1. INTRODUCTION

1.1. Purpose

1. These guidelines set out the principles for the assessment of horizontal cooperation agreements under Article 81 of the Treaty. A cooperation is of a 'horizontal nature' if an agreement or concerted practice is entered into between companies operating at the same level(s) in the market. In most instances, horizontal cooperation amounts to cooperation between competitors. It covers for example areas such as research and development (R & D), production, purchasing or commercialisation.

2. Horizontal cooperation may lead to competition problems. This is for example the case if the parties to a cooperation agree to fix prices or output, to share markets, or if the cooperation enables the parties to maintain, gain or increase market power and thereby causes negative market effects with respect to prices, output, innovation or the variety and quality of products.

3. On the other hand, horizontal cooperation can lead to substantial economic benefits. Companies need to respond to increasing competitive pressure and a changing market place driven by globalisation, the speed of technological progress and the generally more dynamic nature of markets. Cooperation can be a means to share risk, save costs, pool know-how and launch innovation faster. In particular for small and medium-sized enterprises cooperation is an important means to adapt to the changing market place.

4. The Commission, while recognising the economic benefits that can be generated by cooperation, has to ensure that effective competition is maintained. Article 81 provides the legal framework for a balanced assessment taking into account both anti-competitive effects as well as economic benefits.

5. In the past, two Commission notices and two block exemption regulations provided guidance for the assessment of horizontal cooperation under Article 81. Commission Regulation (EEC) No 417/85 (\(^1\)), as last amended by Regulation (EC) No 2236/97 (\(^2\)) and Commission Regulation (EEC) No 418/85 (\(^3\)), as last amended by Regulation (EC) No 2236/97, provided for the exemption of certain forms of specialisation agreement and research and development agreement (R & D) respectively. Those two Regulations have now been replaced by Commission Regulation (EC) No 2658/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of specialisation agreements (\(^4\)) (the Specialisation block exemption Regulation) and Commission Regulation (EC) No 2659/2000 of 29 November 2000 on the application of Article 81(3) of the Treaty to categories of research and development agreements (\(^5\)) (the R & D block exemption Regulation). The two notices provided guidance in respect of certain types of cooperation agreement falling outside Article 81 (\(^6\)) and the assessment of cooperative joint ventures (\(^7\)).

6. Changing markets have generated an increasing variety and use of horizontal cooperation. More complete and updated guidance is needed to improve clarity and transparency regarding the applicability of Article 81 in this area. Within the assessment greater emphasis has to be put on economic criteria to better reflect recent developments in enforcement practice and the case law of the Court of Justice and Court of First Instance of the European Communities.

7. The purpose of these guidelines is to provide an analytical framework for the most common types of horizontal cooperation. This framework is primarily based on criteria that help to analyse the economic context of a cooperation agreement. 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 cooperation and therefore for the assessment under Article 81. Given the enormous variety in types and combinations of horizontal cooperation and market circumstances in which they operate, it is impossible to provide specific answers for every possible scenario. The present analytical framework based on economic criteria will nevertheless assist businesses in assessing the compatibility of an individual cooperation agreement with Article 81.

8. The guidelines not only replace the Notices referred to in paragraph 5, but also cover a wider range of the most common types of horizontal agreements. They complement the R & D block exemption Regulation and the Specialisation block exemption Regulation.
1.2. Scope of the guidelines

9. These guidelines cover agreements or concerted practices (hereinafter referred to as 'agreements') entered into between two or more companies operating at the same level(s) in the market, e.g. at the same level of production or distribution. Within this context the focus is an cooperation between competitors. The term 'competitors' as used in these guidelines includes both actual (\(\text{\textsuperscript{1}}\)) and potential (\(\text{\textsuperscript{2}}\)).

10. The present guidelines do not, however, address all possible horizontal agreements. They are only concerned with those types of cooperation which potentially generate efficiency gains, namely agreements on R & D, production, purchasing, commercialisation, standardisation, and environmental agreements. Other types of horizontal agreements between competitors, for example on the exchange of information or on minority shareholdings, are to be addressed separately.

11. Agreements that are entered into between companies operating at a different level of the production or distribution chain, that is to say vertical agreements, are in principle excluded from these guidelines and dealt with in Commission Regulation (EC) No 2790/1999 (\(\text{\textsuperscript{3}}\)) (the 'Block Exemption Regulation on Vertical Restraints') and the Guidelines on vertical restraints (\(\text{\textsuperscript{4}}\)). However, to the extent that vertical agreements, e.g. 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, these agreements have to be assessed according to the principles described in the present guidelines. This does not exclude the additional application of the Guidelines on Vertical Restraints to these agreements to assess the vertical restraints included in such agreements (\(\text{\textsuperscript{5}}\)).

