

IV

(Notices)

NOTICES FROM EUROPEAN UNION INSTITUTIONS, BODIES, OFFICES AND AGENCIES

EUROPEAN COMMISSION

COMMUNICATION FROM THE COMMISSION

Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements

(Text with EEA relevance)

(2011/C 11/01)

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1. INTRODUCTION

1.1. Purpose and scope

1. These guidelines set out the principles for the assessment under Article 101 of the Treaty on the Functioning of the European Union (*) ('Article 101') of agreements between undertakings, decisions by associations of undertakings and concerted practices (collectively referred to as 'agreements') pertaining to horizontal co-operation. Co-operation is of a 'horizontal nature' if an agreement is entered into between actual or potential competitors. In addition, these guidelines also cover horizontal co-operation agreements between non-competitors, for example, between two companies active in the same product markets but in different geographic markets without being potential competitors.
2. Horizontal co-operation agreements can lead to substantial economic benefits, in particular if they combine complementary activities, skills or assets. Horizontal co-operation can be a means to share risk, save costs, increase investments, pool know-how, enhance product quality and variety, and launch innovation faster.
3. On the other hand, horizontal co-operation agreements may lead to competition problems. This is, for example, the case if the parties agree to fix prices or output or to share markets, or if the co-operation enables the parties to maintain, gain or increase market power and thereby is likely to give rise to negative market effects with respect to prices, output, product quality, product variety or innovation.
4. The Commission, while recognising the benefits that can be generated by horizontal co-operation agreements, has to ensure that effective competition is maintained. Article 101 provides the legal framework for a balanced assessment taking into account both adverse effects on competition and pro-competitive effects.
5. The purpose of these guidelines is to provide an analytical framework for the most common types of horizontal co-operation agreements; they deal with research and development agreements, production agreements including subcontracting and specialisation agreements, purchasing agreements, commercialisation agreements, standardisation agreements including standard contracts, and information exchange. This framework is primarily based on legal and economic criteria that help to analyse a horizontal co-operation agreement and the context in which it occurs. Economic criteria such as the market power of the parties and other factors relating to the market structure form a key element of the assessment of the market impact likely to be caused by a horizontal co-operation agreement and, therefore, for the assessment under Article 101.
6. These guidelines apply to the most common types of horizontal co-operation agreements irrespective of the level of integration they entail with the exception of operations constituting a concentration within the meaning of Article 3 of Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings ⁽¹⁾ ('the Merger Regulation') as would be the case, for example, with joint ventures performing on a lasting basis all the functions of an autonomous economic entity ('full-function joint ventures') ⁽²⁾.

(*) With effect from 1 December 2009, Article 81 of the EC Treaty has become Article 101 of the Treaty on the Functioning of the European Union ('TFEU'). The two Articles are, in substance, identical. For the purposes of these guidelines, references to Article 101 of the TFEU should be understood as references to Article 81 of the EC Treaty where appropriate. The TFEU also introduced certain changes in terminology, such as the replacement of 'Community' by 'Union' and 'common market' by 'internal market'. The terminology of the TFEU will be used throughout these guidelines.

⁽¹⁾ OJ L 24, 29.1.2004, p. 1.

⁽²⁾ See Article 3(4) of the Merger Regulation. However, in assessing whether there is a full-function joint venture, the Commission examines whether the joint venture is autonomous in an operational sense. This does not mean that it enjoys autonomy from its parent companies as regards the adoption of its strategic decisions (see Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings, OJ C 95, 16.4.2008, p. 1, paragraphs 91–109 ('Consolidated Jurisdictional Notice')). It also needs to be recalled that if the creation of a joint venture constituting a concentration under Article 3 of the Merger Regulation has as its object or effect the coordination of the competitive behaviour of undertakings that remain independent, then that coordination will be appraised under Article 101 of the Treaty (see Article 2(4) of the Merger Regulation).

7. Given the potentially large number of types and combinations of horizontal co-operation and market circumstances in which they operate, it is difficult to provide specific answers for every possible scenario. These guidelines will nevertheless assist businesses in assessing the compatibility of an individual co-operation agreement with Article 101. Those criteria do not, however, constitute a 'checklist' which can be applied mechanically. Each case must be assessed on the basis of its own facts, which may require a flexible application of these guidelines.
8. The criteria set out in these guidelines apply to horizontal co-operation agreements concerning both goods and services (collectively referred to as 'products'). These guidelines complement Commission Regulation (EU) No [...] of [...] on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements ⁽¹⁾ ('the R&D Block Exemption Regulation') and Commission Regulation (EU) No [...] of [...] on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of specialisation agreements ⁽²⁾ ('the Specialisation Block Exemption Regulation').
9. Although these guidelines contain certain references to cartels, they are not intended to give any guidance as to what does and does not constitute a cartel as defined by the decisional practice of the Commission and the case-law of the Court of Justice of the European Union.
10. The term 'competitors' as used in these guidelines includes both actual and potential competitors. Two companies are treated as actual competitors if they are active on the same relevant market. A company is treated as a potential competitor of another company if, in the absence of the agreement, in case of a small but permanent increase in relative prices it is likely that the former, within a short period of time ⁽³⁾, would undertake the necessary additional investments or other necessary switching costs to enter the relevant market on which the latter is active. This assessment has to be based on realistic grounds, the mere theoretical possibility to enter a market is not sufficient (see Commission Notice on the definition of the relevant market for the purposes of Community competition law) ⁽⁴⁾ ('the Market Definition Notice').
11. Companies that form part of the same 'undertaking' within the meaning of Article 101(1) are not considered to be competitors for the purposes of these guidelines. Article 101 only applies to agreements between independent undertakings. When a company exercises decisive influence over another company they form a single economic entity and, hence, are part of the same undertaking. ⁽⁵⁾ The same is true for sister companies, that is to say, companies over which decisive influence is exercised by the same parent company. They are consequently not considered to be competitors even if they are both active on the same relevant product and geographic markets.
12. Agreements that are entered into between undertakings operating at a different level of the production or distribution chain, that is to say, vertical agreements, are in principle dealt with in Commission Regulation (EU) No 330/2010 of 20 April 2010 on the application of Article 101(3) of the Treaty on

⁽¹⁾ OJ L [...], [...], p. [...].

⁽²⁾ OJ L [...], [...], p. [...].

⁽³⁾ What constitutes a 'short period of time' depends on the facts of the case at hand, its legal and economic context, and, in particular, on whether the company in question is a party to the agreement or a third party. In the first case, that is to say, where it is analysed whether a party to an agreement should be considered a potential competitor of the other party, the Commission would normally consider a longer period to be a 'short period of time' than in the second case, that is to say, where the capacity of a third party to act as a competitive constraint on the parties to an agreement is analysed. For a third party to be considered a potential competitor, market entry would need to take place sufficiently fast so that the threat of potential entry is a constraint on the parties' and other market participants' behaviour. For these reasons, both the R&D and the Specialisation Block Exemption Regulations consider a period of not more than three years a 'short period of time'.

⁽⁴⁾ OJ C 372, 9.12.1997, p. 5, paragraph 24; see also the Commission's Thirteenth Report on Competition Policy, point 55 and Commission Decision in Case IV/32.009, *Elopak/Metal Box-Odin*, OJ L 209, 8.8.1990, p. 15.

⁽⁵⁾ See, for example, Case C-73/95, *Viho*, [1996] ECR I-5457, paragraph 51. The exercise of decisive influence by the parent company over the conduct of a subsidiary can be presumed in case of wholly-owned subsidiaries; see, for example, Case 107/82, *AEG*, [1983] ECR-3151, paragraph 50; Case C-286/98 P, *Stora*, [2000] ECR-I 9925, paragraph 29; or Case C-97/08 P, *Akzo*, [2009] ECR I-8237, paragraphs 60 *et seq.*

the Functioning of the European Union to categories of vertical agreements and concerted practices⁽¹⁾ (‘the Block Exemption Regulation on Vertical Restraints’) and the Guidelines on Vertical Restraints⁽²⁾. However, to the extent that vertical agreements, for example, distribution agreements, are concluded between competitors, the effects of the agreement on the market and the possible competition problems can be similar to horizontal agreements. Therefore, vertical agreements between competitors fall under these guidelines⁽³⁾. Should there be a need to also assess such agreements under the Block Exemption Regulation on Vertical Restraints and the Guidelines on Vertical Restraints, this will be specifically stated in the relevant chapter of these guidelines. In the absence of such a reference, only these guidelines will be applicable to vertical agreements between competitors.

13. Horizontal co-operation agreements may combine different stages of co-operation, for example research and development (‘R&D’) and the production and/or commercialisation of its results. Such agreements are generally also covered by these guidelines. When using these guidelines for the analysis of such integrated co-operation, as a general rule, all the chapters pertaining to the different parts of the co-operation will be relevant. However, where the relevant chapters of these guidelines contain graduated messages, for example with regard to safe harbours or whether certain conduct will normally be considered a restriction of competition by object or by effect, what is set out in the chapter pertaining to that part of an integrated co-operation which can be considered its ‘centre of gravity’ prevails for the entire co-operation⁽⁴⁾.
14. Two factors are in particular relevant for the determination of the centre of gravity of integrated co-operation: firstly, the starting point of the co-operation, and, secondly, the degree of integration of the different functions which are combined. For example, the centre of gravity of a horizontal co-operation agreement involving both joint R&D and joint production of the results would thus normally be the joint R&D, as the joint production will only take place if the joint R&D is successful. This implies that the results of the joint R&D are decisive for the subsequent joint production. The assessment of the centre of gravity would change if the parties would have engaged in the joint production in any event, that is to say, irrespective of the joint R&D, or if the agreement provided for a full integration in the area of production and only a partial integration of some R&D activities. In this case, the centre of gravity of the co-operation would be the joint production.
15. Article 101 only applies to those horizontal co-operation agreements which may affect trade between Member States. The principles on the applicability of Article 101 set out in these guidelines are therefore based on the assumption that a horizontal co-operation agreement is capable of affecting trade between Member States to an appreciable extent.
16. The assessment under Article 101 as described in these guidelines is without prejudice to the possible parallel application of Article 102 of the Treaty to horizontal co-operation agreements⁽⁵⁾.
17. These guidelines are without prejudice to the interpretation the Court of Justice of the European Union may give to the application of Article 101 to horizontal co-operation agreements.

⁽¹⁾ OJ L 102, 23.4.2010, p. 1.

⁽²⁾ OJ C 130, 19.5.2010, p. 1.

⁽³⁾ This does not apply where competitors enter into a non-reciprocal vertical agreement and (i) the supplier is a manufacturer and a distributor of goods, while the buyer is a distributor and not a competing undertaking at the manufacturing level, or (ii) the supplier is a provider of services at several levels of trade, while the buyer provides its goods or services at the retail level and is not a competing undertaking at the level of trade where it purchases the contract services. Such agreements are exclusively assessed under the Block Exemption Regulation and the Guidelines on Vertical Restraints (see Article 2(4) of the Block Exemption Regulation on Vertical Restraints).

⁽⁴⁾ It should be noted that this test only applies to the relationship between the different chapters of these guidelines, not to the relationship between different block exemption regulations. The scope of a block exemption regulation is defined by its own provisions.

⁽⁵⁾ See Case T-51/89, *Tetra Pak I*, [1990] ECR-II 309, paragraphs 25 *et seq.* and Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, OJ C 45, 24.2.2009, p. 7 (‘Article 102 Guidance Paper’).

18. These guidelines replace the Commission guidelines on the applicability of Article 81 of the EC Treaty to horizontal co-operation agreements⁽¹⁾ which were published by the Commission in 2001 and do not apply to the extent that sector specific rules apply as is the case for certain agreements with regard to agriculture⁽²⁾, transport⁽³⁾ or insurance⁽⁴⁾. The Commission will continue to monitor the operation of the R&D and Specialisation Block Exemption Regulations and these guidelines based on market information from stakeholders and national competition authorities and may revise these guidelines in the light of future developments and of evolving insight.
19. The Commission guidelines on the application of Article 81(3) of the Treaty⁽⁵⁾ ('the General Guidelines') contain general guidance on the interpretation of Article 101. Consequently, these guidelines have to be read in conjunction with the General Guidelines.

1.2. Basic principles for the assessment under Article 101

20. The assessment under Article 101 consists of two steps. The first step, under Article 101(1), is to assess whether an agreement between undertakings, which is capable of affecting trade between Member States, has an anti-competitive object or actual or potential⁽⁶⁾ restrictive effects on competition. The second step, under Article 101(3), which only becomes relevant when an agreement is found to be restrictive of competition within the meaning of Article 101(1), is to determine the pro-competitive benefits produced by that agreement and to assess whether those pro-competitive effects outweigh the restrictive effects on competition⁽⁷⁾. The balancing of restrictive and pro-competitive effects is conducted exclusively within the framework laid down by Article 101(3)⁽⁸⁾. If the pro-competitive effects do not outweigh a restriction of competition, Article 101(2) stipulates that the agreement shall be automatically void.
21. The analysis of horizontal co-operation agreements has certain common elements with the analysis of horizontal mergers pertaining to the potential restrictive effects, in particular as regards joint ventures. There is often only a fine line between full-function joint ventures that fall under the Merger Regulation and non-full-function joint ventures that are assessed under Article 101. Hence, their effects can be quite similar.
22. In certain cases, companies are encouraged by public authorities to enter into horizontal co-operation agreements in order to attain a public policy objective by way of self-regulation. However, companies remain subject to Article 101 if a national law merely encourages or makes it easier for them to

⁽¹⁾ OJ C 3, 6.1.2001, p. 2. These guidelines do not contain a separate chapter on 'environmental agreements' as was the case in the previous guidelines. Standard-setting in the environment sector, which was the main focus of the former chapter on environmental agreements, is more appropriately dealt with in the standardisation chapter of these guidelines. In general, depending on the competition issues 'environmental agreements' give rise to, they are to be assessed under the relevant chapter of these guidelines, be it the chapter on R&D, production, commercialisation or standardisation agreements.

⁽²⁾ Council Regulation (EC) No 1184/2006 of 24 July 2006 applying certain rules of competition to the production of, and trade in, agricultural products, OJ L 214, 4.8.2006, p. 7.

⁽³⁾ Council Regulation (EC) No 169/2009 of 26 February 2009 applying rules of competition to transport by rail, road and inland waterway, OJ L 61, 5.3.2009, p. 1; Council Regulation (EC) No 246/2009 of 26 February 2009 on the application of Article 81(3) of the Treaty to certain categories of agreements and concerted practices between liner shipping companies (consortia), OJ L 79, 25.3.2009, p. 1; Commission Regulation (EC) No 823/2000 of 19 April 2000 on the application of Article 81(3) of the Treaty to certain categories of agreements, decisions and concerted practices between liner shipping companies (consortia), OJ L 100, 20.4.2000, p. 24; Guidelines on the application of Article 81 of the EC Treaty to maritime transport services, OJ C 245, 26.9.2008, p. 2.

⁽⁴⁾ Commission Regulation (EU) No 267/2010 of 24 March 2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of agreements, decisions and concerted practices in the insurance sector, OJ L 83, 31.3.2010, p. 1.

⁽⁵⁾ OJ C 101, 27.4.2004, p. 97.

⁽⁶⁾ Article 101(1) prohibits both actual and potential anti-competitive effects; see for example Case C-7/95 P, *John Deere*, [1998] ECR I-3111, paragraph 77; Case C-238/05, *Asnef-Equifax*, [2006] ECR I-11125, paragraph 50.

⁽⁷⁾ See Joined Cases C-501/06 P and others, *GlaxoSmithKline*, [2009] ECR I-9291, paragraph 95.

⁽⁸⁾ See Case T-65/98, *Van den Bergh Foods*, [2003] ECR II-4653, paragraph 107; Case T-112/99, *Métropole télévision (M6) and others*, [2001] ECR II-2459, paragraph 74; Case T-328/03, *O2*, [2006] ECR II-1231, paragraphs 69 *et seq.*, where the General Court held that it is only in the precise framework of Article 101(3) that the pro- and anti-competitive aspects of a restriction may be weighed.

engage in autonomous anti-competitive conduct⁽¹⁾. In other words, the fact that public authorities encourage a horizontal co-operation agreement does not mean that it is permissible under Article 101⁽²⁾. It is only if anti-competitive conduct is required of companies by national legislation, or if the latter creates a legal framework which precludes all scope for competitive activity on their part, that Article 101 does not apply⁽³⁾. In such a situation, the restriction of competition is not attributable, as Article 101 implicitly requires, to the autonomous conduct of the companies and they are shielded from all the consequences of an infringement of that article⁽⁴⁾. Each case must be assessed on its own facts according to the general principles set out in these guidelines.

1.2.1. Article 101(1)

23. Article 101(1) prohibits agreements the object or effect of which is to restrict⁽⁵⁾ competition.

(i) Restrictions of competition by object

24. Restrictions of competition by *object* are those that by their very nature have the potential to restrict competition within the meaning of Article 101(1)⁽⁶⁾. It is not necessary to examine the actual or potential effects of an agreement on the market once its anti-competitive object has been established⁽⁷⁾.

25. According to the settled case-law of the Court of Justice of the European Union, in order to assess whether an agreement has an anti-competitive object, regard must be had to the content of the agreement, the objectives it seeks to attain, and the economic and legal context of which it forms part. In addition, although the parties' intention is not a necessary factor in determining whether an agreement has an anti-competitive object, the Commission may nevertheless take this aspect into account in its analysis⁽⁸⁾. Further guidance with regard to the notion of restrictions of competition by object can be obtained in the General Guidelines.

(ii) Restrictive effects on competition

26. If a horizontal co-operation agreement does not restrict competition by object, it must be examined whether it has appreciable restrictive effects on competition. Account must be taken of both actual and potential effects. In other words, the agreement must at least be likely to have anti-competitive effects.

27. For an agreement to have restrictive effects on competition within the meaning of Article 101(1) it must have, or be likely to have, an appreciable adverse impact on at least one of the parameters of competition on the market, such as price, output, product quality, product variety or innovation. Agreements can have such effects by appreciably reducing competition between the parties to the agreement or between any one of them and third parties. This means that the agreement must reduce the parties' decision-making independence⁽⁹⁾, either due to obligations contained in the agreement which regulate the market conduct of at least one of the parties or by influencing the market conduct of at least one of the parties by causing a change in its incentives.

⁽¹⁾ See judgment of 14 October 2010 in Case C-280/08 P, *Deutsche Telekom*, ECR I not yet reported, paragraph 82 and the case-law cited therein.

⁽²⁾ See Case C-198/01, *CIF*, [2003] ECR I-8055, paragraphs 56–58; Joined Cases T-217/03 and T-245/03, *French Beef*, [2006] ECR II-4987, paragraph 92; Case T-7/92, *Asia Motor France II*, [1993] ECR II-669, paragraph 71; and Case T-148/89, *Tréfilunion*, [1995] ECR II-1063, paragraph 118.

⁽³⁾ See Case C-280/08 P, *Deutsche Telekom*, paragraph 80–81. This possibility has been narrowly interpreted; see, for example, Joined Cases 209/78 and others, *Van Landewyck*, [1980] ECR 3125, paragraphs 130–134; Joined Cases 240/82 and others, *Stichting Sigarettenindustrie*, [1985] ECR 3831, paragraphs 27–29; and Joined Cases C-359/95 P and C-379/95 P, *Ladbroke Racing*, [1997] ECR I-6265, paragraphs 33 *et seq.*

⁽⁴⁾ At least until a decision to disapply the national legislation has been adopted and that decision has become definitive; see Case C-198/01, *CIF*, paragraphs 54 *et seq.*

⁽⁵⁾ For the purpose of these guidelines, the term 'restriction of competition' includes the prevention and distortion of competition.

⁽⁶⁾ See, for example, Case C-209/07, *BIDS*, [2008] ECR I-8637, paragraph 17.

⁽⁷⁾ See, for example, Joined Cases C-501/06 P and others, *GlaxoSmithKline*, paragraph 55; Case C-209/07, *BIDS*, paragraph 16; Case C-8/08, *T-Mobile Netherlands*, ECR [2009] I-4529, paragraph 29 *et seq.*; Case C-7/95 P, *John Deere*, paragraph 77.

⁽⁸⁾ See, for example, Joined Cases C-501/06 P and others, *GlaxoSmithKline*, paragraph 58; Case C-209/07, *BIDS*, paragraphs 15 *et seq.*

⁽⁹⁾ See Case C-7/95 P, *John Deere*, paragraph 88; Case C-238/05, *Asnef-Equifax*, paragraph 51.

28. Restrictive effects on competition within the relevant market are likely to occur where it can be expected with a reasonable degree of probability that, due to the agreement, the parties would be able to profitably raise prices or reduce output, product quality, product variety or innovation. This will depend on several factors such as the nature and content of the agreement, the extent to which the parties individually or jointly have or obtain some degree of market power, and the extent to which the agreement contributes to the creation, maintenance or strengthening of that market power or allows the parties to exploit such market power.
29. The assessment of whether a horizontal co-operation agreement has restrictive effects on competition within the meaning of Article 101(1) must be made in comparison to the actual legal and economic context in which competition would occur in the absence of the agreement with all of its alleged restrictions (that is to say, in the absence of the agreement as it stands (if already implemented) or as envisaged (if not yet implemented) at the time of assessment). Hence, in order to prove actual or potential restrictive effects on competition, it is necessary to take into account competition between the parties and competition from third parties, in particular actual or potential competition that would have existed in the absence of the agreement. This comparison does not take into account any potential efficiency gains generated by the agreement as these will only be assessed under Article 101(3).
30. Consequently, horizontal co-operation agreements between competitors that, on the basis of objective factors, would not be able to independently carry out the project or activity covered by the co-operation, for instance, due to the limited technical capabilities of the parties, will normally not give rise to restrictive effects on competition within the meaning of Article 101(1) unless the parties could have carried out the project with less stringent restrictions ⁽¹⁾.
31. General guidance with regard to the notion of restrictions of competition by effect can be obtained in the General Guidelines. These guidelines provide additional guidance specific to the competition assessment of horizontal co-operation agreements.

Nature and content of the agreement

32. The nature and content of an agreement relates to factors such as the area and objective of the co-operation, the competitive relationship between the parties and the extent to which they combine their activities. Those factors determine which kinds of possible competition concerns can arise from a horizontal co-operation agreement.
33. Horizontal co-operation agreements may limit competition in several ways. The agreement may:
- be exclusive in the sense that it limits the possibility of the parties to compete against each other or third parties as independent economic operators or as parties to other, competing agreements;
 - require the parties to contribute such assets that their decision-making independence is appreciably reduced; or
 - affect the parties' financial interests in such a way that their decision-making independence is appreciably reduced. Both financial interests in the agreement and also financial interests in other parties to the agreement are relevant for the assessment.
34. The potential effect of such agreements may be the loss of competition between the parties to the agreement. Competitors can also benefit from the reduction of competitive pressure that results from the agreement and may therefore find it profitable to increase their prices. The reduction in those competitive constraints may lead to price increases in the relevant market. Factors such as whether the parties to the agreement have high market shares, whether they are close competitors, whether the customers have limited possibilities of switching suppliers, whether competitors are unlikely to increase supply if prices increase, and whether one of the parties to the agreement is an important competitive force, are all relevant for the competitive assessment of the agreement.

⁽¹⁾ See also paragraph 18 of the General Guidelines.

35. A horizontal co-operation agreement may also:
- lead to the disclosure of strategic information thereby increasing the likelihood of coordination among the parties within or outside the field of the co-operation;
 - achieve significant commonality of costs (that is to say, the proportion of variable costs which the parties have in common), so the parties may more easily coordinate market prices and output.
36. Significant commonality of costs achieved by a horizontal co-operation agreement can only allow the parties to more easily coordinate market prices and output where the parties have market power, the market characteristics are conducive to such coordination, the area of co-operation accounts for a high proportion of the parties' variable costs in a given market, and the parties combine their activities in the area of co-operation to a significant extent. This could, for instance, be the case, where they jointly manufacture or purchase an important intermediate product or jointly manufacture or distribute a high proportion of their total output of a final product.
37. A horizontal agreement may therefore decrease the parties' decision-making independence and as a result increase the likelihood that they will coordinate their behaviour in order to reach a collusive outcome but it may also make coordination easier, more stable or more effective for parties that were already coordinating before, either by making the coordination more robust or by permitting them to achieve even higher prices.
38. Some horizontal co-operation agreements, for example production and standardisation agreements, may also give rise to anti-competitive foreclosure concerns.

Market power and other market characteristics

39. Market power is the ability to profitably maintain prices above competitive levels for a period of time or to profitably maintain output in terms of product quantities, product quality and variety or innovation below competitive levels for a period of time.
40. In markets with fixed costs undertakings must price above their variable costs of production in order to ensure a competitive return on their investment. The fact that undertakings price above their variable costs is therefore not in itself a sign that competition in the market is not functioning well and that undertakings have market power that allows them to price above the competitive level. It is when competitive constraints are insufficient to maintain prices, output, product quality, product variety and innovation at competitive levels that undertakings have market power in the context of Article 101(1).
41. The creation, maintenance or strengthening of market power can result from superior skill, foresight or innovation. It can also result from reduced competition between the parties to the agreement or between any one of the parties and third parties, for example, because the agreement leads to anti-competitive foreclosure of competitors by raising competitors' costs and limiting their capacity to compete effectively with the contracting parties.
42. Market power is a question of degree. The degree of market power required for the finding of an infringement under Article 101(1) in the case of agreements that are restrictive of competition by effect is less than the degree of market power required for a finding of dominance under Article 102, where a substantial degree of market power is required.
43. The starting point for the analysis of market power is the position of the parties on the markets affected by the co-operation. To carry out this analysis the relevant market(s) have to be defined by using the methodology of the Commission's Market Definition Notice. Where specific types of markets, such as purchasing or technology markets, are concerned these guidelines will provide additional guidance.

