ([76]). 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.

235. 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 123, 27.4.2004. The TTBER replaces Commission Regulation (EC) No 240/96 of 31 January 1996 on the application of Article 85(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 paragraph 106 of the Commission Guidelines on the application of Article 81(3) of the Treaty, not yet published.

([3]) 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).

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

([5]) See Commission Notice on the concept of effect on trade between Member States contained in Articles 81 and 82 of the Treaty, not yet published.

(38) The reasons for this calculation rule are explained in paragraph 23 above.

(39) See e.g. the case law cited in note 15.

(40) See in this respect paragraph 98 of the Guidelines on the application of Article 81(3) of the Treaty cited in note 2.

(41) 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.

(42) See in this respect Case 193/83, *Windsurfing International*, [1986] ECR 611, paragraph 67.

(43) For a general definition of active and passive sales, reference is made to paragraph 50 of the Guidelines on vertical restraints cited in note 36.

(44) Field of use restrictions are further dealt with in section IV.2.4 below.

(45) This hardcore restriction applies to licence agreements concerning trade within the Community. As regards agreements concerning exports outside the Community or imports/re-imports from outside the Community see Case C-306/96, *Javico*, [1998] ECR I-1983.

(46) See in this respect paragraph 77 of the judgment in *Nungesser* cited in note 13.

(47) See in this respect Case 26/76, *Metro (I)*, [1977] ECR 1875.

(48) If the licensed technology is outdated no restriction of competition arises, see in this respect Case 65/86, *Bayer v Süllhofer*, [1988] ECR 5249.

(49) As to non-challenge clauses in the context of settlement agreements see point 209 below.

(50) See paragraph 14 above.

(51) See paragraphs 66 and 67 above.

(52) See in this respect paragraph 42 of the Guidelines on the application of Article 81(3) of the Treaty, cited in note 2.

(53) See in this respect paragraph 8 of the Commission Notice on agreements of minor importance, cited in note 17.

(54) See in this respect Case T-228/97, *Irish Sugar*, [1999] ECR II-2969, paragraph 101.

(55) See in this respect paragraph 23 of the Guidelines on horizontal cooperation agreements, cited in note 20.

(56) See Joined Cases 25/84 and 26/84, *Ford*, [1985] ECR 2725.

(57) See in this respect for example Commission Decision in *TPS* (OJ L 90, 2.4.1999, p. 6). Similarly, the prohibition of Article 81(1) also only applies as long as the agreement has a restrictive object or restrictive effects.

(58) Cited in note 36. See in particular paragraphs 115 *et seq*.

(59) As to these concepts see section IV.4.1 below.

(60) See paragraph 85 of the Guidelines on the application of Article 81(3) of the Treaty, cited in note 2.

(61) Idem, paragraphs 98 and 102.

(62) 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.

(63) See in this respect Case T-51/89, *Tetra Pak (I)*, [1990] ECR II-309. See also paragraph 106 of the Guidelines on the application of Article 81(3) of the Treaty cited in note 2 above.

(64) See the judgment in *Nungesser* cited in note 13.

(65) See in this respect the Commission's Notice in the Canon/Kodak Case (OJ C 330, 1.11.1997, p. 10) and the IGR Stereo Television Case mentioned in the XI Report on Competition Policy, paragraph 94.

(66) For the applicable analytical framework see section 2.7 below and paragraphs 138 *et seq*. of the Guidelines on Vertical Restraints cited in note 36.

(67) See note 36.

(68) 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.

(69) The term 'technology' is not limited to patents. It covers also patent applications and intellectual property rights other than patents.

(70) See in this respect the judgment in *John Deere* cited in note 11.