12. Agreements may combine different stages of cooperation, for example R & D and the production of its results. Unless they fall under Council Regulation (EEC) No 4064/89 of 21 December 1989 on the control of concentrations between undertakings (\(\text{\textsuperscript{6}}\)), as last amended by Regulation (EC) No 1310/97 (\(\text{\textsuperscript{7}}\)) ('the Merger Regulation'), these agreements are covered by the guidelines. The centre of gravity of the cooperation determines which section of the present guidelines applies to the agreement in question. In the determination of the centre of gravity, account is taken in particular of two factors: firstly, the starting point of the cooperation, and, secondly, the degree of integration of the different functions which are being combined. A cooperation involving both joint R & D and joint production of the results would thus normally be covered in the section on 'Agreements on Research and Development', 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 production. The R & D agreement can thus be regarded as the starting point of the cooperation. This assessment would change if the agreement foresaw a full integration in the area of production and only a partial integration of some R & D activities. In this case, the possible anti-competitive effects and economic benefits of the cooperation would largely relate to the joint production, and the agreement would therefore be examined according to the principles set out in the section on 'Production Agreements'. More complex arrangements such as strategic alliances that combine a number of different areas and instruments of cooperation in varying ways are not covered by the guidelines. The assessment of each individual area of cooperation within an alliance may be carried out with the help of the corresponding chapter in the guidelines. However, complex arrangements must also be analysed in their totality. Due to the variety of areas an alliance may combine, it is impossible to give general guidance for such an overall assessment. Alliances or other forms of cooperation that primarily declare intentions are impossible to assess under the competition rules as long as they lack a precise scope.

13. The criteria set out in these guidelines apply to cooperation concerning both goods and services, collectively referred to as 'products'. However, the guidelines do not apply to the extent that sector-specific rules apply, as in the case for agriculture, transport or insurance (\(\text{\textsuperscript{8}}\)). Operations that come under the Merger Regulation are also not the subject of the present guidelines.

14. Article 81 only applies to those horizontal cooperation agreements which may affect trade between Member States. These guidelines are not concerned with the analysis of the capability of a given agreement to affect trade. The following principles on the applicability of Article 81 are therefore based on the assumption that trade between Member States is affected. In practice, however, this issue needs to be examined on a case-by-case basis.

15. Article 81 does not apply to agreements which are of minor importance because they are not capable of appreciably restricting competition by object or effect. These guidelines are without prejudice to the application of the present or any future 'de minimis' notice (\(\text{\textsuperscript{9}}\)).

16. The assessment under Article 81 as described in these guidelines is without prejudice to the possible parallel application of Article 82 of the Treaty to horizontal cooperation agreements. Furthermore, these guidelines are without prejudice to the interpretation that may be given by the Court of First Instance and the Court of Justice of the European Communities in relation to the application of Article 81 to horizontal cooperation agreements.
1.3. Basic principles for the assessment under Article 81

1.3.1. Article 81(1)

17. Article 81(1) applies to horizontal cooperation agreements which have as their object or effect the prevention, restriction or distortion of competition (hereinafter referred to as 'restrictions of competition').

18. In some cases the nature of a cooperation indicates from the outset the applicability of Article 81(1). This is the case for agreements that have as their object a restriction of competition by means of price fixing, output limitation or sharing of markets or customers. These agreements are presumed to have negative market effects. It is therefore not necessary to examine their actual effects on competition and the market in order to establish that they fall within Article 81(1).

19. Many horizontal cooperation agreements, however, do not have as their object a restriction of competition. Therefore, an analysis of the effects of the agreement is necessary. For this analysis it is not sufficient that the agreement limits competition between the parties. It must also be likely to affect competition in the market to such an extent that negative market effects as to prices, output, innovation or the variety or quality of goods and services can be expected.

20. Whether the agreement is able to cause such negative market effects depends on the economic context taking into account both the nature of the agreement and the parties' combined market power which determines — together with other structural factors — the capability of the cooperation to affect overall competition to such a significant extent.

Nature of the agreement

21. The nature of an agreement relates to factors such as the area and objective of the cooperation, the competitive relationship between the parties and the extent to which they combine their activities. These factors indicate the likelihood of the parties coordinating their behaviour in the market.

22. Certain types of agreement, for instance most R & D agreements or cooperation to set standards or improve environmental conditions, are less likely to include restrictions with respect to prices and output. If these types of agreements have negative effects at all these are likely to be on innovation or the variety of products. They may also give rise to foreclosure problems.

23. Other types of cooperation such as agreements on production or purchasing typically cause a certain degree of commonality in (total) costs. If this degree is significant, the parties may more easily coordinate market prices and output. A significant degree of commonality in costs can only be achieved under certain conditions: First, the area of cooperation, e.g. production and purchasing, has to account for a high proportion of the total costs in a given market. Secondly, the parties need to combine their activities in the area of cooperation to a significant extent. This is, for instance, the case, where they jointly manufacture or purchase an important intermediate product or a high proportion of their total output of a final product.