44. If the parties have a low combined market share, the horizontal co-operation agreement is unlikely to give rise to restrictive effects on competition within the meaning of Article 101(1) and, normally, no further analysis will be required. What is considered to be a 'low combined market share' depends on the type of agreement in question and can be inferred from the 'safe harbour' thresholds set out in various chapters of these guidelines and, more generally, from the Commission Notice on agreements of minor importance which do not appreciably restrict competition under Article 81(1) of the Treaty establishing the European Community (*de minimis*)⁽¹⁾ (the *De Minimis* Notice'). If one of just two parties has only an insignificant market share and if it does not possess important resources, even a high combined market share normally cannot be seen as indicating a likely restrictive effect on competition in the market⁽²⁾. Given the variety of horizontal co-operation agreements and the different effects they may cause in different market situations, it is not possible to give a general market share threshold above which sufficient market power for causing restrictive effects on competition can be assumed.
45. Depending on the market position of the parties and the concentration in the market, other factors such as the stability of market shares over time, entry barriers and the likelihood of market entry, and the countervailing power of buyers/suppliers also have to be considered.
46. Normally, the Commission uses current market shares in its competitive analysis⁽³⁾. However, reasonably certain future developments may also be taken into account, for instance in the light of exit, entry or expansion in the relevant market. Historic data may be used if market shares have been volatile, for instance when the market is characterised by large, lumpy orders. Changes in historic market shares may provide useful information about the competitive process and the likely future importance of the various competitors, for instance, by indicating whether undertakings have been gaining or losing market shares. In any event, the Commission interprets market shares in the light of likely market conditions, for instance, if the market is highly dynamic in character and if the market structure is unstable due to innovation or growth.
47. When entering a market is sufficiently easy, a horizontal co-operation agreement will normally not be expected to give rise to restrictive effects on competition. For entry to be considered a sufficient competitive constraint on the parties to a horizontal co-operation agreement, it must be shown to be likely, timely and sufficient to deter or defeat any potential restrictive effects of the agreement. The analysis of entry may be affected by the presence of horizontal co-operation agreements. The likely or possible termination of a horizontal co-operation agreement may influence the likelihood of entry.

1.2.2. Article 101(3)

48. The assessment of restrictions of competition by object or effect under Article 101(1) is only one side of the analysis. The other side, which is reflected in Article 101(3), is the assessment of the pro-competitive effects of restrictive agreements. The general approach when applying Article 101(3) is presented in the General Guidelines. Where in an individual case a restriction of competition within the meaning of Article 101(1) has been proven, Article 101(3) can be invoked as a defence. According to Article 2 of Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty⁽⁴⁾, the burden of proof under Article 101(3) rests on the undertaking(s) invoking the benefit of this provision. Therefore, the factual arguments and the evidence provided by the undertaking(s) must enable the Commission to arrive at the conviction that the agreement in question is sufficiently likely to give rise to pro-competitive effects or that it is not⁽⁵⁾.

⁽¹⁾ OJ C 368, 22.12.2001, p. 13.

⁽²⁾ If there are more than two parties, then the collective share of all co-operating competitors has to be significantly greater than the share of the largest single participating competitor.

⁽³⁾ As to the calculation of market shares, see also Market Definition Notice, paragraphs 54–55.

⁽⁴⁾ OJ L 1, 4.1.2003, p. 1.

⁽⁵⁾ See, for example, Joined Cases C-501/06 P and others, *GlaxoSmithKline*, paragraphs 93–95.

49. The application of the exception rule of Article 101(3) is subject to four cumulative conditions, two positive and two negative:
- the agreement must contribute to improving the production or distribution of products or contribute to promoting technical or economic progress, that is to say, lead to efficiency gains;
 - the restrictions must be indispensable to the attainment of those objectives, that is to say, the efficiency gains;
 - consumers must receive a fair share of the resulting benefits, that is to say, the efficiency gains, including qualitative efficiency gains, attained by the indispensable restrictions must be sufficiently passed on to consumers so that they are at least compensated for the restrictive effects of the agreement; hence, efficiencies only accruing to the parties to the agreement will not suffice; for the purposes of these guidelines, the concept of 'consumers' encompasses the customers, potential and/or actual, of the parties to the agreement ⁽¹⁾; and
 - the agreement must not afford the parties the possibility of eliminating competition in respect of a substantial part of the products in question.
50. In the area of horizontal co-operation agreements there are block exemption regulations based on Article 101(3) for research and development ⁽²⁾ and specialisation (including joint production) ⁽³⁾ agreements. Those Block Exemption Regulations are based on the premise that the combination of complementary skills or assets can be the source of substantial efficiencies in research and development and specialisation agreements. This may also be the case for other types of horizontal co-operation agreements. The analysis of the efficiencies of an individual agreement under Article 101(3) is therefore to a large extent a question of identifying the complementary skills and assets that each of the parties brings to the agreement and evaluating whether the resulting efficiencies are such that the conditions of Article 101(3) are fulfilled.
51. Complementarities may arise from horizontal co-operation agreements in various ways. A research and development agreement may bring together different research capabilities that allow the parties to produce better products more cheaply and shorten the time for those products to reach the market. A production agreement may allow the parties to achieve economies of scale or scope that they could not achieve individually.
52. Horizontal co-operation agreements that do not involve the combination of complementary skills or assets are less likely to lead to efficiency gains that benefit consumers. Such agreements may reduce duplication of certain costs, for instance because certain fixed costs can be eliminated. However, fixed cost savings are, in general, less likely to result in benefits to consumers than savings in, for instance, variable or marginal costs.
53. Further guidance regarding the Commission's application of the criteria of Article 101(3) can be obtained in the General Guidelines.

1.3. Structure of these guidelines

54. Chapter 2 will first set out some general principles for the assessment of the exchange of information, which are applicable to all types of horizontal co-operation agreements entailing the exchange of information. The subsequent chapters of these guidelines will each address one specific type of horizontal co-operation agreement. Each chapter will apply the analytical framework described in section 1.2 as well as the general principles on the exchange of information to the specific type of co-operation in question.

⁽¹⁾ More detail on the concept of consumer is provided in paragraph 84 of the General Guidelines.

⁽²⁾ R&D Block Exemption Regulation.

⁽³⁾ Specialisation Block Exemption Regulation.

2. GENERAL PRINCIPLES ON THE COMPETITIVE ASSESSMENT OF INFORMATION EXCHANGE

2.1. Definition and scope

55. The purpose of this chapter is to guide the competitive assessment of information exchange. Information exchange can take various forms. Firstly, data can be directly shared between competitors. Secondly, data can be shared indirectly through a common agency (for example, a trade association) or a third party such as a market research organisation or through the companies' suppliers or retailers.
56. Information exchange takes place in different contexts. There are agreements, decisions by associations of undertakings, or concerted practices under which information is exchanged, where the main economic function lies in the exchange of information itself. Moreover, information exchange can be part of another type of horizontal co-operation agreement (for example, the parties to a production agreement share certain information on costs). The assessment of the latter type of information exchanges should be carried out in the context of the assessment of the horizontal co-operation agreement itself.
57. Information exchange is a common feature of many competitive markets and may generate various types of efficiency gains. It may solve problems of information asymmetries⁽¹⁾, thereby making markets more efficient. Moreover, companies may improve their internal efficiency through benchmarking against each other's best practices. Sharing of information may also help companies to save costs by reducing their inventories, enabling quicker delivery of perishable products to consumers, or dealing with unstable demand etc. Furthermore, information exchanges may directly benefit consumers by reducing their search costs and improving choice.
58. However, the exchange of market information may also lead to restrictions of competition in particular in situations where it is liable to enable undertakings to be aware of market strategies of their competitors⁽²⁾. The competitive outcome of information exchange depends on the characteristics of the market in which it takes place (such as concentration, transparency, stability, symmetry, complexity etc.) as well as on the type of information that is exchanged, which may modify the relevant market environment towards one liable to coordination.
59. Moreover, communication of information among competitors may constitute an agreement, a concerted practice, or a decision by an association of undertakings with the object of fixing, in particular, prices or quantities. Those types of information exchanges will normally be considered and fined as cartels. Information exchange may also facilitate the implementation of a cartel by enabling companies to monitor whether the participants comply with the agreed terms. Those types of exchanges of information will be assessed as part of the cartel.

Concerted practice

60. Information exchange can only be addressed under Article 101 if it establishes or is part of an agreement, a concerted practice or a decision by an association of undertakings. The existence of an agreement, a concerted practice or decision by an association of undertakings does not prejudice whether the agreement, concerted practice or decision by an association of undertakings gives rise to a restriction of competition within the meaning of Article 101(1). In line with the case-law of the Court of Justice of the European Union, the concept of a concerted practice refers to a form of coordination between undertakings by which, without it having reached the stage where an agreement properly so-called has been concluded, practical cooperation between them is knowingly substituted for the risks of competition⁽³⁾. The criteria of coordination and cooperation necessary for determining the existence of a concerted practice, far from requiring an actual plan to have been worked out, are

⁽¹⁾ Economic theory on information asymmetries deals with the study of decisions in transactions where one party has more information than the other.

⁽²⁾ See Case C-7/95 P, *John Deere*, paragraph 88.

⁽³⁾ See for example Case C-8/08, *T-Mobile Netherlands*, paragraph 26; Joined Cases C-89/85 and others, *Wood Pulp*, [1993] ECR I 1307, paragraph 63.

to be understood in the light of the concept inherent in the provisions of the Treaty on competition, according to which each company must determine independently the policy which it intends to adopt on the internal market and the conditions which it intends to offer to its customers ⁽¹⁾.

61. This does not deprive companies of the right to adapt themselves intelligently to the existing or anticipated conduct of their competitors. It does, however, preclude any direct or indirect contact between competitors, the object or effect of which is to create conditions of competition which do not correspond to the normal competitive conditions of the market in question, regard being had to the nature of the products or services offered, the size and number of the undertakings, and the volume of the said market ⁽²⁾. This precludes any direct or indirect contact between competitors, the object or effect of which is to influence conduct on the market of an actual or potential competitor, or to disclose to such competitor the course of conduct which they themselves have decided to adopt or contemplate adopting on the market, thereby facilitating a collusive outcome on the market ⁽³⁾. Hence, information exchange can constitute a concerted practice if it reduces strategic uncertainty ⁽⁴⁾ in the market thereby facilitating collusion, that is to say, if the data exchanged is strategic. Consequently, sharing of strategic data between competitors amounts to concertation, because it reduces the independence of competitors' conduct on the market and diminishes their incentives to compete.
62. A situation where only one undertaking discloses strategic information to its competitor(s) who accept(s) it can also constitute a concerted practice ⁽⁵⁾. Such disclosure could occur, for example, through contacts via mail, emails, phone calls, meetings etc. It is then irrelevant whether only one undertaking unilaterally informs its competitors of its intended market behaviour, or whether all participating undertakings inform each other of the respective deliberations and intentions. When one undertaking alone reveals to its competitors strategic information concerning its future commercial policy, that reduces strategic uncertainty as to the future operation of the market for all the competitors involved and increases the risk of limiting competition and of collusive behaviour ⁽⁶⁾. For example, mere attendance at a meeting ⁽⁷⁾ where a company discloses its pricing plans to its competitors is likely to be caught by Article 101, even in the absence of an explicit agreement to raise prices ⁽⁸⁾. When a company receives strategic data from a competitor (be it in a meeting, by mail or electronically), it will be presumed to have accepted the information and adapted its market conduct accordingly unless it responds with a clear statement that it does not wish to receive such data ⁽⁹⁾.
63. Where a company makes a unilateral announcement that is also genuinely public, for example through a newspaper, this generally does not constitute a concerted practice within the meaning of Article 101(1) ⁽¹⁰⁾. However, depending on the facts underlying the case at hand, the possibility of finding a concerted practice cannot be excluded, for example in a situation where such an announcement was followed by public announcements by other competitors, not least because strategic responses of competitors to each other's public announcements (which, to take one instance, might involve readjustments of their own earlier announcements to announcements made by competitors) could prove to be a strategy for reaching a common understanding about the terms of coordination.

⁽¹⁾ See Case C-7/95 P, *John Deere*, paragraph 86.

⁽²⁾ Case C-7/95 P, *John Deere*, paragraph 87.

⁽³⁾ See Cases 40/73 and others, *Suiker Unie*, [1975] ECR 1663, paragraph 173 *et seq.*

⁽⁴⁾ Strategic uncertainty in the market arises as there is a variety of possible collusive outcomes available and because companies cannot perfectly observe past and current actions of their competitors and entrants.

⁽⁵⁾ See for example Joined Cases T-25/95 and others, *Cimenteries*, [2000] ECR II-491, paragraph 1849: '[...] the concept of concerted practice does in fact imply the existence of reciprocal contacts [...]. That condition is met where one competitor discloses its future intentions or conduct on the market to another when the latter requests it or, at the very least, accepts it'.

⁽⁶⁾ See Opinion of Advocate General Kokott, Case C-8/08, *T-Mobile Netherlands*, [2009] ECR I-4529, paragraph 54.

⁽⁷⁾ See Case C-8/08, *T-Mobile Netherlands*, paragraph 59: 'Depending on the structure of the market, the possibility cannot be ruled out that a meeting on a single occasion between competitors, such as that in question in the main proceedings, may, in principle, constitute a sufficient basis for the participating undertakings to concert their market conduct and thus successfully substitute practical cooperation between them for competition and the risks that that entails.'

⁽⁸⁾ See Joined Cases T-202/98 and others, *Tate & Lyle v Commission*, [2001] ECR II-2035, paragraph 54.

⁽⁹⁾ See Case C-199/92 P, *Hüls*, [1999] ECR I-4287, paragraph 162; Case C-49/92 P, *Anic Partecipazioni*, [1999] ECR I-4125, paragraph 121.

⁽¹⁰⁾ This would not cover situations where such announcements involve invitations to collude.

2.2. Assessment under Article 101(1)

2.2.1. Main competition concerns ⁽¹⁾

64. Once it has been established that there is an agreement, concerted practice or decision by an association of undertakings, it is necessary to consider the main competition concerns pertaining to information exchanges.

Collusive outcome

65. By artificially increasing transparency in the market, the exchange of strategic information can facilitate coordination (that is to say, alignment) of companies' competitive behaviour and result in restrictive effects on competition. This can occur through different channels.
66. One way is that through information exchange companies may reach a common understanding on the terms of coordination, which can lead to a collusive outcome on the market. Information exchange can create mutually consistent expectations regarding the uncertainties present in the market. On that basis companies can then reach a common understanding on the terms of coordination of their competitive behaviour, even without an explicit agreement on coordination. Exchange of information about intentions concerning future conduct is the most likely means to enable companies to reach such a common understanding.
67. Another channel through which information exchange can lead to restrictive effects on competition is by increasing the internal stability of a collusive outcome on the market. In particular, it can do so by enabling the companies involved to monitor deviations. Namely, information exchange can make the market sufficiently transparent to allow the colluding companies to monitor to a sufficient degree whether other companies are deviating from the collusive outcome, and thus to know when to retaliate. Both exchanges of present and past data can constitute such a monitoring mechanism. This can either enable companies to achieve a collusive outcome on markets where they would otherwise not have been able to do so, or it can increase the stability of a collusive outcome already present on the market (see Example 3, paragraph 107).
68. A third channel through which information exchange can lead to restrictive effects on competition is by increasing the external stability of a collusive outcome on the market. Information exchanges that make the market sufficiently transparent can allow colluding companies to monitor where and when other companies are attempting to enter the market, thus allowing the colluding companies to target the new entrant. This may also tie into the anti-competitive foreclosure concerns discussed in paragraphs 69 to 71. Both exchanges of present and past data can constitute such a monitoring mechanism.

Anti-competitive foreclosure

69. Apart from facilitating collusion, an exchange of information can also lead to anti-competitive foreclosure ⁽²⁾.
70. An exclusive exchange of information can lead to anti-competitive foreclosure on the same market where the exchange takes place. This can occur when the exchange of commercially sensitive information places unaffiliated competitors at a significant competitive disadvantage as compared to the companies affiliated within the exchange system. This type of foreclosure is only possible if the information concerned is very strategic for competition and covers a significant part of the relevant market.
71. It cannot be excluded that information exchange may also lead to anti-competitive foreclosure of third parties in a related market. For instance, by gaining enough market power through an information exchange, parties exchanging information in an upstream market, for instance vertically integrated companies, may be able to raise the price of a key component for a market downstream. Thereby, they could raise the costs of their rivals downstream, which could result in anti-competitive foreclosure in the downstream market.

⁽¹⁾ The use of the term 'main competition concerns' means that the ensuing description of competition concerns is neither exclusive nor exhaustive.

⁽²⁾ With regard to foreclosure concerns that vertical agreements can give rise to, see paragraphs 100 *et seq.* of the Guidelines on Vertical Restraints.

2.2.2. Restriction of competition by object

72. Any information exchange with the objective of restricting competition on the market will be considered as a restriction of competition by object. In assessing whether an information exchange constitutes a restriction of competition by object, the Commission will pay particular attention to the legal and economic context in which the information exchange takes place ⁽¹⁾. To this end, the Commission will take into account whether the information exchange, by its very nature, may possibly lead to a restriction of competition ⁽²⁾.
73. Exchanging information on companies' individualised intentions concerning future conduct regarding prices or quantities ⁽³⁾ is particularly likely to lead to a collusive outcome. Informing each other about such intentions may allow competitors to arrive at a common higher price level without incurring the risk of losing market share or triggering a price war during the period of adjustment to new prices (see Example 1, paragraph 105). Moreover, it is less likely that information exchanges concerning future intentions are made for pro-competitive reasons than exchanges of actual data.
74. Information exchanges between competitors of individualised data regarding intended future prices or quantities should therefore be considered a restriction of competition by object ⁽⁴⁾ ⁽⁵⁾. In addition, private exchanges between competitors of their individualised intentions regarding future prices or quantities would normally be considered and fined as cartels because they generally have the object of fixing prices or quantities. Information exchanges that constitute cartels not only infringe Article 101(1), but, in addition, are very unlikely to fulfil the conditions of Article 101(3).

2.2.3. Restrictive effects on competition

75. The likely effects of an information exchange on competition must be analysed on a case-by-case basis as the results of the assessment depend on a combination of various case specific factors. The assessment of restrictive effects on competition compares the likely effects of the information exchange with the competitive situation that would prevail in the absence of that specific information exchange ⁽⁶⁾. For an information exchange to have restrictive effects on competition within the meaning of Article 101(1), it must be likely to have an appreciable adverse impact on one (or several) of the parameters of competition such as price, output, product quality, product variety or innovation. Whether or not an exchange of information will have restrictive effects on competition depends on both the economic conditions on the relevant markets and the characteristics of information exchanged.
76. Certain market conditions may make coordination easier to achieve, sustain internally, or sustain externally ⁽⁷⁾. Exchanges of information in such markets may have more restrictive effects compared to markets with different conditions. However, even where market conditions are such that coordination

⁽¹⁾ See, for example, Joined Cases C-501/06 P and others, *GlaxoSmithKline*, paragraph 58; Case C-209/07, *BIDS*, paragraphs 15 *et seq.*

⁽²⁾ See also General Guidelines, paragraph 22.

⁽³⁾ Information regarding intended future quantities could for instance include intended future sales, market shares, territories, and sales to particular groups of consumers.

⁽⁴⁾ The notion of 'intended future prices' is illustrated in Example 1. In specific situations where companies are fully committed to sell in the future at the prices that they have previously announced to the public (that is to say, they can not revise them), such public announcements of future individualised prices or quantities would not be considered as intentions, and hence would normally not be found to restrict competition by object. This could occur, for example, because of the repeated interactions and the specific type of relationship companies may have with their customers, for instance since it is essential that the customers know future prices in advance or because they can already take advanced orders at these prices. This is because in these situations the information exchange would be a more costly means for reaching a collusive outcome in the market than exchanging information on future intentions, and would be more likely to be done for pro-competitive reasons. However, this does not imply that in general price commitment towards customers is necessarily pro-competitive. On the contrary, it could limit the possibility of deviating from a collusive outcome and hence render it more stable.

⁽⁵⁾ This is without prejudice to the fact that public announcements of intended individualised prices may give rise to efficiencies and that the parties to such exchange would have a possibility to rely on Article 101(3).

⁽⁶⁾ Case C-7/95 P, *John Deere v Commission*, paragraph 76.

⁽⁷⁾ Information exchange may restrict competition in a similar way to a merger if it leads to more effective, more stable or more likely coordination in the market; see Case C-413/06 P, *Sony*, [2008] ECR I-4951, paragraph 123, where the Court of Justice endorsed the criteria established by the General Court in Case T-342/99, *Airtours*, [2002] ECR II-2585, paragraph 62.

may be difficult to sustain before the exchange, the exchange of information may change the market conditions in such a way that coordination becomes possible after the exchange – for example by increasing transparency in the market, reducing market complexity, buffering instability or compensating for asymmetry. For this reason it is important to assess the restrictive effects of the information exchange in the context of both the initial market conditions, and how the information exchange changes those conditions. This will include an assessment of the specific characteristics of the system concerned, including its purpose, conditions of access to the system and conditions of participation in the system. It will also be necessary to examine the frequency of the information exchanges, the type of information exchanged (for example, whether it is public or confidential, aggregated or detailed, and historical or current), and the importance of the information for the fixing of prices, volumes or conditions of service ⁽¹⁾. The following factors are relevant for this assessment.

(i) Market characteristics

77. Companies are more likely to achieve a collusive outcome in markets which are sufficiently transparent, concentrated, non-complex, stable and symmetric. In those types of markets companies can reach a common understanding on the terms of coordination and successfully monitor and punish deviations. However, information exchange can also enable companies to achieve a collusive outcome in other market situations where they would not be able to do so in the absence of the information exchange. Information exchange can thereby facilitate a collusive outcome by increasing transparency in the market, reducing market complexity, buffering instability or compensating for asymmetry. In this context, the competitive outcome of an information exchange depends not only on the initial characteristics of the market in which it takes place (such as concentration, transparency, stability, complexity etc.), but also on how the type of the information exchanged may change those characteristics ⁽²⁾.
78. Collusive outcomes are more likely in transparent markets. Transparency can facilitate collusion by enabling companies to reach a common understanding on the terms of coordination, or/and by increasing internal and external stability of collusion. Information exchange can increase transparency and hence limit uncertainties about the strategic variables of competition (for example, prices, output, demand, costs etc.). The lower the pre-existing level of transparency in the market, the more value an information exchange may have in achieving a collusive outcome. An information exchange that contributes little to the transparency in a market is less likely to have restrictive effects on competition than an information exchange that significantly increases transparency. Therefore it is the combination of both the pre-existing level of transparency and how the information exchange changes that level that will determine how likely it is that the information exchange will have restrictive effects on competition. The pre-existing degree of transparency, inter alia, depends on the number of market participants and the nature of transactions, which can range from public transactions to confidential bilateral negotiations between buyers and sellers. When evaluating the change in the level of transparency in the market, the key element is to identify to what extent the available information can be used by companies to determine the actions of their competitors.
79. Tight oligopolies can facilitate a collusive outcome on the market as it is easier for fewer companies to reach a common understanding on the terms of coordination and to monitor deviations. A collusive outcome is also more likely to be sustainable with fewer companies. With more companies coordinating, the gains from deviating are greater because a larger market share can be gained through undercutting. At the same time, gains from the collusive outcome are smaller because, when there are more companies, the share of the rents from the collusive outcome declines. Exchanges of information in tight oligopolies are more likely to cause restrictive effects on competition than in less tight oligopolies, and are not likely to cause such restrictive effects on competition in very fragmented markets. However, by increasing transparency, or modifying the market environment in another way towards one more liable to coordination, information exchanges may facilitate coordination and monitoring among more companies than would be possible in its absence.

⁽¹⁾ Case C-238/05, *Asnef-Equifax*, paragraph 54.

⁽²⁾ It should be noted that the discussion in paragraphs 78 to 85 is not a complete list of relevant market characteristics. There may be other characteristics of the market which are important in the setting of certain information exchanges.

80. Companies may find it difficult to achieve a collusive outcome in a complex market environment. However, to some extent, the use of information exchange may simplify such environments. In a complex market environment more information exchange is normally needed to reach a common understanding on the terms of coordination and to monitor deviations. For example, it is easier to achieve a collusive outcome on a price for a single, homogeneous product, than on numerous prices in a market with many differentiated products. It is nonetheless possible that to circumvent the difficulties involved in achieving a collusive outcome on a large number of prices, companies may exchange information to establish simple pricing rules (for example, pricing points).
81. Collusive outcomes are more likely where the demand and supply conditions are relatively stable⁽¹⁾. In an unstable environment it may be difficult for a company to know whether its lost sales are due to an overall low level of demand or due to a competitor offering particularly low prices, and therefore it is difficult to sustain a collusive outcome. In this context, volatile demand, substantial internal growth by some companies in the market, or frequent entry by new companies, may indicate that the current situation is not sufficiently stable for coordination to be likely⁽²⁾. Information exchange in certain situations can serve the purpose of increasing stability in the market, and thereby may enable a collusive outcome in the market. Moreover, in markets where innovation is important, coordination may be more difficult since particularly significant innovations may allow one company to gain a major advantage over its rivals. For a collusive outcome to be sustainable, the reactions of outsiders, such as current and future competitors not participating in the coordination, as well as customers, should not be capable of jeopardising the results expected from the collusive outcome. In this context, the existence of barriers to entry makes it more likely that a collusive outcome on the market is feasible and sustainable.
82. A collusive outcome is more likely in symmetric market structures. When companies are homogenous in terms of their costs, demand, market shares, product range, capacities etc., they are more likely to reach a common understanding on the terms of coordination because their incentives are more aligned. However, information exchange may in some situations also allow a collusive outcome to occur in more heterogeneous market structures. Information exchange could make companies aware of their differences and help them to design means to accommodate for their heterogeneity in the context of coordination.
83. The stability of a collusive outcome also depends on the companies' discounting of future profits. The more companies value the current profits that they could gain from undercutting versus all the future ones that they could gain by the collusive outcome, the less likely it is that they will be able to achieve a collusive outcome.
84. By the same token, a collusive outcome is more likely among companies that will continue to operate in the same market for a long time, as in such a scenario they will be more committed to coordinate. If a company knows that it will interact with the others for a long time, it will have a greater incentive to achieve the collusive outcome because the stream of future profits from the collusive outcome will be worth more than the short term profit it could have if it deviated, that is to say, before the other companies detect the deviation and retaliate.
85. Overall, for a collusive outcome to be sustainable, the threat of a sufficiently credible and prompt retaliation must be likely. Collusive outcomes are not sustainable in markets in which the consequences of deviation are not sufficiently severe to convince coordinating companies that it is in their best interest to adhere to the terms of the collusive outcome. For example, in markets characterised by infrequent, lumpy orders, it may be difficult to establish a sufficiently severe deterrence mechanism, since the gain from deviating at the right time may be large, certain and immediate, whereas the losses

⁽¹⁾ See Case T-35/92, *John Deere v Commission*, [1994] ECR II-957, paragraph 78.

⁽²⁾ See Commission Decision in Cases IV/31.370 and 31.446, *UK Agricultural Tractor Registration Exchange*, OJ L 68, 13.3.1992, p. 19, paragraph 51 and Case T-35/92, *John Deere v Commission*, paragraph 78. It is not necessary that absolute stability be established or fierce competition excluded.

from being punished small and uncertain, and only materialise after some time. The credibility of the deterrence mechanism also depends on whether the other coordinating companies have an incentive to retaliate, determined by their short-term losses from triggering a price war versus their potential long-term gain in case they induce a return to a collusive outcome. For example, companies' ability to retaliate may be reinforced if they are also interrelated by vertical commercial relationships which they can use as a threat of punishment for deviations.

(ii) Characteristics of the information exchange

Strategic information

86. The exchange between competitors of strategic data, that is to say, data that reduces strategic uncertainty in the market, is more likely to be caught by Article 101 than exchanges of other types of information. Sharing of strategic data can give rise to restrictive effects on competition because it reduces the parties' decision-making independence by decreasing their incentives to compete. Strategic information can be related to prices (for example, actual prices, discounts, increases, reductions or rebates), customer lists, production costs, quantities, turnovers, sales, capacities, qualities, marketing plans, risks, investments, technologies and R&D programmes and their results. Generally, information related to prices and quantities is the most strategic, followed by information about costs and demand. However, if companies compete with regard to R&D it is the technology data that may be the most strategic for competition. The strategic usefulness of data also depends on its aggregation and age, as well as the market context and frequency of the exchange.

Market coverage

87. For an information exchange to be likely to have restrictive effects on competition, the companies involved in the exchange have to cover a sufficiently large part of the relevant market. Otherwise, the competitors that are not participating in the information exchange could constrain any anti-competitive behaviour of the companies involved. For example, by pricing below the coordinated price level companies unaffiliated within the information exchange system could threaten the external stability of a collusive outcome.
88. What constitutes 'a sufficiently large part of the market' cannot be defined in the abstract and will depend on the specific facts of each case and the type of information exchange in question. Where, however, an information exchange takes place in the context of another type of horizontal co-operation agreement and does not go beyond what is necessary for its implementation, market coverage below the market share thresholds set out in the relevant chapter of these guidelines, the relevant block exemption regulation ⁽¹⁾ or the *De Minimis* Notice pertaining to the type of agreement in question will usually not be large enough for the information exchange to give rise to restrictive effects on competition.

Aggregated/individualised data

89. Exchanges of genuinely aggregated data, that is to say, where the recognition of individualised company level information is sufficiently difficult, are much less likely to lead to restrictive effects on competition than exchanges of company level data. Collection and publication of aggregated market data (such as sales data, data on capacities or data on costs of inputs and components) by a trade organisation or market intelligence firm may benefit suppliers and customers alike by allowing them to get a clearer picture of the economic situation of a sector. Such data collection and publication may allow market participants to make better-informed individual choices in order to adapt

⁽¹⁾ Exchanges of information in the context of an R&D agreement, if they do not exceed what is necessary for implementation of the agreement, can benefit from the safe harbour of 25 % set out in the R&D Block Exemption Regulation. For the Specialisation Block Exemption Regulation, the relevant safe harbour is 20 %.

efficiently their strategy to the market conditions. More generally, unless it takes place in a tight oligopoly, the exchange of aggregated data is unlikely to give rise to restrictive effects on competition. Conversely, the exchange of individualised data facilitates a common understanding on the market and punishment strategies by allowing the coordinating companies to single out a deviator or entrant. Nevertheless, the possibility cannot be excluded that even the exchange of aggregated data may facilitate a collusive outcome in markets with specific characteristics. Namely, members of a very tight and stable oligopoly exchanging aggregated data who detect a market price below a certain level could automatically assume that someone has deviated from the collusive outcome and take market-wide retaliatory steps. In other words, in order to keep collusion stable, companies may not always need to know who deviated, it may be enough to learn that 'someone' deviated.

Age of data

90. The exchange of historic data is unlikely to lead to a collusive outcome as it is unlikely to be indicative of the competitors' future conduct or to provide a common understanding on the market ⁽¹⁾. Moreover, exchanging historic data is unlikely to facilitate monitoring of deviations because the older the data, the less useful it would be for timely detection of deviations and thus as a credible threat of prompt retaliation ⁽²⁾. There is no predetermined threshold when data becomes historic, that is to say, old enough not to pose risks to competition. Whether data is genuinely historic depends on the specific characteristics of the relevant market and in particular the frequency of price re-negotiations in the industry. For example, data can be considered as historic if it is several times older than the average length of contracts in the industry if the latter are indicative of price re-negotiations. Moreover, the threshold when data becomes historic also depends on the data's nature, aggregation, frequency of the exchange, and the characteristics of the relevant market (for example, its stability and transparency).

Frequency of the information exchange

91. Frequent exchanges of information that facilitate both a better common understanding of the market and monitoring of deviations increase the risks of a collusive outcome. In more unstable markets, more frequent exchanges of information may be necessary to facilitate a collusive outcome than in stable markets. In markets with long-term contracts (which are indicative of infrequent price re-negotiations) a less frequent exchange of information would normally be sufficient to achieve a collusive outcome. By contrast, infrequent exchanges would not tend to be sufficient to achieve a collusive outcome in markets with short-term contracts indicative of frequent price re-negotiations ⁽³⁾. However, the frequency at which data needs to be exchanged to facilitate a collusive outcome also depends on the nature, age and aggregation of data ⁽⁴⁾.

Public/non-public information

92. In general, exchanges of genuinely public information are unlikely to constitute an infringement of Article 101 ⁽⁵⁾. *Genuinely public information* is information that is generally equally accessible (in terms of costs of access) to all competitors and customers. For information to be genuinely public, obtaining it should not be more costly for customers and companies unaffiliated to the exchange system than for the companies exchanging the information. For this reason, competitors would normally not choose to exchange data that they can collect from the market at equal ease, and hence in practice

⁽¹⁾ The collection of historic data can also be used to convey a sector association's input to or analysis of a review of public policy.

⁽²⁾ For example, in past cases the Commission has considered the exchange of individual data which was more than one year old as historic and as not restrictive of competition within the meaning of Article 101(1), whereas information less than one year old has been considered as recent; Commission Decision in Case IV/31.370, *UK Agricultural Tractor Registration Exchange*, paragraph 50; Commission Decision in Case IV/36.069, *Wirtschaftsvereinigung Stahl*, OJ L 1, 3.1.1998, p. 10, paragraph 17.

⁽³⁾ However, infrequent contracts could decrease the likelihood of a sufficiently prompt retaliation.

⁽⁴⁾ However, depending on the structure of the market and the overall context of the exchange, the possibility cannot be excluded that an isolated exchange may constitute a sufficient basis for the participating undertakings to concert their market conduct and thus successfully substitute practical co-operation between them for competition and the risks that that entails; see Case C-8/08, *T-Mobile Netherlands*, paragraph 59.

⁽⁵⁾ Joined Cases T-191/98 and others, *Atlantic Container Line (TACA)*, [2003] ECR II-3275, paragraph 1154. This may not be the case if the exchange underpins a cartel.

exchanges of genuinely public data are unlikely. In contrast, even if the data exchanged between competitors is what is often referred to as being 'in the public domain', it is not genuinely public if the costs involved in collecting the data deter other companies and customers from doing so ⁽¹⁾. A possibility to gather the information in the market, for example to collect it from customers, does not necessarily mean that such information constitutes market data readily accessible to competitors ⁽²⁾.

93. Even if there is public availability of data (for example, information published by regulators), the existence of an additional information exchange by competitors may give rise to restrictive effects on competition if it further reduces strategic uncertainty in the market. In that case, it is the incremental information that could be critical to tip the market balance towards a collusive outcome.

Public/non-public exchange of information

94. An *information exchange* is genuinely public if it makes the exchanged data equally accessible (in terms of costs of access) to all competitors and customers ⁽³⁾. The fact that information is exchanged in public may decrease the likelihood of a collusive outcome on the market to the extent that non-coordinating companies, potential competitors, as well as costumers may be able to constrain potential restrictive effect on competition ⁽⁴⁾. However, the possibility cannot be entirely excluded that even genuinely public exchanges of information may facilitate a collusive outcome in the market.

2.3. Assessment under Article 101(3)

2.3.1. Efficiency gains ⁽⁵⁾

95. Information exchange may lead to efficiency gains. Information about competitors' costs can enable companies to become more efficient if they benchmark their performance against the best practices in the industry and design internal incentive schemes accordingly.
96. Moreover, in certain situations information exchange can help companies allocate production towards high-demand markets (for example, demand information) or low cost companies (for example, cost information). The likelihood of those types of efficiencies depends on market characteristics such as whether companies compete on prices or quantities and the nature of uncertainties on the market. Some forms of information exchanges in this context may allow substantial cost savings where, for example, they reduce unnecessary inventories or enable quicker delivery of perishable products to areas with high demand and their reduction in areas with low demand (see Example 6, paragraph 110).
97. Exchange of consumer data between companies in markets with asymmetric information about consumers can also give rise to efficiencies. For instance, keeping track of the past behaviour of customers in terms of accidents or credit default provides an incentive for consumers to limit their risk exposure. It also makes it possible to detect which consumers carry a lower risk and should benefit from lower prices. In this context, information exchange can also reduce consumer lock-in, thereby inducing stronger competition. This is because information is generally specific to a relationship and consumers would otherwise lose the benefit from that information when switching to another company. Examples of such efficiencies are found in the banking and insurance sectors, which are characterised by frequent exchanges of information about consumer defaults and risk characteristics.

⁽¹⁾ Moreover, the fact that the parties to the exchange have previously communicated the data to the public (for example through a daily newspaper or on their websites) does not imply that a subsequent non-public exchange would not infringe Article 101.

⁽²⁾ See Joined Cases T-202/98 and others, *Tate & Lyle v Commission*, paragraph 60.

⁽³⁾ This does not preclude that a database be offered at a lower price to customers which themselves have contributed data to it, as by doing so they normally would have also incurred costs.

⁽⁴⁾ Assessing barriers to entry and countervailing 'buyer power' in the market would be relevant for determining whether outsiders to the information exchange system would be able to jeopardise the outcomes expected from coordination. However, increased transparency to consumers may either decrease or increase scope for a collusive outcome because with increased transparency to consumers, as price elasticity of demand is higher, pay-offs from deviation are higher but retaliation is also harsher.

⁽⁵⁾ The discussion of potential efficiency gains from information exchange is neither exclusive nor exhaustive.

98. Exchanging past and present data related to market shares may in some situations provide benefits to both companies and consumers by allowing companies to announce it as a signal of quality of their products to consumers. In situations of imperfect information about product quality, consumers often use indirect means to gain information on the relative qualities of products such as price and market shares (for example, consumers use best-selling lists in order to choose their next book).
99. Information exchange that is genuinely public can also benefit consumers by helping them to make a more informed choice (and reducing their search costs). Consumers are most likely to benefit in this way from public exchanges of current data, which are the most relevant for their purchasing decisions. Similarly, public information exchange about current input prices can lower search costs for companies, which would normally benefit consumers through lower final prices. Those types of direct consumer benefits are less likely to be generated by exchanges of future pricing intentions because companies which announce their pricing intentions are likely to revise them before consumers actually purchase based on that information. Consumers generally cannot rely on companies' future intentions when making their consumption plans. However, to some extent, companies may be disciplined not to change the announced future prices before implementation when, for example, they have repeated interactions with consumers and consumers rely on knowing the prices in advance or, for example, when consumers can make advance orders. In those situations, exchanging information related to the future may improve customers' planning of expenditure.
100. Exchanging present and past data is more likely to generate efficiency gains than exchanging information about future intentions. However, in specific circumstances announcing future intentions could also give rise to efficiency gains. For example, companies knowing early the winner of an R&D race could avoid duplicating costly efforts and wasting resources that cannot be recovered ⁽¹⁾.

2.3.2. *Indispensability*

101. Restrictions that go beyond what is necessary to achieve the efficiency gains generated by an information exchange do not fulfil the conditions of Article 101(3). For fulfilling the condition of indispensability, the parties will need to prove that the data's subject matter, aggregation, age, confidentiality and frequency, as well as coverage, of the exchange are of the kind that carries the lowest risks indispensable for creating the claimed efficiency gains. Moreover, the exchange should not involve information beyond the variables that are relevant for the attainment of the efficiency gains. For instance, for the purpose of benchmarking, an exchange of individualised data would generally not be indispensable because information aggregated in for example some form of industry ranking could also generate the claimed efficiency gains while carrying a lower risk of leading to a collusive outcome (see Example 4, paragraph 108). Finally, it is generally unlikely that the sharing of individualised data on future intentions is indispensable, especially if it is related to prices and quantities.
102. Similarly, information exchanges that form part of horizontal co-operation agreements are also more likely to fulfil the conditions of Article 101(3) if they do not go beyond what is indispensable for the implementation of the economic purpose of the agreement (for example, sharing technology necessary for an R&D agreement or cost data in the context of a production agreement).

2.3.3. *Pass-on to consumers*

103. Efficiency gains attained by indispensable restrictions must be passed on to consumers to an extent that outweighs the restrictive effects on competition caused by an information exchange. The lower is the market power of the parties involved in the information exchange, the more likely it is that the efficiency gains would be passed on to consumers to an extent that outweighs the restrictive effects on competition.

⁽¹⁾ Such efficiencies need to be weighed against the potential negative effects of, for example, limiting competition for the market which stimulates innovation.

2.3.4. No elimination of competition

104. The criteria of Article 101(3) cannot be met if the companies involved in the information exchange are afforded the possibility of eliminating competition in respect of a substantial part of the products concerned.

2.4. Examples

105. Exchange of intended future prices as a restriction of competition by object

Example 1

Situation: A trade association of coach companies in country X disseminates individualised information on intended future prices only to the member coach companies. The information contains several elements, such as the intended fare and the route to which the fare applies, the possible restrictions to this fare, such as which consumers can buy it, if advanced payment or minimum stay is required, the period during which tickets can be sold for the given fare (first and last ticket date), and the time during which the ticket with the given fare can be used for travel (first and last travel dates).

Analysis: This information exchange, which is triggered by a decision by an association of undertakings, concerns pricing intentions of competitors. This information exchange is a very efficient tool for reaching a collusive outcome and therefore restricts competition by object. This is because the companies are free to change their own intended prices as announced within the association at any time if they learn that their competitors intend to charge higher prices. This allows the companies to reach a common higher price level without incurring the cost of losing market share. For example, coach Company A can announce today a price increase on the route from city 1 to city 2 for travel as of the following month. Since this information is accessible to all other coach companies, Company A can then wait and see the reaction of its competitors to this price announcement. If a competitor on the same route, say, Company B, matched the price increase, then Company A's announcement would be left unchanged and later would likely become effective. However, if Company B did not match the price increase, then Company A could still revise its fare. The adjustment would continue until the companies converged to an increased anti-competitive price level. This information exchange is unlikely to fulfil the conditions of Article 101(3). The information exchange is only confined to competitors, that is to say, customers of the coach companies do not directly benefit from it.

106. Exchange of current prices with sufficient efficiency gains for consumers

Example 2

Situation: A national tourist office together with the coach companies in small country X agree to disseminate information on current prices of coach tickets through a freely accessible website (in contrast to Example 1, paragraph 105, consumers can already purchase tickets at the prices and conditions which are exchanged, thus they are not intended future prices but present prices of current and future services). The information contains several elements, such as the fare and the route to which the fare is applied, the possible restrictions to this fare, such as which consumers can buy it, if advanced payment or minimum stay is required, and the time during which the ticket with the given fare can be used for travel (first and last travel dates). Coach travel in country X is not in the same relevant market as train and air travel. It is presumed that the relevant market is concentrated, stable and relatively non-complex, and pricing becomes transparent with the information exchange.

Analysis: This information exchange does not constitute a restriction of competition by object. The companies are exchanging current prices rather than intended future prices because they are effectively already selling tickets at these prices (unlike in Example 1, paragraph 105). Therefore, this exchange of information is less likely to constitute an efficient mechanism for reaching a focal point for coordination. Nevertheless, given the market structure and strategic nature of the data, this information exchange is likely to constitute an efficient mechanism for monitoring deviations from a collusive outcome, which would be likely to occur in this type of market setting. Therefore, this information exchange could give rise to restrictive effects on competition within the meaning of Article 101(1). However, to the extent that some restrictive effects on competition could result from the possibility to monitor deviations, it is likely that the efficiency gains stemming from the

information exchange would be passed on to consumers to an extent that outweighs the restrictive effects on competition in both their likelihood and magnitude. Unlike in Example 1, paragraph 105, the information exchange is public and consumers can actually purchase tickets at the prices and conditions that are exchanged. Therefore this information exchange is likely to directly benefit consumers by reducing their search costs and improving choice, and thereby also stimulating price competition. Hence, the conditions of Article 101(3) are likely to be met.

107. Current prices deduced from the information exchanged

Example 3

Situation: The luxury hotels in the capital of country A operate in a tight, non-complex and stable oligopoly, with largely homogenous cost structures, which constitute a separate relevant market from other hotels. They directly exchange individual information about current occupancy rates and revenues. In this case, from the information exchanged the parties can directly deduce their actual current prices.

Analysis: Unless it is a disguised means of exchanging information on future intentions, this exchange of information would not constitute a restriction of competition by object because the hotels exchange present data and not information on intended future prices or quantities. However, the information exchange would give rise to restrictive effects on competition within the meaning of Article 101(1) because knowing the competitors' actual current prices would be likely to facilitate coordination (that is to say, alignment) of companies' competitive behaviour. It would be most likely used to monitor deviations from the collusive outcome. The information exchange increases transparency in the market as even though the hotels normally publish their list prices, they also offer various discounts to the list price resulting from negotiations or for early or group bookings, etc. Therefore, the incremental information that is non-publicly exchanged between the hotels is commercially sensitive, that is to say, strategically useful. This exchange is likely to facilitate a collusive outcome on the market because the parties involved constitute a tight, non-complex and stable oligopoly involved in a long-term competitive relationship (repeated interactions). Moreover, the cost structures of the hotels are largely homogeneous. Finally, neither consumers nor market entry can constrain the incumbents' anti-competitive behaviour as consumers have little buyer power and barriers to entry are high. It is unlikely that in this case the parties would be able to demonstrate any efficiency gains stemming from the information exchange that would be passed on to consumers to an extent that would outweigh the restrictive effects on competition. Therefore it is unlikely that the conditions of Article 101(3) can be met.

108. Benchmarking benefits – criteria of Article 101(3) not fulfilled

Example 4

Situation: Three large companies with a combined market share of 80 % in a stable, non-complex, concentrated market with high barriers to entry, non-publicly and frequently exchange information directly between themselves about a substantial fraction of their individual costs. The companies claim that they do this to benchmark their performance against their competitors and thereby intend to become more efficient.

Analysis: This information exchange does not in principle constitute a restriction of competition by object. Consequently, its effects on the market need to be assessed. Because of the market structure, the fact that the information exchanged relates to a large proportion of the companies' variable costs, the individualised form of presentation of the data, and its large coverage of the relevant market, the information exchange is likely to facilitate a collusive outcome and thereby gives rise to restrictive effects on competition within the meaning of Article 101(1). It is unlikely that the criteria of Article 101(3) are fulfilled because there are less restrictive means to achieve the claimed

efficiency gains, for example by way of a third party collecting, anonymising and aggregating the data in some form of industry ranking. Finally, in this case, since the parties form a very tight, non-complex and stable oligopoly, even the exchange of aggregated data could facilitate a collusive outcome in the market. However, this would be very unlikely if this exchange of information happened in a non-transparent, fragmented, unstable, and complex market.

109. Genuinely public information

Example 5

Situation: The four companies owning all the petrol stations in a large country A exchange current gasoline prices over the telephone. They claim that this information exchange cannot have restrictive effects on competition because the information is public as it is displayed on large display panels at every petrol station.

Analysis: The pricing data exchanged over the telephone is not genuinely public, as in order to obtain the same information in a different way it would be necessary to incur substantial time and transport costs. One would have to travel frequently large distances to collect the prices displayed on the boards of petrol stations spread all over the country. The costs for this are potentially high, so that the information could in practice not be obtained but for the information exchange. Moreover, the exchange is systematic and covers the entire relevant market, which is a tight, non-complex, stable oligopoly. Therefore it is likely to create a climate of mutual certainty as to the competitors' pricing policy and thereby it is likely to facilitate a collusive outcome. Consequently, this information exchange is likely to give rise to restrictive effects on competition within the meaning of Article 101(1).

110. Improved meeting of demand as an efficiency gain

Example 6

Situation: There are five producers of fresh bottled carrot juice in the relevant market. Demand for this product is very unstable and vary from location to location in different points in time. The juice has to be sold and consumed within one day from the date of production. The producers agree to establish an independent market research company that on a daily basis collects current information about unsold juice in each point of sale, which it publishes on its website the following week in a form that is aggregated per point of sale. The published statistics allow producers and retailers to forecast demand and to better position the product. Before the information exchange was put in place, the retailers had reported large quantities of wasted juice and therefore had reduced the quantity of juice purchased from the producers; that is to say, the market was not working efficiently. Consequently, in some periods and areas there were frequent instances of unmet demand. The information exchange system, which allows better forecasting of oversupply and undersupply, has significantly reduced the instances of unmet consumer demand and increased the quantity sold in the market.

Analysis: Even though the market is quite concentrated and the data exchanged is recent and strategic, it is not very likely that this exchange would facilitate a collusive outcome because a collusive outcome would be unlikely to occur in such an unstable market. Even if the exchange creates some risk of giving rise to restrictive effects on competition, the efficiency gains stemming from increasing supply to places with high demand and decreasing supply in places with low demand is likely to offset potential restrictive effects. The information is exchanged in a public and aggregated form, which carries lower anti-competitive risks than if it were non-public and individualised. The information exchange therefore does not go beyond what is necessary to correct the market failure. Therefore, it is likely that this information exchange meets the criteria of Article 101(3).

3. RESEARCH AND DEVELOPMENT AGREEMENTS

3.1. Definition

111. R&D agreements vary in form and scope. They range from outsourcing certain R&D activities to the joint improvement of existing technologies and co-operation concerning the research, development and marketing of completely new products. They may take the form of a co-operation agreement or of a jointly controlled company. This chapter applies to all forms of R&D agreements, including related agreements concerning the production or commercialisation of the R&D results.

3.2. Relevant markets

112. The key to defining the relevant market when assessing the effects of an R&D agreement is to identify those products, technologies or R&D efforts that will act as the main competitive constraints on the parties. At one end of the spectrum of possible situations, innovation may result in a product (or technology) which competes in an existing product (or technology) market. This is, for example, the case with R&D directed towards slight improvements or variations, such as new models of certain products. Here possible effects concern the market for existing products. At the other end of the spectrum, innovation may result in an entirely new product which creates its own new product market (for example, a new vaccine for a previously incurable disease). However, many cases concern situations in between those two extremes, that is to say, situations in which innovation efforts may create products (or technology) which, over time, replace existing ones (for example, CDs which have replaced records). A careful analysis of those situations may have to cover both existing markets and the impact of the agreement on innovation.

Existing product markets

113. Where the co-operation concerns R&D for the improvement of existing products, those existing products and their close substitutes form the relevant market concerned by the co-operation ⁽¹⁾.
114. If the R&D efforts aim at a significant change of existing products or even at a new product to replace existing ones, substitution with the existing products may be imperfect or long-term. It may be concluded that the old and the potentially emerging new products do not belong to the same relevant market ⁽²⁾. The market for existing products may nevertheless be concerned, if the pooling of R&D efforts is likely to result in the coordination of the parties' behaviour as suppliers of existing products, for instance because of the exchange of competitively sensitive information relating to the market for existing products.
115. If the R&D concerns an important component of a final product, not only the market for that component may be relevant for the assessment, but also the existing market for the final product. For instance, if car manufacturers co-operate in R&D related to a new type of engine, the car market may be affected by that R&D co-operation. The market for final products, however, is only relevant for the assessment if the component at which the R&D is aimed is technically or economically a key element of those final products and if the parties to the R&D agreement have market power with respect to the final products.

Existing technology markets

116. R&D co-operation may not only concern products but also technology. When intellectual property rights are marketed separately from the products to which they relate, the relevant technology market has to be defined as well. Technology markets consist of the intellectual property that is licensed and its close substitutes, that is to say, other technologies which customers could use as a substitute.

⁽¹⁾ For market definition, see the Market Definition Notice.

⁽²⁾ See also Commission Guidelines on the application of Article 81 of the EC Treaty to technology transfer agreements, OJ C 101, 27.4.2004, p. 2 ('Technology Transfer Guidelines'), paragraph 33.

117. The methodology for defining technology markets follows the same principles as product market definition⁽¹⁾. Starting from the technology which is marketed by the parties, those other technologies to which customers could switch in response to a small but non-transitory increase in relative prices need to be identified. Once those technologies are identified, market shares can be calculated by dividing the licensing income generated by the parties by the total licensing income of all licensors.
118. The parties' position in the market for existing technology is a relevant assessment criterion where the R&D co-operation concerns a significant improvement to an existing technology or a new technology that is likely to replace the existing technology. The parties' market shares can, however, only be taken as a starting point for this analysis. In technology markets, particular emphasis must be placed on potential competition. If companies which do not currently license their technology are potential entrants on the technology market they could constrain the ability of the parties to profitably raise the price for their technology. This aspect of the analysis may also be taken into account directly in the calculation of market shares by basing those on the sales of the products incorporating the licensed technology on downstream product markets (see paragraphs 123 to 126).

Competition in innovation (R&D efforts)

119. R&D co-operation may not only affect competition in existing markets, but also competition in innovation and new product markets. This is the case where R&D co-operation concerns the development of new products or technology which either may – if emerging – one day replace existing ones or which are being developed for a new intended use and will therefore not replace existing products but create a completely new demand. The effects on competition in innovation are important in these situations, but can in some cases not be sufficiently assessed by analysing actual or potential competition in existing product/technology markets. In this respect, two scenarios can be distinguished, depending on the nature of the innovative process in a given industry.
120. In the first scenario, which is, for instance, present in the pharmaceutical industry, the process of innovation is structured in such a way that it is possible at an early stage to identify competing R&D poles. Competing R&D poles are R&D efforts directed towards a certain new product or technology, and the substitutes for that R&D, that is to say, R&D aimed at developing substitutable products or technology for those developed by the co-operation and having similar timing. In this case, it can be analysed whether after the agreement there will be a sufficient number of remaining R&D poles. The starting point of the analysis is the R&D of the parties. Then credible competing R&D poles have to be identified. In order to assess the credibility of competing poles, the following aspects have to be taken into account: the nature, scope and size of any other R&D efforts, their access to financial and human resources, know-how/patents, or other specialised assets as well as their timing and their capability to exploit possible results. An R&D pole is not a credible competitor if it cannot be regarded as a close substitute for the parties' R&D effort from the viewpoint of, for instance, access to resources or timing.
121. Besides the direct effect on the innovation itself, the co-operation may also affect a new product market. It will often be difficult to analyse the effects on such a market directly as by its very nature it does not yet exist. The analysis of such markets will therefore often be implicitly incorporated in the analysis of competition in innovation. However, it may be necessary to consider directly the effects on such a market of aspects of the agreement that go beyond the R&D stage. An R&D agreement that includes joint production and commercialisation on the new product market may, for instance, be assessed differently than a pure R&D agreement.
122. In the second scenario, the innovative efforts in an industry are not clearly structured so as to allow the identification of R&D poles. In this situation, in the absence of exceptional circumstances, the Commission would not try to assess the impact of a given R&D co-operation on innovation, but would limit its assessment to existing product and/or technology markets which are related to the R&D co-operation in question.