Agreements that do not fall under Article 81(1)

24. Some categories of agreements do not fall under Article 81(1) because of their very nature. This is normally true for cooperation that does not imply a coordination of the parties' competitive behaviour in the market such as

— cooperation between non-competitors,

— cooperation between competing companies that cannot independently carry out the project or activity covered by the cooperation,

— cooperation concerning an activity which does not influence the relevant parameters of competition.

These categories of cooperation could only come under Article 81(1) if they involve firms with significant market power (17) and are likely to cause foreclosure problems vi-à-vis third parties.

Agreements that almost always fall under Article 81(1)

25. Another category of agreements can be assessed from the outset as normally falling under Article 81(1). This concerns cooperation agreements that have the object to restrict competition by means of price fixing, output limitation or sharing of markets or customers. These restrictions are considered to be the most harmful, because they directly interfere with the outcome of the competitive process. Price fixing and output limitation directly lead to customers paying higher prices or not receiving the desired quantities. The sharing of markets or customers reduces the choice available to customers and therefore also leads to higher prices or reduced output. It can therefore be presumed that these restrictions have negative market effects. They are therefore almost always prohibited (18).
Agreements that may fall under Article 81(1)

26. Agreements that do not belong to the above-mentioned categories need further analysis in order to decide whether they fall under Article 81(1). The analysis has to include market-related criteria such as the market position of the parties and other structural factors.

Market power and market structure

27. The starting point for the analysis is the position of the parties in the markets affected by the cooperation. This determines whether or not they are likely to maintain, gain or increase market power through the cooperation, i.e. have the ability to cause negative market effects as to prices, output, innovation or the variety or quality of goods and services. To carry out this analysis the relevant market(s) have to be defined by using the methodology of the Commission's market definition notice (19). Where specific types of markets are concerned such as purchasing or technology markets, these guidelines will provide additional guidance.

28. If the parties together have a low combined market share (20), a restrictive effect of the cooperation is unlikely and no further analysis normally is required. 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 restrictive effect on competition in the market (21). Given the variety of cooperation types and the different effects they may cause in different market situations, it is impossible to give a general market share threshold above which sufficient market power for causing restrictive effects can be assumed.

29. In addition to 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, the countervailing power of buyers/suppliers or the nature of the products (e.g. homogeneity, maturity) have to be considered as well. Where an impact on competition in innovation is likely and can not be assessed adequately on the basis of existing markets, specific factors to analyse these impacts may have to be taken into account (see Chapter 2, R & D agreements).

1.3.2. Article 81(3)

31. Agreements that come under Article 81(1) may be exempted provided the conditions of Article 81(3) are fulfilled. This is the case if the agreement

— contributes to improving the production or distribution of products or to promoting technical or economic progress

— allows consumers a fair share of the resulting benefit

and does not

— impose restrictions which are not indispensable to the attainment of the above listed objectives

— afford the possibility of eliminating competition in respect of a substantial part of the products in question.

Economic benefits

32. The first condition requires that the agreement contributes to improving the production or distribution of products or to promoting technical or economic progress. As these benefits relate to static or dynamic efficiencies, they can be referred to as 'economic benefits'. Economic benefits may outweigh restrictive effects on competition. For instance, a cooperation may enable firms to offer goods or services at lower prices, better quality or to launch innovation more quickly. Most efficiencies stem from the combination and integration of different skills or resources. The parties must demonstrate that the efficiencies are likely to be caused by the cooperation and cannot be achieved by less restrictive means (see also below). Efficiency claims must be substantiated. Speculations or general statements on cost savings are not sufficient.

33. The Commission does not take into account cost savings that arise from output reduction, market sharing, or from the mere exercise of market power.
Fair share for the consumers

34. Economic benefits have to favour not only the parties to the agreement, but also the consumers. Generally, the transmission of the benefits to the consumers will depend on the intensity of competition within the relevant market. Competitive pressures will normally ensure that cost-savings are passed on by way of lower prices or that companies have an incentive to bring new products to the market as quickly as possible. Therefore, if sufficient competition which effectively constrains the parties to the agreement is maintained on the market, the competitive process will normally ensure that the consumers receive a fair share of the economic benefits.

Indispensability

35. The restriction of competition must be necessary to achieve the economic benefits. If there are less restrictive means to achieve similar benefits, the claimed efficiencies cannot be used to justify the restrictions of competition. Whether or not individual restrictions are necessary depends on market circumstances and on the duration of the agreement. For instance, exclusivity agreements may prevent a participating party from free riding and may therefore be acceptable. Under certain circumstances they may, however, not be necessary and worsen a restrictive effect.