⁽¹⁾ See Market Definition Notice; see also Technology Transfer Guidelines, paragraphs 19 *et seq.*

Calculation of market shares

123. The calculation of market shares, both for the purposes of the R&D Block Exemption Regulation and of these guidelines, has to reflect the distinction between existing markets and competition in innovation. At the beginning of an R&D co-operation the reference point is the existing market for products capable of being improved, substituted or replaced by the products under development. If the R&D agreement only aims at improving or refining existing products, that market includes the products directly concerned by the R&D. Market shares can thus be calculated on the basis of the sales value of the existing products.
124. If the R&D aims at replacing an existing product, the new product will, if successful, become a substitute for the existing products. To assess the competitive position of the parties, it is again possible to calculate market shares on the basis of the sales value of the existing products. Consequently, the R&D Block Exemption Regulation bases its exemption of those situations on the market share in the relevant market for the products capable of being improved, substituted or replaced by the contract products ⁽¹⁾. To fall under the R&D Block Exemption Regulation, that market share may not exceed 25 % ⁽²⁾.
125. For technology markets one way to proceed is to calculate market shares on the basis of each technology's share of total licensing income from royalties, representing a technology's share of the market where competing technologies are licensed. However, this may often be a mere theoretical and not very practical way to proceed because of lack of clear information on royalties, the use of royalty free cross-licensing, etc. An alternative approach is to calculate market shares on the technology market on the basis of sales of products or services incorporating the licensed technology on downstream product markets. Under that approach all sales on the relevant product market are taken into account, irrespective of whether the product incorporates a technology that is being licensed ⁽³⁾. Also for that market the share may not exceed 25 % (irrespective of the calculation method used) for the benefits of the R&D Block Exemption Regulation to apply.
126. If the R&D aims at developing a product which will create a completely new demand, market shares based on sales cannot be calculated. Only an analysis of the effects of the agreement on competition in innovation is possible. Consequently, the R&D Block Exemption Regulation treats those agreements as agreements between non-competitors and exempts them irrespective of market share for the duration of the joint R&D and an additional period of seven years after the product is first put on the market ⁽⁴⁾. However, the benefit of the block exemption may be withdrawn if the agreement eliminated effective competition in innovation ⁽⁵⁾. After the seven year period, market shares based on sales value can be calculated, and the market share threshold of 25 % applies ⁽⁶⁾.

3.3. Assessment under Article 101(1)

3.3.1. Main competition concerns

127. R&D co-operation can restrict competition in various ways. First, it may reduce or slow down innovation, leading to fewer or worse products coming to the market later than they otherwise would. Secondly, on product or technology markets the R&D co-operation may reduce significantly competition between the parties outside the scope of the agreement or it may make anti-competitive coordination on those markets likely, thereby leading to higher prices. A foreclosure problem may only arise in the context of co-operation involving at least one player with a significant degree of market power (which does not necessarily amount to dominance) for a key technology and the exclusive exploitation of the results.

⁽¹⁾ Point (u) of Article 1(1) of the R&D Block Exemption Regulation.

⁽²⁾ Article 4(2) of the R&D Block Exemption Regulation.

⁽³⁾ See also Technology Transfer Guidelines, paragraph 23.

⁽⁴⁾ Article 4(1) of the R&D Block Exemption Regulation.

⁽⁵⁾ See recitals 19, 20 and 21 in the preamble to the R&D Block Exemption Regulation.

⁽⁶⁾ Article 4(3) of the R&D Block Exemption Regulation.

3.3.2. Restrictions of competition by object

128. R&D agreements restrict competition by object if they do not truly concern joint R&D, but serve as a tool to engage in a disguised cartel, that is to say, otherwise prohibited price fixing, output limitation or market allocation. However, an R&D agreement which includes the joint exploitation of possible future results is not necessarily restrictive of competition.

3.3.3. Restrictive effects on competition

129. Most R&D agreements do not fall under Article 101(1). First, this can be said for many agreements relating to co-operation in R&D at a rather early stage, far removed from the exploitation of possible results.
130. Moreover, R&D co-operation between non-competitors does generally not give rise to restrictive effects on competition⁽¹⁾. The competitive relationship between the parties has to be analysed in the context of affected existing markets and/or innovation. If, on the basis of objective factors, the parties are not able to carry out the necessary R&D independently, for instance, due to the limited technical capabilities of the parties, the R&D agreement will normally not have any restrictive effects on competition. This can apply, for example, to companies bringing together complementary skills, technologies and other resources. The issue of potential competition has to be assessed on a realistic basis. For instance, parties cannot be defined as potential competitors simply because the co-operation enables them to carry out the R&D activities. The decisive question is whether each party independently has the necessary means as regards assets, know-how and other resources.
131. Outsourcing of previously captive R&D is a specific form of R&D co-operation. In such a scenario, the R&D is often carried out by specialised companies, research institutes or academic bodies, which are not active in the exploitation of the results. Normally, such agreements are combined with a transfer of know-how and/or an exclusive supply clause concerning the possible results, which, due to the complementary nature of the co-operating parties in such a scenario, do not give rise to restrictive effects on competition within the meaning of Article 101(1).
132. R&D co-operation which does not include the joint exploitation of possible results by means of licensing, production and/or marketing rarely gives rise to restrictive effects on competition within the meaning of Article 101(1). Those pure R&D agreements can only cause a competition problem if competition with respect to innovation is appreciably reduced, leaving only a limited number of credible competing R&D poles.
133. R&D agreements are only likely to give rise to restrictive effects on competition where the parties to the co-operation have market power on the existing markets and/or competition with respect to innovation is appreciably reduced.
134. There is no absolute threshold above which it can be presumed that an R&D agreement creates or maintains market power and thus is likely to give rise to restrictive effects on competition within the meaning of Article 101(1). However, R&D agreements between competitors are covered by the R&D Block Exemption Regulation provided that their combined market share does not exceed 25 % and that the other conditions for the application of the R&D Block Exemption Regulation are fulfilled.
135. Agreements falling outside the R&D Block Exemption Regulation because the combined market share of the parties exceeds 25 % do not necessarily give rise to restrictive effects on competition. However,

⁽¹⁾ R&D co-operation between non-competitors can, however, produce foreclosure effects under Article 101(1) if it relates to an exclusive exploitation of results and if it is concluded between companies, one of which has a significant degree of market power (which does not necessarily amount to dominance) with respect to a key technology.

the stronger the combined position of the parties on existing markets and/or the more competition in innovation is restricted, the more likely it is that the R&D agreement can cause restrictive effects on competition ⁽¹⁾.

136. If the R&D is directed at the improvement or refinement of existing products or technologies, possible effects concern the relevant market(s) for those existing products or technologies. Effects on prices, output, product quality, product variety or innovation in existing markets are, however, only likely if the parties together have a strong position, entry is difficult and few other innovation activities are identifiable. Furthermore, if the R&D only concerns a relatively minor input of a final product, effects on competition in those final products are, if any, very limited.
137. In general, a distinction has to be made between pure R&D agreements and agreements providing for more comprehensive co-operation involving different stages of the exploitation of results (that is to say, licensing, production or marketing). As set out in paragraph 132, pure R&D agreements will only rarely give rise to restrictive effects on competition within the meaning of Article 101(1). This is in particular true for R&D directed towards a limited improvement of existing products or technologies. If, in such a scenario, the R&D co-operation includes joint exploitation only by means of licensing to third parties, restrictive effects such as foreclosure problems are unlikely. If, however, joint production and/or marketing of the slightly improved products or technologies are included, the effects on competition of the co-operation have to be examined more closely. Restrictive effects on competition in the form of increased prices or reduced output in existing markets are more likely if strong competitors are involved in such a situation.
138. If the R&D is directed at an entirely new product (or technology) which creates its own new market, price and output effects on existing markets are rather unlikely. The analysis has to focus on possible restrictions of innovation concerning, for instance, the quality and variety of possible future products or technologies or the speed of innovation. Those restrictive effects can arise where two or more of the few companies engaged in the development of such a new product start to co-operate at a stage where they are each independently rather near to the launch of the product. Such effects are typically the direct result of the agreement between the parties. Innovation may be restricted even by a pure R&D agreement. In general, however, R&D co-operation concerning entirely new products is unlikely to give rise to restrictive effects on competition unless only a limited number of credible alternative R&D poles exist. This principle does not change significantly if the joint exploitation of the results, even joint marketing, is involved. In those situations the issue of joint exploitation may only give rise to restrictive effects on competition where foreclosure from key technologies plays a role. Those problems would, however, not arise where the parties grant licences that allow third parties to compete effectively.
139. Many R&D agreements will lie somewhere in between the two situations described in paragraphs 137 and 138. They may therefore have effects on innovation as well as repercussions on existing markets. Consequently, both the existing market and the effect on innovation may be of relevance for the assessment with respect to the parties' combined positions, concentration ratios, number of players or innovators and entry conditions. In some cases there can be restrictive effects on competition in the form of increased prices or reduced output, product quality, product variety or innovation in existing markets and in the form of a negative impact on innovation by means of slowing down the development. For instance, if significant competitors on an existing technology market co-operate to develop a new technology which may one day replace existing products that co-operation may slow down the development of the new technology if the parties have market power on the existing market and also a strong position with respect to R&D. A similar effect can occur if the major player in an existing market co-operates with a much smaller or even potential competitor who is just about to emerge with a new product or technology which may endanger the incumbent's position.

⁽¹⁾ This is without prejudice to the analysis of potential efficiency gains, including those that regularly exist in publicly co-funded R&D.

140. Agreements may also fall outside the R&D Block Exemption Regulation irrespective of the parties' market power. This applies for instance to agreements which unduly restrict access of a party to the results of the R&D co-operation⁽¹⁾. The R&D Block Exemption Regulation provides for a specific exception to this general rule in the case of academic bodies, research institutes or specialised companies which provide R&D as a service and which are not active in the industrial exploitation of the results of R&D⁽²⁾. Nevertheless, agreements falling outside the R&D Block Exemption Regulation and containing exclusive access rights for the purposes of exploitation may, where they fall under Article 101(1), fulfil the criteria of Article 101(3), particularly where exclusive access rights are economically indispensable in view of the market, risks and scale of the investment required to exploit the results of the research and development.

3.4. Assessment under Article 101(3)

3.4.1. Efficiency gains

141. Many R&D agreements – with or without joint exploitation of possible results – bring about efficiency gains by combining complementary skills and assets, thus resulting in improved or new products and technologies being developed and marketed more rapidly than would otherwise be the case. R&D agreements may also lead to a wider dissemination of knowledge, which may trigger further innovation. R&D agreements may also give rise to cost reductions.

3.4.2. Indispensability

142. Restrictions that go beyond what is necessary to achieve the efficiency gains generated by an R&D agreement do not fulfil the criteria of Article 101(3). In particular, the restrictions listed in Article 5 of the R&D Block Exemption Regulation may mean it is less likely that the criteria of Article 101(3) will be found to be met, following an individual assessment. It will therefore generally be necessary for the parties to an R&D agreement to show that such restrictions are indispensable to the co-operation.

3.4.3. Pass-on to consumers

143. Efficiency gains attained by indispensable restrictions must be passed on to consumers to an extent that outweighs the restrictive effects on competition caused by the R&D agreement. For example, the introduction of new or improved products on the market must outweigh any price increases or other restrictive effects on competition. In general, it is more likely that an R&D agreement will bring about efficiency gains that benefit consumers if the R&D agreement results in the combination of complementary skills and assets. The parties to an agreement may, for instance, have different research capabilities. If, on the other hand, the parties' skills and assets are very similar, the most important effect of the R&D agreement may be the elimination of part or all of the R&D of one or more of the parties. This would eliminate (fixed) costs for the parties to the agreement but would be unlikely to lead to benefits which would be passed on to consumers. Moreover, the higher the market power of the parties the less likely they are to pass on the efficiency gains to consumers to an extent that would outweigh the restrictive effects on competition.

3.4.4. No elimination of competition

144. The criteria of Article 101(3) cannot be met if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products (or technologies) in question.

3.4.5. Time of the assessment

145. The assessment of restrictive agreements under Article 101(3) is made within the actual context in which they occur and on the basis of the facts existing at any given point in time. The assessment is sensitive to material changes in the facts. The exception rule of Article 101(3) applies as long as the four conditions of Article 101(3) are fulfilled and ceases to apply when that is no longer the case. When applying Article 101(3) in accordance with those principles it is necessary to take into account the initial sunk investments made by any of the parties and the time needed and the restraints

⁽¹⁾ See Article 3(2) of the R&D Block Exemption Regulation.

⁽²⁾ See Article 3(2) of the R&D Block Exemption Regulation.

required to making and recouping an efficiency enhancing investment. Article 101 cannot be applied without taking due account of such *ex ante* investment. The risk facing the parties and the sunk investment that must be made to implement the agreement can thus lead to the agreement falling outside Article 101(1) or fulfilling the conditions of Article 101(3), as the case may be, for the period of time needed to recoup the investment. Should the invention resulting from the investment benefit from any form of exclusivity granted to the parties under rules specific to the protection of intellectual property rights, the recoupment period for such an investment will generally be unlikely to exceed the exclusivity period established under those rules.

146. In some cases the restrictive agreement is an irreversible event. Once the restrictive agreement has been implemented the *ex ante* situation cannot be re-established. In such cases the assessment must be made exclusively on the basis of the facts pertaining at the time of implementation. For instance, in the case of an R&D agreement whereby each party agrees to abandon its respective research project and pool its capabilities with those of another party, it may from an objective point of view be technically and economically impossible to revive a project once it has been abandoned. The assessment of the anti-competitive and pro-competitive effects of the agreement to abandon the individual research projects must therefore be made as of the time of the completion of its implementation. If at that point in time the agreement is compatible with Article 101, for instance because a sufficient number of third parties have competing R&D projects, the parties' agreement to abandon their individual projects remains compatible with Article 101, even if at a later point in time the third party projects fail. However, the prohibition of Article 101 may apply to other parts of the agreement in respect of which the issue of irreversibility does not arise. If, for example, in addition to joint R&D, the agreement provides for joint exploitation, Article 101 may apply to that part of the agreement if, due to subsequent market developments, the agreement gives rise to restrictive effects on competition and does not (any longer) satisfy the conditions of Article 101(3) taking due account of *ex ante* sunk investments.

3.5. Examples

147. Impact of joint R&D on innovation markets/new product market

Example 1

Situation: A and B are the two major companies on the Union-wide market for the manufacture of existing electronic components. Both have a market share of 30 %. They have each made significant investments in the R&D necessary to develop miniaturised electronic components and have developed early prototypes. They now agree to pool those R&D efforts by setting up a joint venture to complete the R&D and produce the components, which will be sold back to the parents, who will commercialise them separately. The remainder of the market consists of small companies without sufficient resources to undertake the necessary investments.

Analysis: Miniaturised electronic components, while likely to compete with the existing components in some areas, are essentially a new technology and an analysis must be made of the poles of research destined towards that future market. If the joint venture goes ahead then only one route to the necessary manufacturing technology will exist, whereas it would appear likely that A and B could reach the market individually with separate products. The agreement therefore reduces product variety. The joint production is also likely to directly limit competition between the parties to the agreement and lead them to agree on output levels, quality or other competitively important parameters. This would limit competition even though the parties will commercialise the products independently. The parties could, for instance, limit the output of the joint venture compared to what the parties would have brought to the market if they had decided their output on their own. The joint venture could also charge a high transfer price to the parties, thereby increasing the input costs for the parties which could lead to higher downstream prices. The parties have a large combined market share on the existing downstream market and the remainder of that market is fragmented. This situation is likely to become even more pronounced on the new downstream product market since the smaller competitors cannot invest in the new components. It is therefore quite likely that the joint production will restrict competition.

Furthermore, the market for miniaturised electronic components is in the future likely to develop into a duopoly with a high degree of commonality of costs and possible exchange of commercially sensitive information between the parties. There may therefore also be a serious risk of anti-competitive coordination leading to a collusive outcome in the market. The R&D agreement is therefore likely to give rise to restrictive effects on competition within the meaning of Article 101(1). While the agreement could give rise to efficiency gains in the form of bringing a new technology forward quicker, the parties would face no competition at the R&D level, so their incentives to pursue the new technology at a high pace could be severely reduced. Although some of those concerns could be remedied if the parties committed to license key know-how for manufacturing miniature components to third parties on reasonable terms, it seems unlikely that this could remedy all concerns and fulfil the conditions of Article 101(3).

Example 2

Situation: A small research company (Company A) which does not have its own marketing organisation has discovered and patented a pharmaceutical substance based on new technology that will revolutionise the treatment of a certain disease. Company A enters into an R&D agreement with a large pharmaceutical producer Company B of products that have so far been used for treating the disease. Company B lacks any similar expertise and R&D programme and would not be able to build such expertise within a relevant timeframe. For the existing products Company B has a market share of around 75 % in all Member States, but the patents will expire over the next five years. There exist two other poles of research with other companies at approximately the same stage of development using the same basic new technology. Company B will provide considerable funding and know-how for product development, as well as future access to the market. Company B is granted a licence for the exclusive production and distribution of the resulting product for the duration of the patent. It is expected that the product could be brought to market in five to seven years.

Analysis: The product is likely to belong to a new relevant market. The parties bring complementary resources and skills to the co-operation, and the probability of the product coming to market increases substantially. Although Company B is likely to have considerable market power on the existing market, that market power will be decreasing shortly. The agreement will not lead to a loss in R&D on the part of Company B, as it has no expertise in this area of research, and the existence of other poles of research are likely to eliminate any incentive to reduce R&D efforts. The exploitation rights during the remaining patent period are likely to be necessary for Company B to make the considerable investments needed and Company A has no marketing resources of its own. The agreement is therefore unlikely to give rise to restrictive effects on competition within the meaning of Article 101(1). Even if there were such effects, it is likely that the conditions of Article 101(3) would be fulfilled.

148. Risk of foreclosure

Example 3

Situation: A small research company (Company A) which does not have its own marketing organisation has discovered and patented a new technology that will revolutionise the market for a certain product for which there is a monopoly producer (Company B) worldwide as no competitors can compete with Company B's current technology. There exist two other poles of research with other companies at approximately the same stage of development using the same

basic new technology. Company B will provide considerable funding and know-how for product development, as well as future access to the market. Company B is granted an exclusive licence for the use of the technology for the duration of the patent and commits to funding only the development of Company A's technology.

Analysis: The product is likely to belong to a new relevant market. The parties bring complementary resources and skills to the co-operation, and the probability of the product coming to market increases substantially. However, the fact that Company B commits to Company A's new technology may be likely to lead the two competing poles of research to abandon their projects as it could be difficult to receive continued funding once they have lost the most likely potential customer for their technology. In such a situation no potential competitors would be able to challenge Company B's monopoly position in the future. The foreclosure effect of the agreement would then be likely to be considered to give rise to restrictive effects on competition within the meaning of Article 101(1). In order to benefit from Article 101(3) the parties would have to show that the exclusivity granted would be indispensable to bring the new technology to the market.

Example 4

Situation: Company A has market power on the market of which its blockbuster medicine forms part. A small company (Company B) which is engaged in pharmaceutical R&D and active pharmaceutical ingredient ('API') production has discovered and filed a patent application for a new process that makes it possible to produce the API of Company A's blockbuster in a more economic fashion and continues to develop the process for industrial production. The compound (API) patent of the blockbuster expires in a little less than three years; thereafter there will remain a number of process patents relating to the medicine. Company B considers that the new process developed by it would not infringe the existing process patents of Company A and would allow the production of a generic version of the blockbuster once the API patent has expired. Company B could either produce the product itself or license the process to interested third parties, for example, generic producers or Company A. Before concluding its research and development in this area, Company B enters into an agreement with Company A, in which Company A makes a financial contribution to the R&D project being carried out by Company B on condition that it acquires an exclusive licence for any of Company B's patents related to the R&D project. There exist two other independent poles of research to develop a non-infringing process for the production of the blockbuster medicine, but it is not yet clear that they will reach industrial production.

Analysis: The process covered by Company B's patent application does not allow for the production of a new product. It merely improves an existing production process. Company A has market power on the existing market of which the blockbuster medicine forms part. Whilst that market power would decrease significantly with the actual market entry of generic competitors, the exclusive licence makes the process developed by Company B unavailable to third parties and is thus liable to delay generic entry (not least as the product is still protected by a number of process patents) and, consequently, restricts competition within the meaning of Article 101(1). As Company A and Company B are potential competitors, the R&D Block Exemption Regulation does not apply because Company A's market share on the market of which the blockbuster medicine forms part is above 25 %. The cost savings based on the new production process for Company A are not sufficient to outweigh the restriction of competition. In any event, an exclusive licence is not indispensable to obtain the savings in the production process. Therefore, the agreement is unlikely to fulfil the conditions of Article 101(3).

149. Impact of R&D co-operation on dynamic product and technology markets and the environment

Example 5

Situation: Two engineering companies that produce vehicle components agree to set up a joint venture to combine their R&D efforts to improve the production and performance of an existing

component. The production of that component would also have a positive effect on the environment. Vehicles would consume less fuel and therefore emit less CO₂. The companies pool their existing technology licensing businesses in the area, but will continue to manufacture and sell the components separately. The two companies have market shares in the Union of 15 % and 20 % on the Original Equipment Manufacturer ('OEM') product market. There are two other major competitors together with several in-house research programmes by large vehicle manufacturers. On the world-wide market for the licensing of technology for those products the parties have shares of 20 % and 25 %, measured in terms of revenue generated, and there are two other major technologies. The product life cycle for the component is typically two to three years. In each of the last five years one of the major companies has introduced a new version or upgrade.

Analysis: Since neither company's R&D effort is aimed at a completely new product, the markets to consider are those for the existing components and for the licensing of relevant technology. The parties' combined market share on both the OEM market (35 %) and, in particular, on the technology market (45 %) are quite high. However, the parties will continue to manufacture and sell the components separately. In addition, there are several competing technologies, which are regularly improved. Moreover, the vehicle manufacturers who do not currently license their technology are also potential entrants on the technology market and thus constrain the ability of the parties to profitably raise prices. To the extent that the joint venture has restrictive effects on competition within the meaning of Article 101(1), it is likely that it would fulfil the criteria of Article 101(3). For the assessment under Article 101(3) it would be necessary to take into account that consumers will benefit from a lower consumption of fuel.

4. PRODUCTION AGREEMENTS

4.1. Definition and scope

150. Production agreements vary in form and scope. They can provide that production is carried out by only one party or by two or more parties. Companies can produce jointly by way of a joint venture, that is to say, a jointly controlled company operating one or several production facilities or by looser forms of co-operation in production such as subcontracting agreements where one party (the 'contractor') entrusts to another party (the 'subcontractor') the production of a good.
151. There are different types of subcontracting agreements. Horizontal subcontracting agreements are concluded between companies operating in the same product market irrespective of whether they are actual or potential competitors. Vertical subcontracting agreements are concluded between companies operating at different levels of the market.
152. Horizontal subcontracting agreements comprise unilateral and reciprocal specialisation agreements as well as subcontracting agreements with a view to expanding production. Unilateral specialisation agreements are agreements between two parties which are active on the same product market or markets, by virtue of which one party agrees to fully or partly cease production of certain products or to refrain from producing those products and to purchase them from the other party, which agrees to produce and supply the products. Reciprocal specialisation agreements are agreements between two or more parties which are active on the same products market or markets, by virtue of which two or more parties agree, on a reciprocal basis, to fully or partly cease or refrain from producing certain but different products and to purchase those products from the other parties, which agree to produce and supply them. In the case of subcontracting agreements with a view to expanding production the contractor entrusts the subcontractor with the production of a good, while the contractor does not at the same time cease or limit its own production of the good.
153. These guidelines apply to all forms of joint production agreements and horizontal subcontracting agreements. Subject to certain conditions, joint production agreements as well as unilateral and reciprocal specialisation agreements may benefit from the Specialisation Block Exemption Regulation.

154. Vertical subcontracting agreements are not covered by these guidelines. They fall within the scope of the Guidelines on Vertical Restraints and, subject to certain conditions, may benefit from the Block Exemption Regulation on Vertical Restraints. In addition, they may be covered by the Commission notice of 18 December 1978 concerning its assessment of certain subcontracting agreements in relation to Article 85(1) of the EEC Treaty ⁽¹⁾ ('the Subcontracting Notice').

4.2. Relevant markets

155. In order to assess the competitive relationship between the co-operating parties, it is necessary first to define the relevant market or markets directly concerned by the co-operation in production, that is to say, the markets to which the products manufactured under the production agreement belong.
156. A production agreement can also have spill-over effects in markets neighbouring the market directly concerned by the co-operation, for instance upstream or downstream to the agreement (the so-called 'spill-over markets') ⁽²⁾. The spill-over markets are likely to be relevant if the markets are inter-dependent and the parties are in a strong position on the spill-over market.

4.3. Assessment under Article 101(1)

4.3.1. Main competition concerns

157. Production agreements can lead to a direct limitation of competition between the parties. Production agreements, and in particular production joint ventures, may lead the parties to directly align output levels and quality, the price at which the joint venture sells on its products, or other competitively important parameters. This may restrict competition even if the parties market the products independently.
158. Production agreements may also result in the coordination of the parties' competitive behaviour as suppliers leading to higher prices or reduced output, product quality, product variety or innovation, that is to say, a collusive outcome. This can happen, subject to the parties having market power and the existence of market characteristics conducive to such coordination, in particular when the production agreement increases the parties' commonality of costs (that is to say, the proportion of variable costs which the parties have in common) to a degree which enables them to achieve a collusive outcome, or if the agreement involves an exchange of commercially sensitive information that can lead to a collusive outcome.
159. Production agreements may furthermore lead to anti-competitive foreclosure of third parties in a related market (for example, the downstream market relying on inputs from the market in which the production agreement takes place). For instance, by gaining enough market power, parties engaging in joint production in an upstream market may be able to raise the price of a key component for a market downstream. Thereby, they could use the joint production to raise the costs of their rivals downstream and, ultimately, force them off the market. This would, in turn, increase the parties' market power downstream, which could enable them to sustain prices above the competitive level or otherwise harm consumers. Such competition concerns could materialise irrespective of whether the parties to the agreement are competitors on the market in which the co-operation takes place. However, for this kind of foreclosure to have anti-competitive effects, at least one of the parties must have a strong market position in the market where the risks of foreclosure are assessed.

4.3.2. Restrictions of competition by object

160. Generally, agreements which involve price-fixing, limiting output or sharing markets or customers restrict competition by object. However, in the context of production agreements, this does not apply where:

⁽¹⁾ OJ C 1, 3.1.1979, p. 2.

⁽²⁾ As also referred to in Article 2(4) of the Merger Regulation.

- the parties agree on the output directly concerned by the production agreement (for example, the capacity and production volume of a joint venture or the agreed amount of outsourced products), provided that the other parameters of competition are not eliminated; or
- a production agreement that also provides for the joint distribution of the jointly manufactured products envisages the joint setting of the sales prices for those products, and only those products, provided that that restriction is necessary for producing jointly, meaning that the parties would not otherwise have an incentive to enter into the production agreement in the first place.

161. In these two cases an assessment is required as to whether the agreement gives rise to likely restrictive effects on competition within the meaning of Article 101(1). In both scenarios the agreement on output or prices will not be assessed separately, but in the light of the overall effects of the entire production agreement on the market.

4.3.3. Restrictive effects on competition

162. Whether the possible competition concerns that production agreements can give rise to are likely to materialise in a given case depends on the characteristics of the market in which the agreement takes place, as well as on the nature and market coverage of the co-operation and the product it concerns. These variables determine the likely effects of a production agreement on competition and thereby the applicability of Article 101(1).
163. Whether a production agreement is likely to give rise to restrictive effects on competition depends on the situation that would prevail in the absence of the agreement with all its alleged restrictions. Consequently, production agreements between companies which compete on markets on which the co-operation occurs are not likely to have restrictive effects on competition if the co-operation gives rise to a new market, that is to say, if the agreement enables the parties to launch a new product or service, which, on the basis of objective factors, the parties would otherwise not have been able to do, for instance, due to the technical capabilities of the parties.
164. In some industries where production is the main economic activity, even a pure production agreement can in itself eliminate key dimensions of competition, thereby directly limiting competition between the parties to the agreements.
165. Alternatively, a production agreement can lead to a collusive outcome or anti-competitive foreclosure by increasing the companies' market power or their commonality of costs or if it involves the exchange of commercially sensitive information. On the other hand, a direct limitation of competition between the parties, a collusive outcome or anti-competitive foreclosure is not likely to occur if the parties to the agreement do not have market power in the market in which the competition concerns are assessed. It is only market power that can enable them to profitably maintain prices above the competitive level, or profitably maintain output, product quality or variety below what would be dictated by competition.
166. In cases where a company with market power in one market co-operates with a potential entrant, for example, with a supplier of the same product in a neighbouring geographic or product market, the agreement can potentially increase the market power of the incumbent. This can lead to restrictive effects on competition if actual competition in the incumbent's market is already weak and the threat of entry is a major source of competitive constraint.
167. Production agreements which also involve commercialisation functions, such as joint distribution or marketing, carry a higher risk of restrictive effects on competition than pure joint production agreements. Joint commercialisation brings the co-operation closer to the consumer and usually involves the joint setting of prices and sales, that is to say, practices that carry the highest risks for competition. However, joint distribution agreements for products which have been jointly produced are generally less likely to restrict competition than stand-alone joint distribution agreements. Also, a joint distribution agreement that is necessary for the joint production agreement to take place in the first place is less likely to restrict competition than if it were not necessary for the joint production.

Market power

168. A production agreement is unlikely to lead to restrictive effects on competition if the parties to the agreement do not have market power in the market on which a restriction of competition is assessed. The starting point for the analysis of market power is the market share of the parties. This will normally be followed by the concentration ratio and the number of players in the market as well as by other dynamic factors such as potential entry, and changing market shares.
169. Companies are unlikely to have market power below a certain level of market share. Therefore, unilateral or reciprocal specialisation agreements as well as joint production agreements including certain integrated commercialisation functions such as joint distribution are covered by the Specialisation Block Exemption Regulation if they are concluded between parties with a combined market share not exceeding 20 % in the relevant market or markets, provided that the other conditions for the application of the Specialisation Block Exemption Regulation are fulfilled. Moreover, as regards horizontal subcontracting agreements with a view to expanding production, in most cases it is unlikely that market power exists if the parties to the agreement have a combined market share not exceeding 20 %. In any event, if the parties' combined market share does not exceed 20 % it is likely that the conditions of Article 101(3) are fulfilled.
170. However, if the parties' combined market share exceeds 20 %, the restrictive effects have to be analysed as the agreement does not fall within the scope of the Specialisation Block Exemption Regulation or the safe harbour for horizontal subcontracting agreements with a view to expanding production referred to in sentences 3 and 4 of paragraph 169. A moderately higher market share than allowed for in the Specialisation Block Exemption Regulation or the safe harbour referred to in sentences 3 and 4 of paragraph 169 does not necessarily imply a highly concentrated market, which is an important factor in the assessment. A combined market share of the parties of slightly more than 20 % may occur in a market with a moderate concentration. Generally, a production agreement is more likely to lead to restrictive effects on competition in a concentrated market than in a market which is not concentrated. Similarly, a production agreement in a concentrated market may increase the risk of a collusive outcome even if the parties only have a moderate combined market share.
171. Even if the market shares of the parties to the agreement and the market concentration are high, the risks of restrictive effects on competition may still be low if the market is dynamic, that is to say, a market in which entry occurs and market positions change frequently.
172. In the analysis of whether the parties to a production agreement have market power, the number and intensity of links (for example, other co-operation agreements) between the competitors in the market are relevant to the assessment.
173. Factors such as whether the parties to the agreement have high market shares, whether they are close competitors, whether the customers have limited possibilities of switching suppliers, whether competitors are unlikely to increase supply if prices increase, and whether one of the parties to the agreement is an important competitive force, are all relevant for the competitive assessment of the agreement.

Direct limitation of competition between the parties

174. Competition between the parties to a production agreement can be directly limited in various ways. The parties to a production joint venture could, for instance, limit the output of the joint venture compared to what the parties would have brought to the market if each of them had decided their output on their own. If the main product characteristics are determined by the production agreement this could also eliminate the key dimensions of competition between the parties and, ultimately, lead to restrictive effects on competition. Another example would be a joint venture charging a high transfer price to the parties, thereby increasing the input costs for the parties which could lead to higher downstream prices. Competitors may find it profitable to increase their prices as a response, thereby contributing to price increases in the relevant market.

Collusive outcome

175. The likelihood of a collusive outcome depends on the parties' market power as well as the characteristics of the relevant market. A collusive outcome can result in particular (but not only) from commonality of costs or an exchange of information brought about by the production agreement.
176. A production agreement between parties with market power can have restrictive effects on competition if it increases their commonality of costs (that is to say, the proportion of variable costs which the parties have in common) to a level which enables them to collude. The relevant costs are the variable costs of the product with respect to which the parties to the production agreement compete.
177. A production agreement is more likely to lead to a collusive outcome if prior to the agreement the parties already have a high proportion of variable costs in common, as the additional increment (that is to say, the production costs of the product subject to the agreement) can tip the balance towards a collusive outcome. Conversely, if the increment is large, the risk of a collusive outcome may be high even if the initial level of commonality of costs is low.
178. Commonality of costs increases the risk of a collusive outcome only if production costs constitute a large proportion of the variable costs concerned. This is, for instance, not the case where the co-operation concerns products which require costly commercialisation. An example would be new or heterogeneous products requiring expensive marketing or high transport costs.
179. Another scenario where commonality of costs can lead to a collusive outcome could be where the parties agree on the joint production of an intermediate product which accounts for a large proportion of the variable costs of the final product with respect to which the parties compete downstream. The parties could use the production agreement to increase the price of that common important input for their products in the downstream market. This would weaken competition downstream and would be likely to lead to higher final prices. The profit would be shifted from downstream to upstream to be then shared between the parties through the joint venture.
180. Similarly, commonality of costs increases the anti-competitive risks of a horizontal subcontracting agreement where the input which the contractor purchases from the subcontractor accounts for a large proportion of the variable costs of the final product with which the parties compete.
181. Any negative effects arising from the exchange of information will not be assessed separately but in the light of the overall effects of the agreement. A production agreement can give rise to restrictive effects on competition if it involves an exchange of commercially strategic information that can lead to a collusive outcome or anti-competitive foreclosure. Whether the exchange of information in the context of a production agreement is likely to lead to restrictive effects on competition should be assessed according to the guidance given in Chapter 2.
182. If the information exchange does not exceed the sharing of data necessary for the joint production of the goods subject to the production agreement, then even if the information exchange had restrictive effects on competition within the meaning of Article 101(1), the agreement would be more likely to meet the criteria of Article 101(3) than if the exchange went beyond what was necessary for the joint production. In this case the efficiency gains stemming from producing jointly are likely to outweigh the restrictive effects of the coordination of the parties' conduct. Conversely, in the context of a production agreement the sharing of data which is not necessary for producing jointly, for example the exchange of information related to prices and sales, is less likely to fulfil the conditions of Article 101(3).

4.4. Assessment under Article 101(3)**4.4.1. Efficiency gains**

183. Production agreements can be pro-competitive if they provide efficiency gains in the form of cost savings or better production technologies. By producing together companies can save costs that otherwise they would duplicate. They can also produce at lower costs if the co-operation enables them to increase production where marginal costs decline with output, that is to say, by economies of scale. Producing jointly can also help companies to improve product quality if they put together their

complementary skills and know-how. Co-operation can also enable companies to increase product variety, which they could not have afforded, or would not have been able to achieve, otherwise. If joint production allows the parties to increase the number of different types of products, it can also provide cost savings by means of economies of scope.

4.4.2. Indispensability

184. Restrictions that go beyond what is necessary to achieve the efficiency gains generated by a production agreement do not fulfil the criteria of Article 101(3). For instance, restrictions imposed in a production agreement on the parties' competitive conduct with regard to output outside the co-operation will normally not be considered to be indispensable. Similarly, setting prices jointly will not be considered indispensable if the production agreement does not also involve joint commercialisation.

4.4.3. Pass-on to consumers

185. Efficiency gains attained by indispensable restrictions need to be passed on to consumers in the form of lower prices or better product quality or variety to an extent that outweighs the restrictive effects on competition. Efficiency gains that only benefit the parties or cost savings that are caused by output reduction or market allocation are not sufficient to meet the criteria of Article 101(3). If the parties to the production agreement achieve savings in their variable costs they are more likely to pass them on to consumers than if they reduce their fixed costs. Moreover, the higher the market power of the parties, the less likely they will pass on the efficiency gains to consumers to an extent that would outweigh the restrictive effects on competition.

4.4.4. No elimination of competition

186. The criteria of Article 101(3) cannot be met if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products in question. This has to be analysed in the relevant market to which the products subject to the co-operation belong and in any possible spill-over markets.

4.5. Examples

187. Commonality of costs and collusive outcomes

Example 1

Situation: Companies A and B, two suppliers of a product X decide to close their current old production plants and build a larger, modern and more efficient production plant run by a joint venture, which will have a higher capacity than the total capacity of the old plants of Companies A and B. No other such investments are planned by competitors, which are using their facilities at full capacity. Companies A and B have market shares of 20 % and 25 % respectively. Their products are the closest substitutes in a specific segment of the market, which is concentrated. The market is transparent and rather stagnant, there is no entry and the market shares have been stable over time. Production costs constitute a major part of Company A and Company B's variable costs for product X. Commercialisation is a minor economic activity in terms of costs and strategic importance compared to production: marketing costs are low as product X is homogenous and established and transport is not a key driver of competition.

Analysis: If Companies A and B share all or most of their variable costs, this production agreement could lead to a direct limitation of competition between them. It may lead the parties to limit the output of the joint venture compared to what they would have brought to the market if each of them had decided their output on their own. In the light of the capacity constraints of the competitors this reduction output could lead to higher prices.

Even if Companies A and B were not sharing most of their variable costs, but only a significant part thereof, this production agreement could lead to a collusive outcome between Companies A and B, thereby indirectly eliminating competition between the two parties. The likelihood of this depends not only on the issue of commonality of costs (which are high in this case) but also on the characteristics of the relevant market such as, for example, transparency, stability and level of concentration.

In either of the two situations mentioned above, it is likely, in the market configuration of this example, that the production joint venture of Companies A and B would give rise to restrictive effects on competition within the meaning of Article 101(1) on the market of X.

The replacement of two smaller old production plants by the larger, modern and more efficient one may lead the joint venture to increase output at lower prices to the benefits of consumers. However, the production agreement could only meet the criteria of Article 101(3) if the parties provided substantiated evidence that the efficiency gains would be passed on to consumers to such an extent that they would outweigh the restrictive effects on competition.

188. Links between competitors and collusive outcomes

Example 2

Situation: Two suppliers, Companies A and B, form a production joint venture with respect to product Y. Companies A and B each have a 15 % market share on the market for Y. There are 3 other players on the market: Company C with a market share of 30 %, Company D with 25 % and Company E with 15 %. Company B already has a joint production plant with Company D.

Analysis: The market is characterised by very few players and rather symmetric structures. Cooperation between Companies A and B would add an additional link in the market, *de facto* increasing the concentration in the market, as it would also link Company D to Companies A and B. This co-operation is likely to increase the risk of a collusive outcome and thereby likely to give rise to restrictive effects on competition within the meaning of Article 101(1). The criteria of Article 101(3) could only be fulfilled in the presence of significant efficiency gains which are passed on to consumers to such an extent that they would outweigh the restrictive effects on competition.

189. Anti-competitive foreclosure on a downstream market

Example 3

Situation: Companies A and B set up a production joint venture for the intermediate product X which covers their entire production of X. The production costs of X account for 70 % of the variable costs of the final product Y with respect to which Companies A and B compete downstream. Companies A and B each have a share of 20 % on the market for Y, there is limited entry and the market shares have been stable over time. In addition to covering their own demand for X, both Companies A and B each have a market share of 40 % on the market for X. There are high barriers to entry on the market for X and existing producers are operating near full capacity. On the market for Y, there are two other significant suppliers, each with a 15 % market share, and several smaller competitors. This agreement generates economies of scale.

Analysis: By virtue of the production joint venture, Companies A and B would be able to largely control supplies of the essential input X to their competitors in the market for Y. This would give Companies A and B the ability to raise their rivals' costs by artificially increasing the price of X, or by reducing the output. This could foreclose the competitors of Companies A and B in market for Y. Because of the likely anti-competitive foreclosure downstream, this agreement is likely to give rise to restrictive effects on competition within the meaning of Article 101(1). The economies of scale generated by the production joint venture are unlikely to outweigh the restrictive effects on competition and therefore this agreement would most likely not meet the criteria of Article 101(3).

190. Specialisation agreement as market allocation

Example 4

Situation: Companies A and B each manufacture both products X and Y. Company A's market share of X is 30 % and of Y 10 %. B's market share of X is 10 % and of Y 30 %. To obtain economies of scale they conclude a reciprocal specialisation agreement under which Company A will only produce X and Company B only Y. They do not cross-supply the products to each other so that Company A only sells X and Company B sells only Y. The parties claim that by specialising in this way they save costs due to the economies of scale and by focusing on only one product will improve their production technologies, which will lead to better quality products.

Analysis: With regard to its effects on competition in the market, this specialisation agreement is close to a hardcore cartel where parties allocate the market among themselves. Therefore, this agreement restricts competition by object. Because the claimed efficiencies in the form of economies of scale and improving production technology are only linked to the market allocation, they are unlikely to outweigh the restrictive effects, and therefore the agreement would not meet the criteria of Article 101(3). In any event, if Company A or B believes that it would be more efficient to focus on only one product, it can simply take the unilateral decision to only produce X or Y without at the same time agreeing that the other company will focus on producing the respective other product.

The analysis would be different if Companies A and B supplied each other with the product they focus on so that they both continue to sell X and Y. In such a case Companies A and B could still compete on price on both markets, especially if production costs (which become common through the production agreement) did not constitute a major share of the variable costs of their products. The relevant costs in this context are the commercialisation costs. Hence, the specialisation agreement would be unlikely to restrict competition if X and Y were largely heterogeneous products with a very high proportion of marketing and distribution costs (for example, 65–70 % or more of total costs). In such a scenario the risks of a collusive outcome would not be high and the criteria of Article 101(3) may be fulfilled, provided that the efficiency gains would be passed on to consumers to such an extent that they would outweigh the restrictive effects on competition of the agreement.

191. Potential competitors

Example 5

Situation: Company A produces final product X and Company B produces final product Y. X and Y constitute two separate product markets, in which Companies A and B respectively have strong market power. Both companies use Z as an input for their production of X and Y and they both produce Z for captive use only. X is a low added value product for which Z is an essential input (X is quite a simple transformation of Z). Y is a high value added product, for which Z is one of many inputs (Z constitutes a small part of variable costs of Y). Companies A and B agree to jointly produce Z, which generates modest economies of scale.

Analysis: Companies A and B are not actual competitors with regard to X, Y or Z. However, since X is a simple transformation of input Z, it is likely that Company B could easily enter the market for X and thus challenge Company A's position on that market. The joint production agreement with regard to Z might reduce Company B's incentives to do so as the joint production might be used for side payments and limit the probability of Company B selling product X (as Company A is likely to have control over the quantity of Z purchased by Company B from the joint venture). However, the probability of Company B entering the market for X in the absence of the agreement depends on the expected profitability of the entry. As X is a low added value product, entry might not be profitable and thus entry by Company B could be unlikely in the absence of the agreement. Given that Companies A and B already have market power, the agreement is likely to give rise to restrictive effects on competition within the meaning of Article 101(1) if the agreement does indeed

decrease the likelihood of entry of Company B into Company A's market, that is to say, the market for X. The efficiency gains in the form of economies of scale generated by the agreement are modest and therefore unlikely to outweigh the restrictive effects on competition.

192. Information exchange in a production agreement

Example 6

Situation: Companies A and B with high market power decide to produce together to become more efficient. In the context of this agreement they secretly exchange information about their future prices. The agreement does not cover joint distribution.

Analysis: This information exchange makes a collusive outcome likely and is therefore likely to have as its object the restriction of competition within the meaning of Article 101(1). It would be unlikely to meet the criteria of Article 101(3) because the sharing of information about the parties' future prices is not indispensable for producing jointly and attaining the corresponding cost savings.

193. Swaps and information exchange

Example 7

Situation: Companies A and B both produce Z, a commodity chemical. Z is a homogenous product which is manufactured according to a European standard which does not allow for any product variations. Production costs are a significant cost factor regarding Z. Company A has a market share of 20 % and Company B of 25 % on the Union-wide market for Z. There are four other manufacturers on the market for Z, with respective market shares of 20 %, 15 %, 10 % and 10 %. The production plant of Company A is located in Member State X in northern Europe whereas the production plant of Company B is located in Member State Y in southern Europe. Even though the majority of Company A's customers are located in northern Europe, Company A also has a number of customers in southern Europe. The majority of Company B's customers are in southern Europe, although it also has a number of customers located in northern Europe. Currently, Company A provides its southern European customers with Z manufactured in its production plant in Member State X and transports it to southern Europe by truck. Similarly, Company B provides its northern European customers with Z manufactured in Member State Y and transports it to northern Europe by truck. Transport costs are quite high, but not so high as to make the deliveries by Company A to southern Europe and Company B to northern Europe unprofitable. Transport costs from Member State X to southern Europe are lower than from Member State Y to northern Europe.

Companies A and B decide that it would be more efficient if Company A stopped transporting Z from Member State X to southern Europe and if Company B stopped transporting the Z from Member State Y to northern Europe although, at the same time, they are keen on retaining their customers. To do so, Companies A and B intend to enter into a swap agreement which allows them to purchase an agreed annual quantity of Z from the other party's plant with a view to selling the purchased Z to those of their customers which are located closer to the other party's plant. In order to calculate a purchase price which does not favour one party over the other and which takes due account of the parties' different production costs and different savings on transport costs, and in order to ensure that both parties can achieve an appropriate margin, they agree to disclose to each other their main costs with regard to Z (that is to say, production costs and transport costs).

Analysis: The fact that Companies A and B – who are competitors – swap parts of their production does not in itself give rise to competition concerns. However, the envisaged swap agreement between Companies A and B provides for the exchange of both parties' production and transport costs with regard to Z. Moreover, Companies A and B have a strong combined market position in a fairly concentrated market for a homogenous commodity product. Therefore, due to the extensive information exchange on a key parameter of competition with regard to Z, it is

likely that the swap agreement between Companies A and B will give rise to restrictive effects on competition within the meaning of Article 101(1) as it can lead to a collusive outcome. Even though the agreement will give rise to significant efficiency gains in the form of cost savings for the parties, the restrictions on competition generated by the agreement are not indispensable for their attainment. The parties could achieve similar cost savings by agreeing on a price formula which does not entail the disclosure of their production and transport costs. Consequently, in its current form the swap agreement does not fulfil the criteria of Article 101(3).

5. PURCHASING AGREEMENTS

5.1. Definition

194. This chapter focuses on agreements concerning the joint purchase of products. Joint purchasing can be carried out by a jointly controlled company, by a company in which many other companies hold non-controlling stakes, by a contractual arrangement or by even looser forms of co-operation (collectively referred to as 'joint purchasing arrangements'). Joint purchasing arrangements usually aim at the creation of buying power which can lead to lower prices or better quality products or services for consumers. However, buying power may, under certain circumstances, also give rise to competition concerns.
195. Joint purchasing arrangements may involve both horizontal and vertical agreements. In these cases a two-step analysis is necessary. First, the horizontal agreements between the companies engaging in joint purchasing have to be assessed according to the principles described in these guidelines. If that assessment leads to the conclusion that the joint purchasing arrangement does not give rise to competition concerns, a further assessment will be necessary to examine the relevant vertical agreements. The latter assessment will follow the rules of the Block Exemption Regulation on Vertical Restraints and the Guidelines on Vertical Restraints.
196. A common form of joint purchasing arrangement is an 'alliance', that is to say an association of undertakings formed by a group of retailers for the joint purchasing of products. Horizontal agreements concluded between the members of the alliance or decisions adopted by the alliance first have to be assessed as a horizontal co-operation agreement according to these guidelines. Only if that assessment does not reveal any competition concerns does it become relevant to assess the relevant vertical agreements between the alliance and an individual member thereof and between the alliance and suppliers. Those agreements are covered – subject to certain conditions – by the Block Exemption Regulation on Vertical Restraints. Vertical agreements not covered by that Block Exemption Regulation are not presumed to be illegal but require individual examination.

5.2. Relevant markets

197. There are two markets which may be affected by joint purchasing arrangements. First, the market or markets with which the joint purchasing arrangement is directly concerned, that is to say, the relevant purchasing market or markets. Secondly, the selling market or markets, that is to say, the market or markets downstream where the parties to the joint purchasing arrangement are active as sellers.
198. The definition of relevant purchasing markets follows the principles described in the Market Definition Notice and is based on the concept of substitutability to identify competitive constraints. The only difference from the definition of 'selling markets' is that substitutability has to be defined from the viewpoint of supply and not from the viewpoint of demand. In other words, the suppliers' alternatives are decisive in identifying the competitive constraints on purchasers. Those alternatives could be analysed, for instance, by examining the suppliers' reaction to a small but non-transitory price decrease. Once the market is defined, the market share can be calculated as the percentage of the purchases by the parties out of the total sales of the purchased product or products in the relevant market.
199. If the parties are, in addition, competitors on one or more selling markets, those markets are also relevant for the assessment. The selling markets have to be defined by applying the methodology described in the Market Definition Notice.

5.3. Assessment under Article 101(1)

5.3.1. Main competition concerns

200. Joint purchasing arrangements may lead to restrictive effects on competition on the purchasing and/or downstream selling market or markets, such as increased prices, reduced output, product quality or variety, or innovation, market allocation, or anti-competitive foreclosure of other possible purchasers.
201. If downstream competitors purchase a significant part of their products together, their incentives for price competition on the selling market or markets may be considerably reduced. If the parties have a significant degree of market power (which does not necessarily amount to dominance) on the selling market or markets, the lower purchase prices achieved by the joint purchasing arrangement are likely not to be passed on to consumers.
202. If the parties have a significant degree of market power on the purchasing market (buying power) there is a risk that they may force suppliers to reduce the range or quality of products they produce, which may bring about restrictive effects on competition such as quality reductions, lessening of innovation efforts, or ultimately sub-optimal supply.
203. Buying power of the parties to the joint purchasing arrangement could be used to foreclose competing purchasers by limiting their access to efficient suppliers. This is most likely if there are a limited number of suppliers and there are barriers to entry on the supply side of the upstream market.
204. In general, however, joint purchasing arrangements are less likely to give rise to competition concerns when the parties do not have market power on the selling market or markets.

5.3.2. Restrictions of competition by object

205. Joint purchasing arrangements restrict competition by object if they do not truly concern joint purchasing, but serve as a tool to engage in a disguised cartel, that is to say, otherwise prohibited price fixing, output limitation or market allocation.
206. Agreements which involve the fixing of purchase prices can have the object of restricting competition within the meaning of Article 101(1) ⁽¹⁾. However, this does not apply where the parties to a joint purchasing arrangement agree on the purchasing prices the joint purchasing arrangement may pay to its suppliers for the products subject to the supply contract. In that case an assessment is required as to whether the agreement is likely to give rise to restrictive effects on competition within the meaning of Article 101(1). In both scenarios the agreement on purchase prices will not be assessed separately, but in the light of the overall effects of the purchasing agreement on the market.

5.3.3. Restrictive effects on competition

207. Joint purchasing arrangements which do not have as their object the restriction of competition must be analysed in their legal and economic context with regard to their actual and likely effects on competition. The analysis of the restrictive effects on competition generated by a joint purchasing arrangement must cover the negative effects on both the purchasing and the selling markets.

Market power

208. There is no absolute threshold above which it can be presumed that the parties to a joint purchasing arrangement have market power so that the joint purchasing arrangement is likely to give rise to restrictive effects on competition within the meaning of Article 101(1). However, in most cases it is unlikely that market power exists if the parties to the joint purchasing arrangement have a combined market share not exceeding 15 % on the purchasing market or markets as well as a combined market share not exceeding 15 % on the selling market or markets. In any event, if the parties' combined market shares do not exceed 15 % on both the purchasing and the selling market or markets, it is likely that the conditions of Article 101(3) are fulfilled.