No elimination of competition

36. The last criterion of elimination of competition for a substantial part of the products in question is related to the question of dominance. Where an undertaking is dominant or becoming dominant as a consequence of a horizontal agreement, an agreement which produces anti-competitive effects in the meaning of Article 81 can in principle not be exempted.

Block Exemption Regulations for R & D and Specialisation

37. Under certain conditions the criteria of Article 81(3) can be assumed to be fulfilled for specified categories of agreements. This is in particular the case for R & D and production agreements where the combination of complementary skills or assets can be the source of substantial efficiencies. These guidelines should be seen as a complement to the R & D and Specialisation block exemption Regulations. Those block exemption Regulations exempt most common forms of agreements in the fields of production/specialisation up to a market share threshold of 20% and in the field of R & D up to a market share threshold of 25% provided that the agreements fulfil the conditions for application of the block exemption and do not contain ‘hard core’ restrictions (‘black clauses’) that render the block exemption inapplicable. The block exemption Regulations do not provide severability for hardcore restrictions. If there are one or more hardcore restrictions, the benefit of the block exemption Regulation is lost for the entire agreement.

1.4. Structure of the following chapters on types of cooperation

38. The guidelines are divided into chapters relating to certain types of agreements. Each chapter is structured according to the analytical framework described above under point 1.3. Where necessary, specific guidance on the definition of relevant markets is given (e.g. in the field of R & D or with respect to purchasing markets).

2. AGREEMENTS ON RESEARCH AND DEVELOPMENT

2.1. Definition

39. R & D agreements may vary in form and scope. They range from outsourcing certain R & D activities to the joint improvement of existing technologies or to a cooperation concerning the research, development and marketing of completely new products. They may take the form of a cooperation 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 provided that the cooperation's centre of gravity lies in R & D, with the exception of mergers and joint ventures falling under the Merger Regulation.

40. Cooperation in R&D may reduce duplicative, unnecessary costs, lead to significant cross fertilisation of ideas and experience and thus result in products and technologies being developed more rapidly than would otherwise be the case. As a general rule, R & D cooperation tends to increase overall R & D activities.

41. Small and medium-sized enterprises (SMEs) form a dynamic and heterogeneous community which is confronted by many challenges, including the growing demands of larger companies for which they often work as sub-contractors. In R & D intensive sectors, fast growing SMEs, more often called ‘start-up companies’, also aim at becoming a leader in fast-developing market segments. To meet those challenges and to remain competitive, SMEs need constantly to innovate. Through R & D cooperation there is a likelihood that overall R & D by SMEs will increase and that they will be able to compete more vigorously with stronger market players.

42. Under certain circumstances, however, R & D agreements may cause competition problems such as restrictive effects on prices, output, innovation, or variety or quality of products.
2.2. Relevant markets

43. 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 a competitive constraint on the parties. At one end of the spectrum of possible situations, the innovation may result in a product (or technology) which competes in an existing product (or technology) market. This is 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, innovation may result in an entirely new product which creates its own new market (e.g. of the spectrum of a new vaccine for a previously incurable disease). In such a case, existing markets are only relevant if they are somehow related to the innovation in question. Consequently, and if possible, the effects of the cooperation on innovation have to be assessed. However, most of the cases probably concern situations in between these two extremes, i.e. situations in which innovation efforts may create products (or technology) which, over time, replace existing ones (e.g. 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 markets

(a) Product markets

44. When the cooperation concerns R & D for the improvement of existing products, these existing products including its close substitutes form the relevant market concerned by the cooperation (24).

45. If the R & D efforts aim at a significant change of an existing product or even at a new product replacing existing ones, substitution with the existing products may be imperfect or long-term. Consequently, the old and the potentially emerging new products are not likely to belong to the same relevant market. 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. An exploitation of power in the existing market, however, is only possible if the parties together have a strong position with respect to both the existing product market and R & D efforts.

46. If the R & D concerns an important component of a final product, not only the market for this component may be relevant for the assessment, but the existing market for the final product as well. For instance, if car manufacturers cooperate in R & D related to a new type of engine, the car market may be affected by this R & D cooperation. 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 these final products and if the parties to the R & D agreement are important competitors with respect to the final products.

(b) Technology markets

47. R & D cooperation may not only concern products but also technology. When rights to intellectual property are marketed separately from the products concerned 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, i.e. other technologies which customers could use as a substitute.

48. The methodology for defining technology markets follows the same principles as product market definition (25). Starting from the technology which is marketed by the parties, one needs to identify those other technologies to which customers could switch in response to a small but permanent increase in relative prices. Once these technologies are identified, one can calculate market shares by dividing the licensing income generated by the parties with the total licensing income of all sellers of substitutable technologies.

49. The parties’ position in the market for existing technology is a relevant assessment criterion where the R & D cooperation concerns the significant improvement of existing technology or a new technology that is likely to replace the existing technology. The parties’ market share can however only be taken as a starting point for this analysis. In technology markets, particular emphasis must be put on potential competition. If companies, who do not currently license their technology, are potential entrants on the technology market they could constrain the ability of the parties to raise the price for their technology (see Example 3 below).

Competition in innovation (R & D efforts)

50. R & D cooperation may not — or not only — affect competition in existing markets, but competition in innovation. This is the case where cooperation concerns the development of new products/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.
51. 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 R & D poles. R & D poles are R & D efforts directed towards a certain new product or technology, and the substitutes for that R & D, i.e. R & D aimed at developing substitutable products or technology for those developed by the cooperation and having comparable access to resources as well as a similar timing. In this case, it can be analysed if after the agreement there will be a sufficient number of R & D poles left. 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 possible 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 can not be regarded as a close substitute for the parties' R & D effort from the viewpoint of, for instance, access to resources or timing.

52. 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, the Commission would, absent exceptional circumstances, not try to assess the impact of a given R & D cooperation on innovation, but would limit its assessment to product and/or technology markets which are related to the R & D cooperation in question.

Calculation of market shares

53. 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 a cooperation the reference point is the market for products capable of being improved or replaced by the products under development. If the R & D agreement only aims at improving or refining existing products, this 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. If the R & D aims at replacing an existing product, the new product will, if successful, become a substitute to 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 these situations on the market share in 'the relevant market for the products capable of being improved or replaced by the contract products'. For an automatic exemption, this market share may not exceed 25 % (28).

54. If the R & D aims at developing a product which will create a complete 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 exempts these agreements irrespective of market share for a period of seven years after the product is first put on the market (27). However, the benefit of the block exemption may be withdrawn if the agreement would eliminate effective competition in innovation (28). After the seven year period, market shares based on sales value can be calculated, and the market share threshold of 25 % applies (29).

2.3. Assessment under Article 81(1)

2.3.1. Nature of the agreement

2.3.1.1. Agreements that do not fall under Article 81(1)

55. Most R & D agreements do not fall under Article 81(1). First, this can be said for agreements relating to cooperation in R & D at a rather theoretical stage, far removed from the exploitation of possible results.

56. Moreover, R & D cooperation between non-competitors does generally not restrict competition (26). The competitive relationship between the parties has to be analysed in the context of affected existing markets and/or innovation. If the parties are not able to carry out the necessary R & D independently, there is no competition to be restricted. This can apply, for example, to firms 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 cooperation enables them to carry out the R & D activities. The decisive question is whether each party independently has the necessary means as to assets, know-how and other resources.

57. R & D cooperation by means of outsourcing of previously captive R & D is often carried out by specialised companies, research institutes or academic bodies which are not active in the exploitation of the results. Typically such agreements are combined with a transfer of know-how and/or an exclusive supply clause concerning possible results. Due to the complementary nature of the cooperating parties in these scenarios, Article 81(1) does not apply.
2.3.2. Market power and market structures

58. R&D cooperation which does not include the joint exploitation of possible results by means of licensing, production and/or marketing rarely falls under Article 81(1). Those ‘pure’ R&D agreements can only cause a competition problem, if effective competition with respect to innovation is significantly reduced.

2.3.1.2. Agreements that almost always fall under Article 81(1)

59. If the true object of an agreement is not R&D but the creation of a disguised cartel, i.e. otherwise prohibited price fixing, output limitation or market allocation, it falls under Article 81(1). However, an R&D agreement which includes the joint exploitation of possible future results is not necessarily restrictive of competition.

2.3.1.3. Agreements that may fall under Article 81(1)

60. R&D agreements that cannot be assessed from the outset as clearly non-restrictive may fall under Article 81(1) and have to be analysed in their economic context. This applies to R&D cooperation which is set up at a stage rather close to the market launch and which is agreed between companies that are competitors on either existing product/technology markets or on innovation markets.

2.3.2. Market power and market structures

61. R&D cooperation can cause negative market effects in three respects: First, it may restrict innovation, secondly it may cause the coordination of the parties’ behaviour in existing markets and thirdly, foreclosure problems may occur at the level of the exploitation of possible results. These types of negative market effects, however, are only likely to emerge when the parties to the cooperation have significant power on the existing markets and/or without competition with respect to innovation is significantly reduced. Without market power there is no incentive to coordinate behaviour on existing markets or to reduce or slow down innovation. A foreclosure problem may only arise in the context of cooperation involving at least one player with significant market power for a key technology and the exclusive exploitation of results.