⁽¹⁾ See Article 101(1)(a); Joined Cases T-217/03 and T-245/03, *French Beef*, paragraphs 83 *et seq.*; Case C-8/08, *T-Mobile Netherlands*, paragraph 37.

209. A market share above that threshold in one or both markets does not automatically indicate that the joint purchasing arrangement is likely to give rise to restrictive effects on competition. A joint purchasing arrangement which does not fall within that safe harbour requires a detailed assessment of its effects on the market involving, but not limited to, factors such as market concentration and possible countervailing power of strong suppliers.
210. Buying power may, under certain circumstances, cause restrictive effects on competition. Anti-competitive buying power is likely to arise if a joint purchasing arrangement accounts for a sufficiently large proportion of the total volume of a purchasing market so that access to the market may be foreclosed to competing purchasers. A high degree of buying power may indirectly affect the output, quality and variety of products on the selling market.
211. In the analysis of whether the parties to a joint purchasing arrangement have buying power, the number and intensity of links (for example, other purchasing agreements) between the competitors in the market are relevant.
212. If, however, competing purchasers co-operate who are not active on the same relevant selling market (for example, retailers which are active in different geographic markets and cannot be regarded as potential competitors), the joint purchasing arrangement is unlikely to have restrictive effects on competition unless the parties have a position in the purchasing markets that is likely to be used to harm the competitive position of other players in their respective selling markets.

Collusive outcome

213. Joint purchasing arrangements may lead to a collusive outcome if they facilitate the coordination of the parties' behaviour on the selling market. This can be the case if the parties achieve a high degree of commonality of costs through joint purchasing, provided the parties have market power and the market characteristics are conducive to coordination.
214. Restrictive effects on competition are more likely if the parties to the joint purchasing arrangement have a significant proportion of their variable costs in the relevant downstream market in common. This is, for instance, the case if retailers, which are active in the same relevant retail market or markets, jointly purchase a significant amount of the products they offer for resale. It may also be the case if competing manufacturers and sellers of a final product jointly purchase a high proportion of their input together.
215. The implementation of a joint purchasing arrangement may require the exchange of commercially sensitive information such as purchase prices and volumes. The exchange of such information may facilitate coordination with regard to sales prices and output and thus lead to a collusive outcome on the selling markets. Spill-over effects from the exchange of commercially sensitive information can, for example, be minimised where data is collated by a joint purchasing arrangement which does not pass on the information to the parties thereto.
216. Any negative effects arising from the exchange of information will not be assessed separately but in the light of the overall effects of the agreement. Whether the exchange of information in the context of a joint purchasing arrangement is likely to lead to restrictive effects on competition should be assessed according to the guidance given in Chapter 2. If the information exchange does not exceed the sharing of data necessary for the joint purchasing of the products by the parties to the joint purchasing arrangement, then even if the information exchange has restrictive effects on competition within the meaning of Article 101(1), the agreement is more likely to meet the criteria of Article 101(3) than if the exchange goes beyond what was necessary for the joint purchasing.

5.4. Assessment under Article 101(3)

5.4.1. Efficiency gains

217. Joint purchasing arrangements can give rise to significant efficiency gains. In particular, they can lead to cost savings such as lower purchase prices or reduced transaction, transportation and storage costs, thereby facilitating economies of scale. Moreover, joint purchasing arrangements may give rise to qualitative efficiency gains by leading suppliers to innovate and introduce new or improved products on the markets.

5.4.2. Indispensability

218. Restrictions that go beyond what is necessary to achieve the efficiency gains generated by a purchasing agreement do not meet the criteria of Article 101(3). An obligation to purchase exclusively through the co-operation may, in certain cases, be indispensable to achieve the necessary volume for the realisation of economies of scale. However, such an obligation has to be assessed in the context of the individual case.

5.4.3. Pass-on to consumers

219. Efficiency gains, such as cost efficiencies or qualitative efficiencies in the form of the introduction of new or improved products on the market, attained by indispensable restrictions must be passed on to consumers to an extent that outweighs the restrictive effects of competition caused by the joint purchasing arrangement. Hence, cost savings or other efficiencies that only benefit the parties to the joint purchasing arrangement will not suffice. Cost savings need to be passed on to consumers, that is to say, the parties' customers. To take a notable example, this pass-on may occur through lower prices on the selling markets. Lower purchasing prices resulting from the mere exercise of buying power are not likely to be passed on to consumers if the purchasers together have market power on the selling markets, and thus do not meet the criteria of Article 101(3). Moreover, the higher the market power of the parties on the selling market or markets the less likely they will pass on the efficiency gains to consumers to an extent that would outweigh the restrictive effects on competition.

5.4.4. No elimination of competition

220. The criteria of Article 101(3) cannot be fulfilled if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products in question. That assessment has to cover both purchasing and selling markets.

5.5. Examples

221. Joint purchasing by small companies with moderate combined market shares

Example 1

Situation: 150 small retailers conclude an agreement to form a joint purchasing organisation. They are obliged to purchase a minimum volume through the organisation, which accounts for roughly 50 % of each retailer's total costs. The retailers can purchase more than the minimum volume through the organisation, and they may also purchase outside the co-operation. They have a combined market share of 23 % on both the purchasing and the selling markets. Company A and Company B are their two large competitors. Company A has a 25 % share on both the purchasing and selling markets, Company B 35 %. There are no barriers which would prevent the remaining smaller competitors from also forming a purchasing group. The 150 retailers achieve substantial cost savings by virtue of purchasing jointly through the purchasing organisation.

Analysis: The retailers have a moderate market position on the purchasing and the selling markets. Furthermore, the co-operation brings about some economies of scale. Even though the retailers achieve a high degree of commonality of costs, they are unlikely to have market power on the selling market due to the market presence of Companies A and B, which are both individually larger than the joint purchasing organisation. Consequently, the retailers are unlikely to coordinate their behaviour and reach a collusive outcome. The formation of the joint purchasing organisation is therefore unlikely to give rise to restrictive effects on competition within the meaning of Article 101(1).

222. Commonality of costs and market power on the selling market

Example 2

Situation: Two supermarket chains conclude an agreement to jointly purchase products which account for roughly 80 % of their variable costs. On the relevant purchasing markets for the

different categories of products the parties have combined market shares between 25 % and 40 %. On the relevant selling market they have a combined market share of 60 %. There are four other significant retailers each with a 10 % market share. Market entry is not likely.

Analysis: It is likely that this purchasing agreement would give the parties the ability to coordinate their behaviour on the selling market, thereby leading to a collusive outcome. The parties have market power on the selling market and the purchasing agreement gives rise to a significant commonality of costs. Moreover, market entry is unlikely. The incentive for the parties to coordinate their behaviour would be reinforced if their cost structures were already similar prior to concluding the agreement. Moreover, similar margins of the parties would further increase the risk of a collusive outcome. This agreement also creates the risk that by the parties' withholding demand and, consequently, as a result of reduced quantity, downstream selling prices would increase. Hence, the purchasing agreement is likely to give rise to restrictive effects on competition within the meaning of Article 101(1). Even though the agreement is very likely to give rise to efficiency gains in the form of cost savings, due to the parties' significant market power on the selling market, these are unlikely to be passed on to consumers to an extent that would outweigh the restrictive effects on competition. Therefore, the purchasing agreement is unlikely to fulfil the criteria of Article 101(3).

223. Parties active in different geographic markets

Example 3

Situation: Six large retailers, which are each based in a different Member State, form a purchasing group to buy several branded durum wheat flour-based products jointly. The parties are allowed to purchase other similar branded products outside the co-operation. Moreover, five of them also offer similar private label products. The members of the purchasing group have a combined market share of approximately 22 % on the relevant purchasing market, which is Union-wide. In the purchasing market there are three other large players of similar size. Each of the parties to the purchasing group has a market share between 20 % and 30 % on the national selling markets on which they are active. None of them is active in a Member State where another member of the group is active. The parties are not potential entrants to each other's markets.

Analysis: The purchasing group will be able to compete with the other existing major players on the purchasing market. The selling markets are much smaller (in turnover and geographic scope) than the Union-wide purchasing market and in those markets some of the members of the group may have market power. Even if the members of the purchasing group have a combined market share of more than 15 % on the purchasing market, the parties are unlikely to coordinate their conduct and collude on the selling markets since they are neither actual nor potential competitors on the downstream markets. Consequently, the purchasing group is not likely to give rise to restrictive effects on competition within the meaning of Article 101(1).

224. Information exchange

Example 4

Situation: Three competing manufacturers A, B and C entrust an independent joint purchasing organisation with the purchase of product Z, which is an intermediary product used by the three parties for their production of the final product X. The costs of Z are not a significant cost factor for the production of X. The joint purchasing organisation does not compete with the parties on the selling market for X. All information necessary for the purchases (for example quality specifications, quantities, delivery dates, maximum purchase prices) is only disclosed to the joint purchasing organisation, not to the other parties. The joint purchasing organisation agrees the purchasing prices with the suppliers. A, B and C have a combined market share of 30 % on each of the purchasing and selling markets. They have six competitors in the purchasing and selling markets, two of which have a market share of 20 %.

Analysis: Since there is no direct information exchange between the parties, the transfer of the information necessary for the purchases to the joint purchasing organisation is unlikely to lead to a collusive outcome. Consequently, the exchange of information is unlikely to give rise to restrictive effects on competition within the meaning of Article 101(1).

6. AGREEMENTS ON COMMERCIALISATION

6.1. Definition

225. Commercialisation agreements involve co-operation between competitors in the selling, distribution or promotion of their substitute products. This type of agreement can have widely varying scope, depending on the commercialisation functions which are covered by the co-operation. At one end of the spectrum, joint selling agreements may lead to a joint determination of all commercial aspects related to the sale of the product, including price. At the other end, there are more limited agreements that only address one specific commercialisation function, such as distribution, after-sales service, or advertising.
226. An important category of those more limited agreements is distribution agreements. The Block Exemption Regulation on Vertical Restraints and Guidelines on Vertical Restraints generally cover distribution agreements unless the parties to the agreement are actual or potential competitors. If the parties are competitors, the Block Exemption Regulation on Vertical Restraints only covers non-reciprocal vertical agreements between competitors, if (a) the supplier is a manufacturer and a distributor of goods, while the buyer is a distributor and not a competing undertaking at the manufacturing level or, (b) the supplier is a provider of services at several levels of trade, while the buyer provides its goods or services at the retail level and does not provide competing services at the level of trade where it purchases the contract services ⁽¹⁾.
227. If competitors agree to distribute their substitute products on a reciprocal basis (in particular if they do so on different geographic markets) there is a possibility in certain cases that the agreements have as their object or effect the partitioning of markets between the parties or that they lead to a collusive outcome. The same can be true for non-reciprocal agreements between competitors. Reciprocal agreements and non-reciprocal agreements between competitors thus have first to be assessed according to the principles set out in this Chapter. If that assessment leads to the conclusion that co-operation between competitors in the area of distribution would in principle be acceptable, a further assessment will be necessary to examine the vertical restraints included in such agreements. That second step of the assessment should be based on the principles set out in the Guidelines on Vertical Restraints.
228. A further distinction should be drawn between agreements where the parties agree only on joint commercialisation and agreements where the commercialisation is related to another type of co-operation upstream, such as joint production or joint purchasing. When analysing commercialisation agreements combining different stages of co-operation it is necessary to determine the centre of gravity of the co-operation in accordance with paragraphs 13 and 14.

6.2. Relevant markets

229. To assess the competitive relationship between the parties, the relevant product and geographic market or markets directly concerned by the co-operation (that is to say, the market or markets to which the products subject to the agreement belong) have to be defined. As a commercialisation agreement in one market may also affect the competitive behaviour of the parties in a neighbouring market which is closely related to the market directly concerned by the co-operation, any such neighbouring market also needs to be defined. The neighbouring market may be horizontally or vertically related to the market where the co-operation takes place.

⁽¹⁾ Article 2(4) of the Block Exemption Regulation on Vertical Restraints.

6.3. Assessment under Article 101(1)

6.3.1. Main competition concerns

230. Commercialisation agreements can lead to restrictions of competition in several ways. First, and most obviously, commercialisation agreements may lead to price fixing.
231. Secondly, commercialisation agreements may also facilitate output limitation, because the parties may decide on the volume of products to be put on the market, therefore restricting supply.
232. Thirdly, commercialisation agreements may become a means for the parties to divide the markets or to allocate orders or customers, for example in cases where the parties' production plants are located in different geographic markets or when the agreements are reciprocal.
233. Finally, commercialisation agreements may also lead to an exchange of strategic information relating to aspects within or outside the scope of the co-operation or to commonality of costs – in particular with regard to agreements not encompassing price fixing – which may result in a collusive outcome.

6.3.2. Restrictions of competition by object

234. Price fixing is one of the major competition concerns arising from commercialisation agreements between competitors. Agreements limited to joint selling generally have the object of coordinating the pricing policy of competing manufacturers or service providers. Such agreements may not only eliminate price competition between the parties on substitute products but may also restrict the total volume of products to be delivered by the parties within the framework of a system for allocating orders. Such agreements are therefore likely to restrict competition by object.
235. That assessment does not change if the agreement is non-exclusive (that is to say, where the parties are free to sell individually outside the agreement), as long as it can be concluded that the agreement will lead to an overall coordination of the prices charged by the parties.
236. Another specific competition concern related to distribution arrangements between parties which are active in different geographic markets is that they can be an instrument of market partitioning. If the parties use a reciprocal distribution agreement to distribute each other's products in order to eliminate actual or potential competition between them by deliberately allocating markets or customers, the agreement is likely to have as its object a restriction of competition. If the agreement is not reciprocal, the risk of market partitioning is less pronounced. It is necessary, however, to assess whether the non-reciprocal agreement constitutes the basis for a mutual understanding to avoid entering each other's markets.

6.3.3. Restrictive effects on competition

237. A commercialisation agreement is normally not likely to give rise to competition concerns if it is objectively necessary to allow one party to enter a market it could not have entered individually or with a more limited number of parties than are effectively taking part in the co-operation, for example, because of the costs involved. A specific application of this principle would be consortia arrangements that allow the companies involved to participate in projects that they would not be able to undertake individually. As the parties to the consortia arrangement are therefore not potential competitors for implementing the project, there is no restriction of competition within the meaning of Article 101(1).
238. Similarly, not all reciprocal distribution agreements have as their object a restriction of competition. Depending on the facts of the case at hand, some reciprocal distribution agreements may, nevertheless, have restrictive effects on competition. The key issue in assessing an agreement of this type is whether the agreement in question is objectively necessary for the parties to enter each other's markets. If it is,

the agreement does not create competition problems of a horizontal nature. However, if the agreement reduces the decision-making independence of one of the parties with regard to entering the other parties' market or markets by limiting its incentives to do so, it is likely to give rise to restrictive effects on competition. The same reasoning applies to non-reciprocal agreements, where the risk of restrictive effects on competition is, however, less pronounced.

239. Moreover, a distribution agreement can have restrictive effects on competition if it contains vertical restraints, such as restrictions on passive sales, resale price maintenance, etc.

Market power

240. Commercialisation agreements between competitors can only have restrictive effects on competition if the parties have some degree of market power. In most cases, it is unlikely that market power exists if the parties to the agreement have a combined market share not exceeding 15 %. In any event, if the parties' combined market share does not exceed 15 % it is likely that the conditions of Article 101(3) are fulfilled.
241. If the parties' combined market share is greater than 15 %, their agreement will fall outside the safe harbour of paragraph 240 and thus the likely impact of the joint commercialisation agreement on the market must be assessed.

Collusive outcome

242. A joint commercialisation agreement that does not involve price fixing is also likely to give rise to restrictive effects on competition if it increases the parties' commonality of variable costs to a level which is likely to lead to a collusive outcome. This is likely to be the case for a joint commercialisation agreement if prior to the agreement the parties already have a high proportion of their variable costs in common as the additional increment (that is to say, the commercialisation costs of the product subject to the agreement) can tip the balance towards a collusive outcome. Conversely, if the increment is large, the risk of a collusive outcome may be high even if the initial level of commonality of costs is low.
243. The likelihood of a collusive outcome depends on the parties' market power and the characteristics of the relevant market. Commonality of costs can only increase the risk of a collusive outcome if the parties have market power and if the commercialisation costs constitute a large proportion of the variable costs related to the products concerned. This is, for example, not the case for homogeneous products for which the highest cost factor is production. However, commonality of commercialisation costs increases the risk of a collusive outcome if the commercialisation agreement concerns products which entail costly commercialisation, for example, high distribution or marketing costs. Consequently, joint advertising or joint promotion agreements can also give rise to restrictive effects on competition if those costs constitute a significant cost factor.
244. Joint commercialisation generally involves the exchange of sensitive commercial information, particularly on marketing strategy and pricing. In most commercialisation agreements, some degree of information exchange is required in order to implement the agreement. It is therefore necessary to verify whether the information exchange can give rise to a collusive outcome with regard to the parties' activities within and outside the co-operation. Any negative effects arising from the exchange of information will not be assessed separately but in the light of the overall effects of the agreement.
245. For example, where the parties to a joint advertising agreement exchange pricing information, this may lead to a collusive outcome with regard to the sale of the jointly advertised products. In any event, the exchange of such information in the context of a joint advertising agreement goes beyond what would be necessary to implement that agreement. The likely restrictive effects on competition of information exchange in the context of commercialisation agreements will depend on the characteristics of the market and the data shared, and should be assessed in the light of the guidance given in Chapter 2.

6.4. Assessment under Article 101(3)

6.4.1. Efficiency gains

246. Commercialisation agreements can give rise to significant efficiency gains. The efficiencies to be taken into account when assessing whether a commercialisation agreement fulfils the criteria of Article 101(3) will depend on the nature of the activity and the parties to the co-operation. Price fixing can generally not be justified, unless it is indispensable for the integration of other marketing functions, and this integration will generate substantial efficiencies. Joint distribution can generate significant efficiencies, stemming from economies of scale or scope, especially for smaller producers.
247. In addition, the efficiency gains must not be savings which result only from the elimination of costs that are inherently part of competition, but must result from the integration of economic activities. A reduction of transport cost which is only a result of customer allocation without any integration of the logistical system can therefore not be regarded as an efficiency gain within the meaning of Article 101(3).
248. Efficiency gains must be demonstrated by the parties to the agreement. An important element in this respect would be the contribution by the parties of significant capital, technology, or other assets. Cost savings through reduced duplication of resources and facilities can also be accepted. However, if the joint commercialisation represents no more than a sales agency without any investment, it is likely to be a disguised cartel and as such unlikely to fulfil the conditions of Article 101(3).

6.4.2. Indispensability

249. Restrictions that go beyond what is necessary to achieve the efficiency gains generated by a commercialisation agreement do not fulfil the criteria of Article 101(3). The question of indispensability is especially important for those agreements involving price fixing or market allocation, which can only under exceptional circumstances be considered indispensable.

6.4.3. Pass-on to consumers

250. Efficiency gains attained by indispensable restrictions must be passed on to consumers to an extent that outweighs the restrictive effects on competition caused by the commercialisation agreement. This can happen in the form of lower prices or better product quality or variety. The higher the market power of the parties, however, the less likely it is that efficiency gains will be passed on to consumers to an extent that outweighs the restrictive effects on competition. Where the parties have a combined market share of below 15 %, it is likely that any demonstrated efficiency gains generated by the agreement will be sufficiently passed on to consumers.

6.4.4. No elimination of competition

251. The criteria of Article 101(3) cannot be fulfilled if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products in question. This has to be analysed in the relevant market to which the products subject to the co-operation belong and in possible spill-over markets.

6.5. Examples

252. Joint commercialisation necessary to enter a market

Example 1

Situation: Four companies providing laundry services in a large city close to the border of another Member State, each with a 3 % market share of the overall laundry market in that city, agree to create a joint marketing arm for the selling of laundry services to institutional customers (that is to say, hotels, hospitals and offices), whilst keeping their independence and freedom to compete for local, individual clients. In view of the new segment of demand (the institutional customers) they develop a common brand name, a common price and common standard terms including, inter alia, a maximum period of 24 hours before deliveries and schedules for delivery. They set up a common

call centre where institutional clients can request their collection and/or delivery service. They hire a receptionist (for the call centre) and several drivers. They further invest in vans for dispatching, and in brand promotion, to increase their visibility. The agreement does not fully reduce their individual infrastructure costs (since they are keeping their own premises and still compete with each other for the individual local clients), but it increases their economies of scale and allows them to offer a more comprehensive service to other types of clients, which includes longer opening hours and dispatching to a wider geographic coverage. In order to ensure the viability of the project, it is indispensable that all four of them enter into the agreement. The market is very fragmented, with no individual competitor having more than 15 % market share.

Analysis: Although the joint market share of the parties is below 15 %, the fact that the agreement involves price fixing means that Article 101(1) could apply. However, the parties would not have been in a position to enter the market for providing laundry services to institutional customers, either individually or in co-operation with a fewer number of parties than the four currently taking part in the agreement. As such, the agreement would not create competition concerns, irrespective of the price-fixing restriction, which in this case can be considered as indispensable to the promotion of the common brand and the success of the project.

253. Commercialisation agreement by more parties than necessary to enter a market

Example 2

Situation: The same facts as in Example 1, paragraph 252, apply with one main difference: in order to ensure the viability of the project, the agreement could have been implemented by only three of the parties (instead of the four actually taking part in the co-operation).

Analysis: Although the joint market share of the parties is below 15 %, the fact that the agreement involves price fixing and could have been carried out by fewer than the four parties means that Article 101(1) applies. The agreement thus needs to be assessed under Article 101(3). The agreement gives rise to efficiency gains as the parties are now able to offer improved services for a new category of customers on a larger scale (which they would not otherwise have been able to service individually). In the light of the parties' combined market share of below 15 %, it is likely that they will sufficiently pass-on any efficiency gains to consumers. It is further necessary to consider whether the restrictions imposed by the agreement are indispensable to achieve the efficiencies and whether the agreement eliminates competition. Given that the aim of the agreement is to provide a more comprehensive service (including dispatch, which was not offered before) to an additional category of customers, under a single brand with common standard terms, the price fixing can be considered as indispensable to the promotion of the common brand and, consequently, the success of the project and the resulting efficiencies. Additionally, taking into account the market fragmentation, the agreement will not eliminate competition. The fact that there are four parties to the agreement (instead of the three that would have been strictly necessary) allows for increased capacity and contributes to simultaneously fulfilling the demand of several institutional customers in compliance with the standard terms (that is to say, meeting maximum delivery time terms). As such, the efficiency gains are likely to outweigh the restrictive effects arising from the reduction of competition between the parties and the agreement is likely to fulfil the conditions of Article 101(3).

254. Joint internet platform

Example 3

Situation: A number of small specialty shops throughout a Member State join an electronic web-based platform for the promotion, sale and delivery of gift fruit baskets. There are a number of competing web-based platforms. By means of a monthly fee, they share the running costs of the platform and jointly invest in brand promotion. Through the webpage, where a wide range of different types of gift baskets are offered, customers order (and pay for) the type of gift basket they

want to be delivered. The order is then allocated to the specialty shop closest to the address of delivery. The shop individually bears the costs of composing the gift basket and delivering it to the client. It reaps 90 % of the final price, which is set by the web-based platform and uniformly applies to all participating specialty shops, whilst the remaining 10 % is used for the common promotion and the running costs of the web-based platform. Apart from the payment of the monthly fee, there are no further restrictions for specialty shops to join the platform, throughout the national territory. Moreover, specialty shops having their own company website are also able to (and in some cases do) sell gift fruit baskets on the internet under their own name and thus can still compete among themselves outside the co-operation. Customers purchasing over the web-based platform are guaranteed same day delivery of the fruit baskets and they can also choose a delivery time convenient to them.

Analysis: Although the agreement is of a limited nature, since it only covers the joint selling of a particular type of product through a specific marketing channel (the web-based platform), since it involves price-fixing, it is likely to restrict competition by object. The agreement therefore needs to be assessed under Article 101(3). The agreement gives rise to efficiency gains such as greater choice and higher quality service and the reduction of search costs, which benefit consumers and are likely to outweigh the restrictive effects on competition the agreement brings about. Given that the specialty stores taking part in the co-operation are still able to operate individually and to compete one with another, both through their shops and the internet, the price-fixing restriction could be considered as indispensable for the promotion of the product (since when buying through the web-based platform consumers do not know where they are buying the gift basket from and do not want to deal with a multitude of different prices) and the ensuing efficiency gains. In the absence of other restrictions, the agreement fulfils the criteria of Article 101(3). Moreover, as other competing web-based platforms exist and the parties continue to compete with each other, through their shops or over the internet, competition will not be eliminated.

255. Sales joint venture

Example 4

Situation: Companies A and B, located in two different Member States, produce bicycle tyres. They have a combined market share of 14 % on the Union-wide market for bicycle tyres. They decide to set up a (non full-function) sales joint venture for marketing the tyres to bicycle producers and agree to sell all their production through the joint venture. The production and transport infrastructure remains separate within each party. The parties claim considerable efficiency gains stem from the agreement. Such gains mainly relate to increased economies of scale, being able to fulfil the demands of their existing and potential new customers and better competing with imported tyres produced in third countries. The joint venture negotiates the prices and allocates orders to the closest production plant, as a way to rationalise transport costs when further delivering to the customer.

Analysis: Even though the combined market share of the parties is below 15 %, the agreement falls under Article 101(1). It restricts competition by object since it involves customer allocation and the setting of prices by the joint venture. The claimed efficiencies deriving from the agreement do not result from the integration of economic activities or from common investment. The joint venture would have a very limited scope and would only serve as an interface for allocating orders to the production plants. It is therefore unlikely that any efficiency gains would be passed on to consumers to such an extent that they would outweigh the restrictive effects on competition brought about by the agreement. Thus, the conditions of Article 101(3) would not be fulfilled.

256. Non-poaching clause in agreement on outsourcing of services

Example 5

Situation: Companies A and B are competing providers of cleaning services for commercial premises. Both have a market share of 15 %. There are several other competitors with market shares between 10 and 15 %. A has taken the (unilateral) decision to only focus on large customers in the future as servicing large and small customers has proved to require a somewhat different organisation of the work. Consequently, Company A has decided to no longer enter into contracts with new small customers. In addition, Companies A and B enter into an outsourcing agreement whereby Company B would directly provide cleaning services to Company A's existing small customers (which represent 1/3 of its customer base). At the same time, Company A is keen not to lose the customer relationship with those small customers. Hence, Company A will continue to keep its contractual relationships with the small customers but the direct provision of the cleaning services will be done by Company B. In order to implement the outsourcing agreement, Company A will necessarily need to provide Company B with the identities of Company A's small customers which are subject to the agreement. As Company A is afraid that Company B may try to poach those customers by offering cheaper direct services (thereby bypassing Company A), Company A insists that the outsourcing agreement contain a 'non-poaching clause'. According to that clause, Company B may not contact the small customers falling under the outsourcing agreements with a view to providing direct services to them. In addition, Companies A and B agree that Company B may not even provide direct services to those customers if Company B is approached by them. Without the 'non-poaching clause' Company A would not enter into an outsourcing agreement with Company B or any other company.