62. There is no absolute market share threshold which indicates that an R&D agreement creates some degree of market power and thus falls under Article 81(1). However, R&D agreements are exempted provided that they are concluded between parties with a combined market share not exceeding 25% and that the other conditions for the application of the R&D Block Exemption Regulation are fulfilled. Therefore, for most R&D agreements, restrictive effects only have to be analysed if the parties’ combined market share exceeds 25%.

63. Agreements falling outside the R&D Block Exemption Regulation due to a stronger market position of the parties do not necessarily restrict competition. However, the stronger the combined position of the parties on existing markets and/or the more competition in innovation is restricted, the more likely is the application of Article 81(1) and the assessment requires a more detailed analysis.

64. If the R&D is directed at the improvement or refinement of existing products/technology possible effects concern the relevant market(s) for these existing products/technology. Effects on prices, output and/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 as to competition in these final products are, if invariably, very limited. In general, a distinction has to be made between pure R&D agreements and more comprehensive cooperation involving different stages of the exploitation of results (i.e. licensing, production, marketing). As said above, pure R&D agreements rarely come under Article 81(1). This is in particular true for R&D directed towards a limited improvement of existing products/technology. If, in such a scenario, the R&D cooperation includes joint exploitation only by means of licensing, restrictive effects such as foreclosure problems are unlikely. If, however, joint production and/or marketing of the slightly improved products/technology are included, the cooperation has to be examined more closely. First, negative effects as to prices and output in existing markets are more likely if strong competitors are involved in such a situation. Secondly, the cooperation may come closer to a production agreement because the R&D activities may de facto not form the centre of gravity of such a collaboration.

65. 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/technology or the speed of innovation. Those restrictive effects can arise where two or more of the few firms engaged in the development of such a new product, start to cooperate at a stage where
they are each independently rather near to the launch of the product. In such a case, innovation may be restricted even by a pure R & D agreement. In general, however, R & D cooperation concerning entirely new products is pro-competitive. This principle does not change significantly if the joint exploitation of the results, even joint marketing, is involved. Indeed, the issue of joint exploitation in these situations is only relevant where foreclosure from key technologies plays a role. Those problems would, however, not arise where the parties grant licences to third parties.

66. Most R & D agreements will lie somewhere in between the two situations described above. 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/innovators and entry conditions. In some cases there can be restrictive price/output effects on existing markets and a negative impact on innovation by means of slowing down the speed of development. For instance, if significant competitors on an existing technology market cooperate to develop a new technology which may one day replace existing products, this cooperation is likely to have restrictive effects if the parties have significant market power on the existing market (which would give an incentive to exploit it), and if they also have a strong position with respect to R & D. A similar effect can occur, if the major player in an existing market cooperates with a much smaller or even potential competitor who is just about to emerge with a new product/technology which may endanger the incumbent’s position.

67. Agreements may also fall outside the block exemption irrespective of the market power of the parties. This applies for instance to agreements which restrict access of a party to the results of the work because they do not, as a general rule, promote technical and economic progress by increasing the dissemination of technical knowledge between the parties (32). The Block exemption provides for a specific exception to this general rule in the case of academic bodies, research Regulation institutes or specialised companies which provide R & D as a service and which are not active in the industrial exploitation of the results of research and development (33). Nevertheless, it should be noted that agreements containing exclusive access rights may, where they fall under Article 81(1), meet the criteria for exemption under Article 81(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.

2.4. Assessment under Article 81(3)

2.4.1. Economic benefits

68. Most R & D agreements — with or without joint exploitation of possible results — bring about economic benefits by means of cost savings and cross fertilisation of ideas and experience, thus resulting in improved or new products and technologies being developed more rapidly than would otherwise be the case. Under these conditions it appears reasonable to provide for the exemption of such agreements which result in a restriction of competition up to a market share threshold below which it can, for the application of Article 81(3), in general, be presumed that the positive effects of research and development agreements will outweigh any negative effects on competition. Therefore, the R & D Block Exemption Regulation exempts those R & D agreements which fulfill certain conditions (see Article 3) and which do not include hard core restrictions (see Article 5), provided that the combined market share of the parties in the affected existing market(s) does not exceed 25%.

69. If considerable market power is created or increased by the cooperation, the parties have to demonstrate significant benefits in carrying out R & D, a quicker launch of new products/technology or other efficiencies.

2.4.2. Indispensability

70. An R & D agreement can not be exempted if it imposes restrictions that are not indispensable to the attainment of the above-mentioned benefits. The individual clauses listed in Article 5 of the R & D block exemption Regulation will in most cases render an exemption impossible following an individual assessment too, and can therefore be regarded as a good indication of restrictions that are not indispensable to the cooperation.

2.4.3. No elimination of competition

71. No exemption will be possible, if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products (or technologies) in question. Where as a consequence of a R & D agreement an undertaking is dominant or becoming dominant either on an existing markets or with respect to innovation, such an agreement which produces anti-competitive effects in the meaning of Article 81 can in principle not be exempted. For innovation this is the case, for example, if the agreement combines the only two existing poles of research.

Time of the assessment and duration of the exemption

72. R & D agreements extending to the joint production and marketing of new products/technology require particular attention as to the time of the assessment.
73. At the beginning of an R & D cooperation, its success and factors such as the parties’ future market position as well as the development of future product or technology markets are often not known. Consequently, the assessment at the point in time when the cooperation is formed is limited to the (then) existing product or technology markets and/or innovation markets as described in this chapter. If, on the basis of this analysis, competition is not likely to be eliminated, the R & D agreement can benefit from an exemption. This will normally cover the duration of the R & D phase plus, in as far as the joint production and marketing of the possible results is concerned, an additional phase for a possible launch and market introduction. The reason for this additional exemption phase is that the first companies to reach the market with a new product/technology will often enjoy very high initial market shares and successful R & D is also often rewarded by intellectual property protection. A strong market position due to this ‘first mover advantage’ cannot normally be interpreted as elimination of competition. Therefore, the block exemption covers R & D agreements for an additional period of seven years (i.e. beyond the R & D phase) irrespective of whether or not the parties obtain with their new products/technology a high share within this period. This also applies to the individual assessment of cases falling outside the block exemption provided that the criteria of Article 81(3) as to the other aspects of the agreement are fulfilled. This does not exclude the possibility that a period of more than 7 years also meets the criteria of Article 81(3) if it can be shown to be the minimum period of time necessary to guarantee an adequate return on the investment involved.

74. If a new assessment of an R & D cooperation is made after that period — for instance, following a complaint — the analysis has to be based on the (then) existing market situation. The block exemption still continues to apply if the parties’ share on the (then) relevant market does not exceed 25%. Similarly, Article 81(3) continues to apply to R & D agreements falling outside the block exemption provided that the criteria for an exemption are fulfilled.

2.5. Examples

75. Example 1

Situation: There are two major companies on the European market for the manufacture of existing electronic components: A (30%) and B (30%). They have each made significant investment in the R & D necessary to develop miniaturised electronic components and have developed early prototypes. They now agree to pool these R & D efforts by setting up a JV 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 firms 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 this future market. If the JV 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. While the agreement could have advantages in bringing a new technology forward quicker, it also reduces variety and creates a commonality of costs between the parties. Furthermore, the possibility for the parties to exploit their strong position on the existing market must be taken into account. Since they would face no competition at the R & D level, their incentives to pursue the new technology at a high pace could be severely reduced. Although some of these concerns could be remedied by requiring the parties to license key know-how for manufacturing miniature components to third parties on reasonable terms, it may not be possible to remedy all concerns and fulfill the conditions for an exemption.

76. Example 2

Situation: A small research 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 B of products that have so far been used for treating the disease. Company B lacks any similar R & D programme. For the existing products company B has a market share of around 75% in all Member States, but patents are expiring over the next five-year period. There exist two other poles of research 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 license for the exclusive production and distribution of the resulting product for the duration of the patent. It is expected that the parties could jointly bring the product 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 cooperation, 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, this power will be decreasing shortly 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 own marketing resources. The agreement is therefore unlikely to restrict competition.

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**Situation:** Two engineering companies that produce vehicle components, agree to set up a JV to combine their R & D efforts to improve the production and performance of an existing component. They also pool their existing technology licensing businesses in this area, but will continue to manufacture separately. The two companies have market shares in Europe of 15% and 20% on the 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 these products they 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 firms 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 for the existing components and for the licensing of relevant technology. Although their existing R & D programmes broadly overlap, the reduced duplication through the cooperation could allow them to spend more on R & D than individually. Several other technologies exist and the parties' combined market share on the OEM market does not bring them into a dominant position. Although their market share on the technology market, at 45%, is very high, there are competing technologies. In addition, the vehicle manufacturers, who do not currently licence their technology, are also potential entrants on this market thus constraining the ability of the parties to raise price. As described, the JV is likely to benefit from an exemption.

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### 3. PRODUCTION AGREEMENTS (INCLUDING SPECIALISATION AGREEMENTS)

#### 3.1. Definition

78. Production agreements may vary in form and scope. They may take the form of joint production through a joint venture (34), i.e. a jointly controlled company that runs one or several production facilities, or can be carried out by means of specialisation or subcontracting agreements whereby one party agrees to carry out the production of a certain product.