Analysis: The outsourcing agreement removes Company B as an independent supplier of cleaning services for Company A's small customers as they will no longer be able to enter into a direct contractual relationship with Company B. However, those customers only represent 1/3 of Company A's customer base, that is to say, 5 % of the market. They will still be able to turn to Company A and Company B's competitors, which represent 70 % of the market. Hence, the outsourcing agreement will not enable Company A to profitably raise the prices charged to the customers subject to the outsourcing agreement. In addition, the outsourcing agreement is not likely to give rise to a collusive outcome as Companies A and B only have a combined market share of 30 % and they are faced with several competitors that have market shares similar to Company A's and Company B's individual market shares. Moreover, the fact that servicing large and small customers is somewhat different minimises the risk of spill-over effects from the outsourcing agreement to Company A's and Company B's behaviour when competing for large customers. Consequently, the outsourcing agreement is not likely to give rise to restrictive effects on competition within the meaning of Article 101(1).

7. STANDARDISATION AGREEMENTS

7.1. Definition

Standardisation agreements

257. Standardisation agreements have as their primary objective the definition of technical or quality requirements with which current or future products, production processes, services or methods may comply⁽¹⁾. Standardisation agreements can cover various issues, such as standardisation of different grades or sizes of a particular product or technical specifications in product or services markets where compatibility and interoperability with other products or systems is essential. The terms of access to a particular quality mark or for approval by a regulatory body can also be regarded as a standard. Agreements setting out standards on the environmental performance of products or production processes are also covered by this chapter.

⁽¹⁾ Standardisation can take different forms, ranging from the adoption of consensus based standards by the recognised European or national standards bodies, through consortia and fora, to agreements between independent companies.

258. The preparation and production of technical standards as part of the execution of public powers are not covered by these guidelines ⁽¹⁾. The European standardisation bodies recognised under Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and on rules on Information Society services ⁽²⁾ are subject to competition law to the extent that they can be considered to be an undertaking or an association of undertakings within the meaning of Articles 101 and 102 ⁽³⁾. Standards related to the provision of professional services, such as rules of admission to a liberal profession, are not covered by these guidelines.

Standard terms

259. In certain industries companies use standard terms and conditions of sale or purchase elaborated by a trade association or directly by the competing companies ('standard terms') ⁽⁴⁾. Such standard terms are covered by these guidelines to the extent that they establish standard conditions of sale or purchase of goods or services between competitors and consumers (and not the conditions of sale or purchase between competitors) for substitute products. When such standard terms are widely used within an industry, the conditions of purchase or sale used in the industry may become *de facto* aligned ⁽⁵⁾. Examples of industries in which standard terms play an important role are the banking (for example, bank account terms) and insurance sectors.
260. Standard terms elaborated individually by a company solely for its own use when contracting with its suppliers or customers are not horizontal agreements and are therefore not covered by these guidelines.

7.2. Relevant markets

261. Standardisation agreements may produce their effects on four possible markets, which will be defined according to the Market Definition Notice. First, standard-setting may have an impact on the product or service market or markets to which the standard or standards relates. Second, where the standard-setting involves the selection of technology and where the rights to intellectual property are marketed separately from the products to which they relate, the standard can have effects on the relevant technology market ⁽⁶⁾. Third, the market for standard-setting may be affected if different standard-setting bodies or agreements exist. Fourth, where relevant, a distinct market for testing and certification may be affected by standard-setting.
262. As regards standard terms, the effects are, in general, felt on the downstream market where the companies using the standard terms compete by selling their product to their customers.

7.3. Assessment under Article 101(1)

7.3.1. Main competition concerns

Standardisation agreements

263. Standardisation agreements usually produce significant positive economic effects ⁽⁷⁾, for example by promoting economic interpenetration on the internal market and encouraging the development of new and improved products or markets and improved supply conditions. Standards thus normally

⁽¹⁾ See Case C-113/07, *SELEX*, [2009] ECR I-2207, paragraph 92.

⁽²⁾ OJ L 204, 21.7.1998, p. 37.

⁽³⁾ See judgment of 12 May 2010 in Case T-432/05, *EMC Development AB v. Commission*, not yet reported.

⁽⁴⁾ Such standard terms might cover only a very small part of the clauses contained in the final contract or a large part thereof.

⁽⁵⁾ This refers to a situation where (legally non-binding) standard terms in practice are used by most of the industry and/or for most aspects of the product/service thus leading to a limitation or even lack of consumer choice.

⁽⁶⁾ See Chapter 3 on R&D agreements.

⁽⁷⁾ See also paragraph 308.

increase competition and lower output and sales costs, benefiting economies as a whole. Standards may maintain and enhance quality, provide information and ensure interoperability and compatibility (thus increasing value for consumers).

264. Standard-setting can, however, in specific circumstances, also give rise to restrictive effects on competition by potentially restricting price competition and limiting or controlling production, markets, innovation or technical development. This can occur through three main channels, namely reduction in price competition, foreclosure of innovative technologies and exclusion of, or discrimination against, certain companies by prevention of effective access to the standard.
265. First, if companies were to engage in anti-competitive discussions in the context of standard-setting, this could reduce or eliminate price competition in the markets concerned, thereby facilitating a collusive outcome on the market ⁽¹⁾.
266. Second, standards that set detailed technical specifications for a product or service may limit technical development and innovation. While a standard is being developed, alternative technologies can compete for inclusion in the standard. Once one technology has been chosen and the standard has been set, competing technologies and companies may face a barrier to entry and may potentially be excluded from the market. In addition, standards requiring that a particular technology is used exclusively for a standard or preventing the development of other technologies by obliging the members of the standard-setting organisation to exclusively use a particular standard, may lead to the same effect. The risk of limitation of innovation is increased if one or more companies are unjustifiably excluded from the standard-setting process.
267. In the context of standards involving intellectual property rights ('IPR') ⁽²⁾, three main groups of companies with different interests in standard-setting can be distinguished in the abstract ⁽³⁾. First, there are upstream-only companies that solely develop and market technologies. Their only source of income is licensing revenue and their incentive is to maximise their royalties. Secondly, there are downstream-only companies that solely manufacture products or offer services based on technologies developed by others and do not hold relevant IPR. Royalties represent a cost for them, and not a source of revenue, and their incentive is to reduce or avoid royalties. Finally, there are vertically integrated companies that both develop technology and sell products. They have mixed incentives. On the one hand, they can draw licensing revenue from their IPR. On the other hand, they may have to pay royalties to other companies holding IPR essential to the standard. They might therefore cross-license their own essential IPR in exchange for essential IPR held by other companies.
268. Third, standardisation may lead to anti-competitive results by preventing certain companies from obtaining effective access to the results of the standard-setting process (that is to say, the specification and/or the essential IPR for implementing the standard). If a company is either completely prevented from obtaining access to the result of the standard, or is only granted access on prohibitive or discriminatory terms, there is a risk of an anti-competitive effect. A system where potentially relevant IPR is disclosed up-front may increase the likelihood of effective access being granted to the standard since it allows the participants to identify which technologies are covered by IPR and which are not. This enables the participants to both factor in the potential effect on the final price of the result of the standard (for example choosing a technology without IPR is likely to have a positive effect on the final price) and to verify with the IPR holder whether they would be willing to license if their technology is included in the standard.

⁽¹⁾ Depending on the circle of participants in the standard-setting process, restrictions can occur either on the supplier or on the purchaser side of the market for the standardised product.

⁽²⁾ In the context of this chapter IPR in particular refers to patent(s) (excluding non-published patent applications). However, in case any other type of IPR in practice gives the IPR holder control over the use of the standard the same principles should be applied.

⁽³⁾ In practice, many companies use a mix of these business models.

269. Intellectual property laws and competition laws share the same objectives ⁽¹⁾ of promoting innovation and enhancing consumer welfare. IPR promote dynamic competition by encouraging undertakings to invest in developing new or improved products and processes. IPR are therefore in general pro-competitive. However, by virtue of its IPR, a participant holding IPR essential for implementing the standard, could, in the specific context of standard-setting, also acquire control over the use of a standard. When the standard constitutes a barrier to entry, the company could thereby control the product or service market to which the standard relates. This in turn could allow companies to behave in anti-competitive ways, for example by 'holding-up' users after the adoption of the standard either by refusing to license the necessary IPR or by extracting excess rents by way of excessive ⁽²⁾ royalty fees thereby preventing effective access to the standard. However, even if the establishment of a standard can create or increase the market power of IPR holders possessing IPR essential to the standard, there is no presumption that holding or exercising IPR essential to a standard equates to the possession or exercise of market power. The question of market power can only be assessed on a case by case basis.

Standard terms

270. Standard terms can give rise to restrictive effects on competition by limiting product choice and innovation. If a large part of an industry adopts the standard terms and chooses not to deviate from them in individual cases (or only deviates from them in exceptional cases of strong buyer-power), customers might have no option other than to accept the conditions in the standard terms. However, the risk of limiting choice and innovation is only likely in cases where the standard terms define the scope of the end-product. As regards classical consumer goods, standard terms of sale generally do not limit innovation of the actual product or product quality and variety.

271. In addition, depending on their content, standard terms might risk affecting the commercial conditions of the final product. In particular, there is a serious risk that standard terms relating to price would restrict price competition.

272. Moreover, if the standard terms become industry practice, access to them might be vital for entry into the market. In such cases, refusing access to the standard terms could risk causing anti-competitive foreclosure. As long as the standard terms remain effectively open for use for anyone that wishes to have access to them, they are unlikely to give rise to anti-competitive foreclosure.

7.3.2. Restrictions of competition by object

Standardisation agreements

273. Agreements that use a standard as part of a broader restrictive agreement aimed at excluding actual or potential competitors restrict competition by object. For instance, an agreement whereby a national association of manufacturers sets a standard and puts pressure on third parties not to market products that do not comply with the standard or where the producers of the incumbent product collude to exclude new technology from an already existing standard ⁽³⁾ would fall into this category.

⁽¹⁾ See Technology Transfer Guidelines, paragraph 7.

⁽²⁾ High royalty fees can only be qualified as excessive if the conditions for an abuse of a dominant position as set out in Article 102 of the Treaty and the case-law of the Court of Justice of the European Union are fulfilled. See for example Case 27/76, *United Brands*, [1978] ECR 207.

⁽³⁾ See for example Commission Decision in Case IV/35.691, *Pre-insulated pipes*, OJ L 24, 30.1.1999, p. 1, where part of the infringement of Article 101 consisted in 'using norms and standards in order to prevent or delay the introduction of new technology which would result in price reductions' (paragraph 147).

274. Any agreements to reduce competition by using the disclosure of most restrictive licensing terms prior to the adoption of a standard as a cover to jointly fix prices either of downstream products or of substitute IPR or technology will constitute restrictions of competition by object ⁽¹⁾.

Standard terms

275. Agreements that use standard terms as part of a broader restrictive agreement aimed at excluding actual or potential competitors also restrict competition by object. An example would be where a trade association does not allow a new entrant access to its standards terms, the use of which is vital to ensure entry to the market.
276. Any standard terms containing provisions which directly influence the prices charged to customers (that is to say, recommended prices, rebates, etc.) would constitute a restriction of competition by object.

7.3.3. Restrictive effects on competition

Standardisation agreements

Agreements normally not restrictive of competition

277. Standardisation agreements which do not restrict competition by object must be analysed in their legal and economic context with regard to their actual and likely effect on competition. In the absence of market power ⁽²⁾, a standardisation agreement is not capable of producing restrictive effects on competition. Therefore, restrictive effects are most unlikely in a situation where there is effective competition between a number of voluntary standards.
278. For those standard-setting agreements which risk creating market power, paragraphs 280 to 286 set out the conditions under which such agreements would normally fall outside the scope of Article 101(1).
279. The non-fulfilment of any or all of the principles set out in this section will not lead to any presumption of a restriction of competition within Article 101(1). However, it will necessitate a self-assessment to establish whether the agreement falls under Article 101(1) and, if so, if the conditions of Article 101(3) are fulfilled. In this context, it is recognised that there exist different models for standard-setting and that competition within and between those models is a positive aspect of a market economy. Therefore, standard-setting organisations remain entirely free to put in place rules and procedures that do not violate competition rules whilst being different to those described in paragraphs 280 to 286.
280. Where participation in standard-setting is **unrestricted** and the procedure for adopting the standard in question is **transparent**, standardisation agreements which contain **no obligation to comply** ⁽³⁾ with the standard and provide **access to the standard on fair, reasonable and non-discriminatory terms** will normally not restrict competition within the meaning of Article 101(1).
281. In particular, to ensure **unrestricted participation** the rules of the standard-setting organisation would need to guarantee that all competitors in the market or markets affected by the standard can participate in the process leading to the selection of the standard. The standard-setting organisations would also need to have objective and non-discriminatory procedures for allocating voting rights as well as, if relevant, objective criteria for selecting the technology to be included in the standard.

⁽¹⁾ This paragraph should not prevent unilateral ex ante disclosures of most restrictive licensing terms as described in paragraph 299. It also does not prevent patent pools created in accordance with the principles set out in the Technology Transfer Guidelines or the decision to license IPR essential to a standard on royalty-free terms as set out in this Chapter.

⁽²⁾ See by analogy paragraph 39 *et seq.* As regards market shares see also paragraph 296.

⁽³⁾ See also paragraph 293 in this regard.

282. With respect to **transparency**, the relevant standard-setting organisation would need to have procedures which allow stakeholders to effectively inform themselves of upcoming, on-going and finalised standardisation work in good time at each stage of the development of the standard.
283. Furthermore, the standard-setting organisation's rules would need to ensure effective **access to the standard on fair, reasonable and non discriminatory terms** ⁽¹⁾.
284. In the case of a standard involving IPR, **a clear and balanced IPR policy** ⁽²⁾, **adapted to the particular industry** and the needs of the standard-setting organisation in question, increases the likelihood that the implementers of the standard will be granted effective access to the standards elaborated by that standard-setting organisation.
285. In order to ensure effective access to the standard, the IPR policy would need to require participants wishing to have their IPR included in the standard to provide an irrevocable commitment in writing to offer to license their essential IPR to all third parties on fair, reasonable and non-discriminatory terms (**'FRAND commitment'**) ⁽³⁾. That commitment should be given prior to the adoption of the standard. At the same time, the IPR policy should allow IPR holders to exclude specified technology from the standard-setting process and thereby from the commitment to offer to license, providing that exclusion takes place at an early stage in the development of the standard. To ensure the effectiveness of the FRAND commitment, there would also need to be a requirement on all participating IPR holders who provide such a commitment to ensure that any company to which the IPR owner transfers its IPR (including the right to license that IPR) is bound by that commitment, for example through a contractual clause between buyer and seller.
286. Moreover, the IPR policy would need to require **good faith disclosure**, by participants, of their IPR that might be essential for the implementation of the standard under development. This would enable the industry to make an informed choice of technology and thereby assist in achieving the goal of effective access to the standard. Such a disclosure obligation could be based on ongoing disclosure as the standard develops and on reasonable endeavours to identify IPR reading on the potential standard ⁽⁴⁾. It is also sufficient if the participant declares that it is likely to have IPR claims over a particular technology (without identifying specific IPR claims or applications for IPR). Since the risks with regard to effective access are not the same in the case of a standard-setting organisation with a royalty-free standards policy, IPR disclosure would not be relevant in that context.

FRAND Commitments

287. FRAND commitments are designed to ensure that essential IPR protected technology incorporated in a standard is accessible to the users of that standard on fair, reasonable and non-discriminatory terms and conditions. In particular, FRAND commitments can prevent IPR holders from making the implementation of a standard difficult by refusing to license or by requesting unfair or unreasonable fees (in other words excessive fees) after the industry has been locked-in to the standard or by charging discriminatory royalty fees.
288. Compliance with Article 101 by the standard-setting organisation does not require the standard-setting organisation to verify whether licensing terms of participants fulfil the FRAND commitment. Participants will have to assess for themselves whether the licensing terms and in particular the fees they charge fulfil the FRAND commitment. Therefore, when deciding whether to commit to FRAND for a particular IPR, participants will need to anticipate the implications of the FRAND commitment, notably on their ability to freely set the level of their fees.

⁽¹⁾ For example effective access should be granted to the specification of the standard.

⁽²⁾ As specified in paragraphs 285 and 286.

⁽³⁾ It should be noted that FRAND can also cover royalty-free licensing.

⁽⁴⁾ To obtain the sought after result a good faith disclosure does not need to go as far as to require participants to compare their IPR against the potential standard and issue a statement positively concluding that they have no IPR reading on the potential standard.

289. In case of a dispute, the assessment of whether fees charged for access to IPR in the standard-setting context are unfair or unreasonable should be based on whether the fees bear a reasonable relationship to the economic value of the IPR ⁽¹⁾. In general, there are various methods available to make this assessment. In principle, cost-based methods are not well adapted to this context because of the difficulty in assessing the costs attributable to the development of a particular patent or groups of patents. Instead, it may be possible to compare the licensing fees charged by the company in question for the relevant patents in a competitive environment before the industry has been locked into the standard (*ex ante*) with those charged after the industry has been locked in (*ex post*). This assumes that the comparison can be made in a consistent and reliable manner ⁽²⁾.
290. Another method could be to obtain an independent expert assessment of the objective centrality and essentiality to the standard at issue of the relevant IPR portfolio. In an appropriate case, it may also be possible to refer to *ex ante* disclosures of licensing terms in the context of a specific standard-setting process. This also assumes that the comparison can be made in a consistent and reliable manner. The royalty rates charged for the same IPR in other comparable standards may also provide an indication for FRAND royalty rates. These guidelines do not seek to provide an exhaustive list of appropriate methods to assess whether the royalty fees are excessive.
291. However, it should be emphasised that nothing in these Guidelines prejudices the possibility for parties to resolve their disputes about the level of FRAND royalty rates by having recourse to the competent civil or commercial courts.

Effects based assessment for standardisation agreements

292. The assessment of each standardisation agreement must take into account the likely effects of the standard on the markets concerned. The following considerations apply to all standardisation agreements that depart from the principles as set out in paragraphs 280 to 286.
293. Whether standardisation agreements may give rise to restrictive effects on competition may depend on whether the members of a standard-setting organisation remain **free to develop alternative standards or products** that do not comply with the agreed standard ⁽³⁾. For example, if the standard-setting agreement binds the members to only produce products in compliance with the standard, the risk of a likely negative effect on competition is significantly increased and could in certain circumstances give rise to a restriction of competition by object ⁽⁴⁾. In the same vein, standards only covering minor aspects or parts of the end-product are less likely to lead to competition concerns than more comprehensive standards.
294. The assessment whether the agreement restricts competition will also focus on **access to the standard**. Where the result of a standard (that is to say, the specification of how to comply with the standard and, if relevant, the essential IPR for implementing the standard) is not at all accessible, or only accessible on discriminatory terms, for members or third parties (that is to say, non-members of the relevant standard-setting organisation) this may discriminate or foreclose or segment markets according to their geographic scope of application and thereby is likely to restrict competition. However, in the case of several competing standards or in the case of effective competition between the standardised solution and non-standardised solution, a limitation of access may not produce restrictive effects on competition.

⁽¹⁾ See Case 27/76, *United Brands*, paragraph 250; see also Case C-385/07 P, *Der Grüne Punkt – Duales System Deutschland GmbH*, [2009] ECR I-6155, paragraph 142.

⁽²⁾ See Case 395/87, *Ministère public v Jean-Louis Tournier*, [1989] ECR 2521, paragraph 38; Joined Cases 110/88, 241/88 and 242/88, *Francois Lucazeau v SACEM*, [1989] ECR 2811, paragraph 33.

⁽³⁾ See Commission Decision in Case IV/29/151, *Philips/VCR*, OJ L 47, 18.2.1978, p. 42, paragraph 23: 'As these standards were for the manufacture of VCR equipment, the parties were obliged to manufacture and distribute only cassettes and recorders conforming to the VCR system licensed by Philips. They were prohibited from changing to manufacturing and distributing other video cassette systems ... This constituted a restriction of competition under Article 85(1)(b)'.

⁽⁴⁾ See Commission Decision in Case IV/29/151, *Philips/VCR*, paragraph 23.

295. If **participation in the standard-setting process** is open in the sense that it allows all competitors (and/or stakeholders) in the market affected by the standard to take part in choosing and elaborating the standard, this will lower the risks of a likely restrictive effect on competition by not excluding certain companies from the ability to influence the choice and elaboration of the standard⁽¹⁾. The greater the likely market impact of the standard and the wider its potential fields of application, the more important it is to allow equal access to the standard-setting process. However, if the facts at hand show that there is competition between several such standards and standard-setting organisations (and it is not necessary that the whole industry applies the same standards) there may be no restrictive effects on competition. Also, if in the absence of a limitation on the number of participants it would not have been possible to adopt the standard, the agreement would not be likely to lead to any restrictive effect on competition under Article 101(1)⁽²⁾. In certain situations the potential negative effects of restricted participation may be removed or at least lessened by ensuring that stakeholders are **kept informed and consulted** on the work in progress⁽³⁾. The more transparent the procedure for adopting the standard, the more likely it is that the adopted standard will take into account the interests of all stakeholders.
296. To assess the effects of a standard-setting agreement, the **market shares of the goods or services based on the standard** should be taken into account. It might not always be possible to assess with any certainty at an early stage whether the standard will in practice be adopted by a large part of the industry or whether it will only be a standard used by a marginal part of the relevant industry. In many cases the relevant market shares of the companies having participated in developing the standard could be used as a proxy for estimating the likely market share of the standard (since the companies participating in setting the standard would in most cases have an interest in implementing the standard)⁽⁴⁾. However, as the effectiveness of standardisation agreements is often proportional to the share of the industry involved in setting and/or applying the standard, high market shares held by the parties in the market or markets affected by the standard will not necessarily lead to the conclusion that the standard is likely to give rise to restrictive effects on competition.
297. Any standard-setting agreement which clearly **discriminates** against any of the participating or potential members could lead to a restriction of competition. For example, if a standard-setting organisation explicitly excludes upstream only companies (that is to say, companies not active on the downstream production market), this could lead to an exclusion of potentially better technologies.
298. As regards standard-setting agreements with **different types of IPR disclosure models** from the ones described in paragraph 286, it would have to be assessed on a case by case basis whether the disclosure model in question (for example a disclosure model not requiring but only encouraging IPR disclosure) guarantees effective access to the standard. In other words, it needs to be assessed whether, in the specific context, an informed choice between technologies and associated IPR is in practice not prevented by the IPR disclosure model.
299. Finally, standard-setting agreements providing for **ex ante disclosures of most restrictive licensing terms**, will not, in principle, restrict competition within the meaning of Article 101(1). In that regard, it is important that parties involved in the selection of a standard be fully informed not only as to the available technical options and the associated IPR, but also as to the likely cost of that IPR. Therefore, should a standard-setting organisation's IPR policy choose to provide for IPR holders to individually

⁽¹⁾ In Commission Decision in Case IV/31.458, *X/Open Group*, OJ L 35, 6.2.1987, p. 36, the Commission considered that even if the standards adopted were made public, the restricted membership policy had the effect of preventing non-members from influencing the results of the work of the group and from getting the know-how and technical understanding relating to the standards which the members were likely to acquire. In addition, non-members could not, in contrast to the members, implement the standard before it was adopted (see paragraph 32). The agreement was therefore in these circumstances seen to constitute a restriction under Article 101(1).

⁽²⁾ Or if the adoption of the standard would have been heavily delayed by an inefficient process, any initial restriction could be outweighed by efficiencies to be considered under Article 101(3).

⁽³⁾ See Commission Decision of 14 October 2009 in Case 39.416, *Ship Classification*. The Decision can be found at: http://ec.europa.eu/competition/antitrust/cases/index/by_nr_78.html#i39_416

⁽⁴⁾ See paragraph 261.

disclose their most restrictive licensing terms, including the maximum royalty rates they would charge, prior to the adoption of the standard, this will normally not lead to a restriction of competition within the meaning of Article 101(1) ⁽¹⁾. Such unilateral ex ante disclosures of most restrictive licensing terms would be one way to enable the standard-setting organisation to take an informed decision based on the disadvantages and advantages of different alternative technologies, not only from a technical perspective but also from a pricing perspective.

Standard terms

300. The establishment and use of standard terms must be assessed in the appropriate economic context and in the light of the situation on the relevant market in order to determine whether the standard terms at issue are likely to give rise to restrictive effects on competition.
301. As long as participation in the actual establishment of standard terms is **unrestricted** for the competitors in the relevant market (either by participation in the trade association or directly), and the established standard terms are **non-binding** and **effectively accessible** for anyone, such agreements are not likely to give rise to restrictive effects on competition (subject to the caveats set out in paragraphs 303, 304, 305 and 307).
302. Effectively accessible and non-binding standard terms for the sale of consumer goods or services (on the presumption that they have no effect on price) thus generally do not have any restrictive effect on competition since they are unlikely to lead to any negative effect on product quality, product variety or innovation. There are, however, two general exceptions where a more in-depth assessment would be required.
303. Firstly, standard terms for the sale of consumer goods or services where the standard terms define the scope of the product sold to the customer, and where therefore the risk of limiting product choice is more significant, could give rise to restrictive effects on competition within the meaning of Article 101(1) where their common application is likely to result in a *de facto* alignment. This could be the case when the widespread use of the standard terms *de facto* leads to a limitation of innovation and product variety. For instance, this may arise where standard terms in insurance contracts limit the customer's practical choice of key elements of the contract, such as the standard risks covered. Even if the use of the standard terms is not compulsory, they might undermine the incentives of the competitors to compete on product diversification.
304. When assessing whether there is a risk that the standard terms are likely to have restrictive effects by way of a limitation of product choice, factors such as existing competition on the market should be taken into account. For example if there is a large number of smaller competitors, the risk of a limitation of product choice would seem to be less than if there are only a few bigger competitors ⁽²⁾. The market shares of the companies participating in the establishment of the standard terms might also give a certain indication of the likelihood of uptake of the standard terms or of the likelihood that the standard terms will be used by a large part of the market. However, in this respect, it is not only relevant to analyse whether the standard terms elaborated are likely to be used by a large part of the market, but also whether the standard terms only cover part of the product or the whole product (the less extensive the standard terms, the less likely that they will lead, overall, to a limitation of product choice). Moreover, in cases where in the absence of the establishment of the standard terms it would not have been possible to offer a certain product, there would not be likely to be any restrictive effect on competition within the meaning of Article 101(1). In that scenario, product choice is increased rather than decreased by the establishment of the standard terms.

⁽¹⁾ Any unilateral ex ante disclosures of most restrictive licensing terms should not serve as a cover to jointly fix prices either of downstream products or of substitute IPR/technologies which is, as outlined in paragraph 274, a restriction of competition by object.

⁽²⁾ If previous experience with standard terms on the relevant market shows that the standard terms did not lead to lessened competition on product differentiation, this might also be an indication that the same type of standard terms elaborated for a neighbouring product will not lead to a restrictive effect on competition.

305. Secondly, even if the standard terms do not define the actual scope of the end-product they might be a decisive part of the transaction with the customer for other reasons. An example would be online shopping where customer confidence is essential (for example, in the use of safe payment systems, a proper description of the products, clear and transparent pricing rules, flexibility of the return policy, etc). As it is difficult for customers to make a clear assessment of all those elements, they tend to favour widespread practices and standard terms regarding those elements could therefore become a *de facto* standard with which companies would need to comply to sell in the market. Even though non-binding, those standard terms would become a *de facto* standard, the effects of which are very close to a binding standard and need to be analysed accordingly.
306. If the use of standard terms is binding, there is a need to assess their impact on product quality, product variety and innovation (in particular if the standard terms are binding on the entire market).
307. Moreover, should the standard terms (binding or non-binding) contain any terms which are likely to have a negative effect on competition relating to prices (for example terms defining the type of rebates to be given), they would be likely to give rise to restrictive effects on competition within the meaning of Article 101(1).

7.4. Assessment under Article 101(3)

7.4.1. Efficiency gains

Standardisation agreements

308. Standardisation agreements frequently give rise to significant efficiency gains. For example, Union wide standards may facilitate market integration and allow companies to market their goods and services in all Member States, leading to increased consumer choice and decreasing prices. Standards which establish technical interoperability and compatibility often encourage competition on the merits between technologies from different companies and help prevent lock-in to one particular supplier. Furthermore, standards may reduce transaction costs for sellers and buyers. Standards on, for instance, quality, safety and environmental aspects of a product may also facilitate consumer choice and can lead to increased product quality. Standards also play an important role for innovation. They can reduce the time it takes to bring a new technology to the market and facilitate innovation by allowing companies to build on top of agreed solutions.
309. To achieve those efficiency gains in the case of standardisation agreements, the information necessary to apply the standard must be effectively available to those wishing to enter the market ⁽¹⁾.
310. Dissemination of a standard can be enhanced by marks or logos certifying compliance thereby providing certainty to customers. Agreements for testing and certification go beyond the primary objective of defining the standard and would normally constitute a distinct agreement and market.
311. While the effects on innovation must be analysed on a case-by-case basis, standards creating compatibility on a horizontal level between different technology platforms are considered to be likely to give rise to efficiency gains.

Standard terms

312. The use of standard terms can entail economic benefits such as making it easier for customers to compare the conditions offered and thus facilitate switching between companies. Standard terms might also lead to efficiency gains in the form of savings in transaction costs and, in certain sectors (in particular where the contracts are of a complex legal structure), facilitate entry. Standard terms may also increase legal certainty for the contract parties.
313. The higher the number of competitors on the market, the greater the efficiency gain of facilitating the comparison of conditions offered.

⁽¹⁾ See Commission Decision in Case IV/31.458, *X/Open Group*, paragraph 42: 'The Commission considers that the willingness of the Group to make available the results as quickly as possible is an essential element in its decision to grant an exemption'.

7.4.2. Indispensability

314. Restrictions that go beyond what is necessary to achieve the efficiency gains that can be generated by a standardisation agreement or standard terms do not fulfil the criteria of Article 101(3).

Standardisation agreements

315. The assessment of each standardisation agreement must take into account its likely effect on the markets concerned, on the one hand, and the scope of restrictions that possibly go beyond the objective of achieving efficiencies, on the other ⁽¹⁾.
316. Participation in standard-setting should normally be open to all competitors in the market or markets affected by the standard unless the parties demonstrate significant inefficiencies of such participation or recognised procedures are foreseen for the collective representation of interests ⁽²⁾.
317. As a general rule standardisation agreements should cover no more than what is necessary to ensure their aims, whether this is technical interoperability and compatibility or a certain level of quality. In cases where having only one technological solution would benefit consumers or the economy at large that standard should, be set on a non-discriminatory basis. Technology neutral standards can, in certain circumstances, lead to larger efficiency gains. Including substitute IPR ⁽³⁾ as essential parts of a standard while at the same time forcing the users of the standard to pay for more IPR than technically necessary would go beyond what is necessary to achieve any identified efficiency gains. In the same vein, including substitute IPR as essential parts of a standard and limiting the use of that technology to that particular standard (that is to say, exclusive use) could limit inter-technology competition and would not be necessary to achieve the efficiencies identified.
318. Restrictions in a standardisation agreement making a standard binding and obligatory for the industry are in principle not indispensable.
319. In a similar vein, standardisation agreements that entrust certain bodies with the exclusive right to test compliance with the standard go beyond the primary objective of defining the standard and may also restrict competition. The exclusivity can, however, be justified for a certain period of time, for example by the need to recoup significant start-up costs ⁽⁴⁾. The standardisation agreement should in that case include adequate safeguards to mitigate possible risks to competition resulting from exclusivity. This concerns, inter alia, the certification fee which needs to be reasonable and proportionate to the cost of the compliance testing.

⁽¹⁾ In Case IV/29/151, *Philips/VCR*, compliance with the VCR standards led to the exclusion of other, perhaps better systems. Such exclusion was particularly serious in view of the pre-eminent market position enjoyed by Philips '... [R]estrictions were imposed upon the parties which were not indispensable to the attainment of these improvements. The compatibility of VCR video cassettes with the machines made by other manufacturers would have been ensured even if the latter had to accept no more than an obligation to observe the VCR standards when manufacturing VCR equipment' (paragraph 31).

⁽²⁾ See Commission Decision in Case IV/31.458, *X/Open Group*, paragraph 45: '[T]he aims of the Group could not be achieved if any company willing to commit itself to the Group objectives had a right to become a member. This would create practical and logistical difficulties for the management of the work and possibly prevent appropriate proposals being passed.' See also Commission Decision of 14 October 2009 in Case 39.416, *Ship Classification*, paragraph 36: 'the Commitments strike an appropriate balance between maintaining demanding criteria for membership of IACS on the one hand, and removing unnecessary barriers to membership of IACS on the other hand. The new criteria will ensure that only technically competent CSs are eligible to become member of IACS, thus preventing that the efficiency and quality of IACS' work is unduly impaired by too lenient requirements for participation in IACS. At the same time, the new criteria will not hinder CSs, who are technically competent and willing to do so from joining IACS'.

⁽³⁾ Technology which is regarded by users or licensees as interchangeable with or substitutable for another technology, by reason of the characteristics and intended use of the technologies.

⁽⁴⁾ In this context see Commission Decision in Cases IV/34.179, 34.202, 216, *Dutch Cranes (SCK and FNK)*, OJ L 312, 23.12.1995, p. 79, paragraph 23: 'The ban on calling on firms not certified by SCK as sub-contractors restricts the freedom of action of certified firms. Whether a ban can be regarded as preventing, restricting or distorting competition within the meaning of Article 85(1) must be judged in the legal and economic context. If such a ban is associated with a certification system which is completely open, independent and transparent and provides for the acceptance of equivalent guarantees from other systems, it may be argued that it has no restrictive effects on competition but is simply aimed at fully guaranteeing the quality of the certified goods or services'.

Standard terms

320. It is generally not justified to make standard terms binding and obligatory for the industry or the members of the trade association that established them. The possibility cannot, however, be ruled out that making standard terms binding may, in a specific case, be indispensable to the attainment of the efficiency gains generated by them.

7.4.3. Pass-on to consumers

Standardisation agreements

321. Efficiency gains attained by indispensable restrictions must be passed on to consumers to an extent that outweighs the restrictive effects on competition caused by a standardisation agreement or by standard terms. A relevant part of the analysis of likely pass-on to consumers is which procedures are used to guarantee that the interests of the users of standards and end consumers are protected. Where standards facilitate technical interoperability and compatibility or competition between new and already existing products, services and processes, it can be presumed that the standard will benefit consumers.

Standard terms

322. Both the risk of restrictive effects on competition and the likelihood of efficiency gains increase with the companies' market shares and the extent to which the standard terms are used. Hence, it is not possible to provide any general 'safe harbour' within which there is no risk of restrictive effects on competition or which would allow the presumption that efficiency gains will be passed on to consumers to an extent that outweighs the restrictive effects on competition.
323. However, certain efficiency gains generated by standard terms, such as increased comparability of the offers on the market, facilitated switching between providers, and legal certainty of the clauses set out in the standard terms, are necessarily beneficial for the consumers. As regards other possible efficiency gains, such as lower transaction costs, it is necessary to make an assessment on a case-by-case basis and in the relevant economic context whether these are likely to be passed on to consumers.

7.4.4. No elimination of competition

324. Whether a standardisation agreement affords the parties the possibility of eliminating competition depends on the various sources of competition in the market, the level of competitive constraint that they impose on the parties and the impact of the agreement on that competitive constraint. While market shares are relevant for that analysis, the magnitude of remaining sources of actual competition cannot be assessed exclusively on the basis of market share except in cases where a standard becomes a *de facto* industry standard⁽¹⁾. In the latter case competition may be eliminated if third parties are foreclosed from effective access to the standard. Standard terms used by a majority of the industry might create a *de facto* industry standard and thus raise the same concerns. However, if the standard or the standard terms only concern a limited part of the product or service, competition is not likely to be eliminated.

7.5. Examples

325. Setting standards competitors cannot satisfy

Example 1

Situation: A standard-setting organisation sets and publishes safety standards that are widely used by the relevant industry. Most competitors of the industry take part in the setting of the standard. Prior to the adoption of the standard, a new entrant has developed a product which is technically equivalent in terms of the performance and functional requirements and which is recognised by the technical committee of the standard-setting organisation. However, the technical specifications of the safety standard are, without any objective justification, drawn up in such a way as to not allow for this or other new products to comply with the standard.

⁽¹⁾ *De facto* standardisation refers to a situation where a (legally non-binding) standard, is, in practice, used by most of the industry.

Analysis: This standardisation agreement is likely to give rise to restrictive effects on competition within the meaning of Article 101(1) and is unlikely to meet the criteria of Article 101(3). The members of the standards development organisation have, without any objective justification, set the standard in such a way that products of their competitors which are based on other technological solutions cannot satisfy it, even though they have equivalent performance. Hence, this standard, which has not been set on a non-discriminatory basis, will reduce or prevent innovation and product variety. It is unlikely that the way the standard is drafted will lead to greater efficiency gains than a neutral one.

326. Non-binding and transparent standard covering a large part of the market

Example 2

Situation: A number of consumer electronics manufacturers with substantial market shares agree to develop a new standard for a product to follow up the DVD.

Analysis: Provided that (a) the manufacturers remain free to produce other new products which do not conform to the new standard, (b) participation in the standard-setting is unrestricted and transparent, and (c) the standardisation agreement does not otherwise restrict competition, Article 101(1) is not likely to be infringed. If the parties agreed to only manufacture products which conform to the new standard, the agreement would limit technical development, reduce innovation and prevent the parties from selling different products, thereby creating restrictive effects on competition within the meaning of Article 101(1).

327. Standardisation agreement without IPR disclosure

Example 3

Situation: A private standard-setting organisation active in standardisation in the ICT (information and communication technology) sector has an IPR policy which neither requires nor encourages disclosures of IPR which could be essential for the future standard. The standard-setting organisation took the conscious decision not to include such an obligation in particular considering that in general all technologies potentially relevant for the future standard are covered by many IPR. Therefore the standard-setting organisation considered that an IPR disclosure obligation would, on the one hand, not lead to the benefit of enabling the participants to choose a solution with no or little IPR and, on the other, would lead to additional costs in analysing whether the IPR would be potentially essential for the future standard. However, the IPR policy of the standard-setting organisation requires all participants to make a commitment to license any IPR that might read on the future standard on FRAND terms. The IPR policy allows for opt-outs if there is specific IPR that an IPR holder wishes to put outside the blanket licensing commitment. In this particular industry there are several competing private standard-setting organisations. Participation in the standard-setting organisation is open to anyone active in the industry.

Analysis: In many cases an IPR disclosure obligation would be pro-competitive by increasing competition between technologies ex ante. In general, such an obligation allows the members of a standard-setting organisation to factor in the amount of IPR reading on a particular technology when deciding between competing technologies (or even to, if possible, choose a technology which is not covered by IPR). The amount of IPR reading on a technology will often have a direct impact on the cost of access to the standard. However, in this particular context, all available technologies seem to be covered by IPR, and even many IPR. Therefore, any IPR disclosure would not have the positive effect of enabling the members to factor in the amount of IPR when choosing technology since regardless of what technology is chosen, it can be presumed that there is IPR reading on that

technology. IPR disclosure would be unlikely to contribute to guaranteeing effective access to the standard which in this scenario is sufficiently guaranteed by the blanket commitment to license any IPR that might read on the future standard on FRAND terms. On the contrary, an IPR disclosure obligation might in this context lead to additional costs for the participants. The absence of IPR disclosure might also, in those circumstances, lead to a quicker adoption of the standard which might be important if there are several competing standard-setting organisations. It follows that the agreement is unlikely to give rise to any negative effects on competition within the meaning of Article 101(1).

328. Standards in the insurance sector

Example 4

Situation: A group of insurance companies comes together to agree non-binding standards for the installation of certain security devices (that is to say, components and equipment designed for loss prevention and reduction and systems formed from such elements). The non-binding standards set by the insurance companies (a) are agreed in order to address a specific need and to assist insurers to manage risk and offer risk-appropriate premiums; (b) are discussed with the installers (or their representatives) and their views are taken on board prior to finalisation of the standards; (c) are published by the relevant insurance association on a dedicated section of its website so that any installer or other interested party can access them easily.

Analysis: The process for setting these standards is transparent and allows for the participation of interested parties. In addition, the result is easily accessible on a reasonable and non-discriminatory basis for anyone that wishes to have access to it. Provided that the standard does not have negative effects on the downstream market (for example by excluding certain installers through very specific and unjustified requirements for installations) it is not likely to lead to restrictive effects on competition. However, even if the standards led to restrictive effects on competition, the conditions set out in Article 101(3) would seem to be fulfilled. The standards would assist insurers in analysing to what extent such installation systems reduce relevant risk and prevent losses so that they can manage risks and offer risk-appropriate premiums. Subject to the caveat regarding the downstream market, they would also be more efficient for installers, allowing them to comply with one set of standards for all insurance companies rather than be tested by every insurance company separately. They could also make it easier for consumers to switch between insurers. In addition, they could be beneficial for smaller insurers who may not have the capacity to test separately. As regards the other conditions of Article 101(3), it seems that the non-binding standards do not go beyond what is necessary to achieve the efficiencies in question, that benefits would be passed on to the consumers (some would even be directly beneficial for the consumers) and that the restrictions would not lead to an elimination of competition.

329. Environmental standards

Example 5

Situation: Almost all producers of washing machines agree, with the encouragement of a public body, to no longer manufacture products which do not comply with certain environmental criteria (for example, energy efficiency). Together, the parties hold 90 % of the market. The products which will be thus phased out of the market account for a significant proportion of total sales. They will be replaced by more environmentally friendly, but also more expensive products. Furthermore, the agreement indirectly reduces the output of third parties (for example, electric utilities and suppliers of components incorporated in the products phased out). Without the agreement, the parties would not have shifted their production and marketing efforts to the more environmentally friendly products.

Analysis: The agreement grants the parties control of individual production and concerns an appreciable proportion of their sales and total output, whilst also reducing third parties' output. Product variety, which is partly focused on the environmental characteristics of the product, is reduced and prices will probably rise. Therefore, the agreement is likely to give rise to restrictive effects on competition within the meaning of Article 101(1). The involvement of the public

authority is irrelevant for that assessment. However, newer, more environmentally friendly products are more technically advanced, offering qualitative efficiencies in the form of more washing machine programmes which can be used by consumers. Furthermore, there are cost efficiencies for the purchasers of the washing machines resulting from lower running costs in the form of reduced consumption of water, electricity and soap. Those cost efficiencies are realised on markets which are different from the relevant market of the agreement. Nevertheless, those efficiencies may be taken into account as the markets on which the restrictive effects on competition and the efficiency gains arise are related and the group of consumers affected by the restriction and the efficiency gains is substantially the same. The efficiency gains outweigh the restrictive effects on competition in the form of increased costs. Other alternatives to the agreement are shown to be less certain and less cost-effective in delivering the same net benefits. Various technical means are economically available to the parties in order to manufacture washing machines which do comply with the environmental characteristics agreed upon and competition will still take place for other product characteristics. Therefore, the criteria of Article 101(3) would appear to be fulfilled.

330. Government encouraged standardisation

Example 6

Situation: In response to the findings of research into the recommended levels of fat in certain processed food conducted by a government-funded think tank in one Member State, several major manufacturers of the processed foods in the same Member State agree, through formal discussions at an industry trade association, to set recommended fat levels for the products. Together, the parties represent 70 % of sales of the products within the Member State. The parties' initiative will be supported by a national advertising campaign funded by the think tank highlighting the dangers of a high fat content in processed foods.

Analysis: Although the fat levels are recommendations and therefore voluntary, as a result of the wide publicity resulting from the national advertising campaign, the recommended fat levels are likely to be implemented by all manufacturers of the processed foods in the Member State. It is therefore likely to become a *de facto* maximum fat level in the processed foods. Consumer choice across the product markets could therefore be reduced. However, the parties will be able to continue to compete with regard to a number of other characteristics of the products, such as price, product size, quality, taste, other nutritional and salt content, balance of ingredients, and branding. Moreover, competition regarding the fat levels in the product offering may increase where parties seek to offer products with the lowest levels. The agreement is therefore unlikely to give rise to restrictive effects on competition within the meaning of Article 101(1).

331. Open standardisation of product packaging

Example 7

Situation: The major manufacturers of a fast-moving consumer product in a competitive market in a Member State – as well as manufacturers and distributors in other Member States who sell the product into the Member State ('importers') – agree with the major packaging suppliers to develop and implement a voluntary initiative to standardise the size and shape of the packaging of the product sold in that Member State. There is currently a wide variation in packaging sizes and materials within and across the Member States. This reflects the fact that the packaging does not represent a high proportion of total production costs and that switching costs for packaging producers are not significant. There is no actual or pending European standard for the packaging. The agreement has been entered into by the parties voluntarily in response to pressure from the Member State's government to meet environmental targets. Together, the manufacturers and importers represent 85 % of sales of the product within the Member State. The voluntary initiative will give rise to a uniform-sized product for sale within the Member State that uses less packaging material, occupies less shelf space, has lower transport and packaging costs, and is more environmentally friendly through reduced packaging waste. It also reduces the recycling costs of producers.

The standard does not specify that particular types of packaging materials must be used. The specifications of the standard have been agreed between manufacturers and importers in an open and transparent manner, with the draft specifications having been published for open consultation on an industry website in a timely manner prior to adoption. The final specifications adopted are also published on an industry trade association website that is freely accessible to any potential entrants, even if they are not members of the trade association.

Analysis: Although the agreement is voluntary, the standard is likely to become a *de facto* industry practice because the parties together represent a high proportion of the market for the product in the Member State and retailers are also being encouraged by the government to reduce packaging waste. As such, the agreement could in theory create barriers to entry and give rise to potential anti-competitive foreclosure effects in the Member State market. This would in particular be a risk for importers of the product in question who may need to repackage the product to meet the *de facto* standard in order to sell in the Member State if the pack size used in other Member States does not meet the standard. However, significant barriers to entry and foreclosure are unlikely to occur in practice because (a) the agreement is voluntary, (b) the standard has been agreed with major importers in an open and transparent manner, (c) switching costs are low, and (d) the technical details of the standard are accessible to new entrants, importers and all packaging suppliers. In particular, importers will have been aware of potential changes to packaging at an early stage of development and will have had the opportunity through the open consultation on the draft standards to put forward their views before the standard was eventually adopted. The agreement therefore may not give rise to restrictive effects on competition within the meaning of Article 101(1).

In any event, it is likely that the conditions of Article 101(3) will be fulfilled in this case: (i) the agreement will give rise to quantitative efficiencies through lower transport and packaging costs, (ii) the prevailing conditions of competition on the market are such that these costs reductions are likely to be passed on to consumers, (iii) the agreement includes only the minimum restrictions necessary to achieve the packaging standard and is unlikely to result in significant foreclosure effects and (iv) competition will not be eliminated in a substantial part of the products in question.

332. Closed standardisation of product packaging

Example 8

Situation: The situation is the same as in Example 7, paragraph 331, except the standard is agreed only between manufacturers of the fast-moving consumer product located within the Member State (who represent 65 % of the sales of the product in the Member State), there was no open consultation on the specifications adopted (which include detailed standards on the type of packaging material that must be used) and the specifications of the voluntary standard are not published. This resulted in higher switching costs for producers in other Member States than for domestic producers.

Analysis: Similar to Example 7, paragraph 331, although the agreement is voluntary, it is very likely to become *de facto* standard industry practice since retailers are also being encouraged by the government to reduce packaging waste and the domestic manufacturers account for 65 % of sales of the product within the Member State. The fact that relevant producers in other Member States were not consulted resulted in the adoption of a standard which imposes higher switching costs on them compared to domestic producers. The agreement may therefore create barriers to entry and give rise to potential anti-competitive foreclosure effects on packaging suppliers, new entrants and importers – all of whom were not involved in the standard-setting process – as they may need to repackage the product to meet the *de facto* standard in order to sell in the Member State if the pack size used in other Member States does not meet the standard.

Unlike in Example 7, paragraph 331, the standardisation process has not been carried out in an open and transparent manner. In particular, new entrants, importers and packaging suppliers have not been given the opportunity to comment on the proposed standard and may not even be aware of it until a late stage, creating the possibility that they may not be able to change their production methods or switch suppliers quickly and effectively. Moreover, new entrants, importers and

packaging suppliers may not be able to compete if the standard is unknown or difficult to comply with. Of particular relevance here is the fact that the standard includes detailed specifications on the packaging materials to be used which, because of the closed nature of the consultation and the standard, importers and new entrants will struggle to comply with. The agreement may therefore restrict competition within the meaning of Article 101(1). This conclusion is not affected by the fact the agreement has been entered into in order to meet underlying environmental targets agreed with the Member State's government.

It is unlikely that the conditions of Article 101(3) will be fulfilled in this case. Although the agreement will give rise to similar quantitative efficiencies as arise under Example 7, paragraph 331, the closed and private nature of the standardisation agreement and the non-published detailed standard on the type of packaging material that must be used are unlikely to be indispensable to achieving the efficiencies under the agreement.

333. Non-binding and open standard terms used for contracts with end-users

Example 9

Situation: A trade association for electricity distributors establishes non-binding standard terms for the supply of electricity to end-users. The establishment of the standard terms is made in a transparent and non-discriminatory manner. The standard terms cover issues such as the specification of the point of consumption, the location of the connection point and the connection voltage, provisions on service reliability as well as the procedure for settling the accounts between the parties to the contract (for example, what happens if the customer does not provide the supplier with the readings of the measurement devices). The standard terms do not cover any issues relating to prices, that is to say, they contain no recommended prices or other clauses related to price. Any company active within the sector is free to use the standard terms as it sees fit. About 80 % of the contracts concluded with end-users in the relevant market are based on these standard terms.

Analysis: These standard terms are not likely to give rise to restrictive effects on competition within the meaning of Article 101(1). Even if they have become industry practice, they do not seem to have any appreciable negative impact on prices, product quality or variety.

334. Standard terms used for contracts between companies

Example 10

Situation: Construction companies in a certain Member State come together to establish non-binding and open standard terms and conditions for use by a contractor when submitting a quotation for construction work to a client. A form of quotation is included together with terms and conditions suitable for building or construction. Together, the documents create the construction contract. Clauses cover such matters as contract formation, general obligations of the contractor and the client and non-price related payment conditions (for example, a provision specifying the contractor's right to give notice to suspend the work for non-payment), insurance, duration, handover and defects, limitation of liability, termination, etc. In contrast to Example 9, paragraph 333, these standard terms would often be used between companies, one active upstream and one active downstream.

Analysis: These standard terms are not likely to have restrictive effects on competition within the meaning of Article 101(1). There would normally not be any significant limitation in the customer's choice of the end-product, namely the construction work. Other restrictive effects on competition do not seem likely. Indeed, several of the clauses above (handover and defects, termination, etc.) would often be regulated by law.

335. Standard terms facilitating the comparison of different companies' products

Example 11

Situation: A national association for the insurance sector distributes non-binding standard policy conditions for house insurance contracts. The conditions give no indication of the level of insurance premiums, the amount of the cover or the excesses payable by the insured. They do not impose comprehensive cover including risks to which a significant number of policyholders are not simultaneously exposed and do not require the policyholders to obtain cover from the same insurer for different risks. While the majority of insurance companies use standard policy conditions, not all their contracts contain the same conditions as they are adapted to each client's individual needs and therefore there is no *de facto* standardisation of insurance products offered to consumers. The standard policy conditions enable consumers and consumer organisations to compare the policies offered by the different insurers. A consumer association is involved in the process of laying down the standard policy conditions. They are also available for use by new entrants, on a non-discriminatory basis.

Analysis: These standard policy conditions relate to the composition of the final insurance product. If the market conditions and other factors would show that there might be a risk of limitation in product variety as a result of insurance companies using such standard policy conditions, it is likely that such possible limitation would be outweighed by efficiencies such as facilitation of comparison by consumers of conditions offered by insurance companies. Those comparisons in turn facilitate switching between insurance companies and thus enhance competition. Furthermore the switching of providers, as well as market entry by competitors, constitutes an advantage for consumers. The fact that the consumer association has participated in the process could, in certain instances, increase the likelihood of those efficiencies which do not automatically benefit the consumers being passed on. The standard policy conditions are also likely to reduce transaction costs and facilitate entry for insurers on a different geographic and/or product markets. Moreover, the restrictions do not seem to go beyond what is necessary to achieve the identified efficiencies and competition would not be eliminated. Consequently, the criteria of Article 101(3) are likely to be fulfilled.