79. Generally, one can distinguish three categories of production agreements: Joint production agreements, whereby the parties agree to produce certain products jointly, (unilateral or reciprocal) specialisation agreements, whereby the parties agree unilaterally or reciprocally to cease production of a product and to purchase it from the other party, and subcontracting agreements whereby one party (the 'contractor') entrusts to another party (the 'subcontractor') the production of a product.

80. Subcontracting agreements are vertical agreements. They are therefore, to the extent that they contain restrictions of competition, covered by the Block Exemption Regulation and the Guidelines on Vertical Restraints. There are however two exceptions to this rule: Subcontracting agreements between competitors (35), and subcontracting agreements between non-competitors involving the transfer of know-how to the subcontractor (36).

81. Subcontracting agreements between competitors are covered by these guidelines (37). Guidance for the assessment of subcontracting agreements between non-competitors involving the transfer of know-how to the subcontractor is given in a separate Notice (38).

#### 3.2. Relevant markets

82. In order to assess the competitive relationship between the cooperating parties, the relevant product and geographic market(s) directly concerned by the cooperation (i.e. the market(s) to which products subject to the agreement belong) must first be defined. Secondly, a production agreement in one market may also affect the competitive behaviour of the parties in a market which is downstream or upstream or a neighbouring market closely related to the market directly concerned by the cooperation (39) (so-called 'spill-over markets'). However, spill-over effects only occur if the cooperation in one market necessarily results in the coordination of competitive behaviour in another market, i.e. if the markets are linked by interdependencies, and if the parties are in a strong position on the spill-over market.
3.3. Assessment under Article 81 (1)

3.3.1. Nature of the agreement

83. The main source of competition problems that may arise from production agreements is the coordination of the parties' competitive behaviour as suppliers. This type of competition problem arises where the cooperating parties are actual or potential competitors on at least one of these relevant market(s), i.e. on the markets directly concerned by the cooperation and/or on possible spill-over markets.

The fact that the parties are competitors does not automatically cause the coordination of their behaviour. In addition, the parties normally need to cooperate with regard to a significant part of their activities in order to achieve a substantial degree of commonality of costs. The higher the degree of commonality of costs, the greater the potential for a limitation of price competition, especially in the case of homogenous products.

85. In addition to coordination concerns, production agreements may also create foreclosure problems and other negative effects towards third parties. They are not caused by a competitive relationship between the parties, but by a strong market position of at least one of the parties (e.g. on an upstream market for a key component, which enables the parties to raise the costs of their rivals in a downstream market) in the context of a more vertical or complementary relationship between the cooperating parties. Therefore, the possibility of foreclosure mainly needs to be examined in the case of joint production of an important component and of subcontracting agreements (see below).

86. Unless foreclosure problems arise, production agreements between non-competitors are not normally caught by Article 81(1). This is also true for agreements whereby inputs or components which have so far been manufactured for own consumption (captive production) are purchased from a third party by way of subcontracting or unilateral specialisation, unless there are indications that the company which so far has only produced for own consumption could have entered the merchant market for sales to third parties without incurring significant additional costs or risks in response to small, permanent changes in relative market prices.

87. Even production agreements between competitors do not necessarily come under Article 81(1). First, cooperation between firms which compete on markets closely related to the market directly concerned by the cooperation, cannot be defined as restricting competition, if the cooperation is the only commercially justifiable possible way to enter a new market, to launch a new product or service or to carry out a specific project.

88. Secondly, an effect on the parties' competitive behaviour as market suppliers is highly unlikely if the parties have a small proportion of their total costs in common. For instance, a low degree of commonality in total costs can be assumed where two or more companies agree on specialisation/joint production of an intermediate product which only accounts for a small proportion of the production costs of the final product and, consequently, the total costs. The same applies to a subcontracting agreement between competitors where the input which one competitor purchases from another only accounts for a small proportion of the production costs of the final product. A low degree of commonality of total costs can also be assumed where the parties jointly manufacture a final product, but only a small proportion as compared to their total output of the final product. Even if a significant proportion is jointly manufactured, the degree of commonality of total costs may nevertheless be low or moderate, if the cooperation concerns heterogeneous products which require costly marketing.

89. Thirdly, subcontracting agreements between competitors do not fall under Article 81(1) if they are limited to individual sales and purchases on the merchant market without any further obligations and without forming part of a wider commercial relationship between the parties (40).

3.3.1.2. Agreements that almost always fall under Article 81(1)

90. Agreements which fix the prices for market supplies of the parties, limit output or share markets or customer groups have the object of restricting competition and almost always fall under Article 81(1). This does, however, not apply to cases

— where the parties agree on the output directly concerned by the production agreement (e.g. the capacity and production volume of a joint venture or the agreed amount of outsourced products), or

— where a production joint venture that also carries out the distribution of the manufactured products sets the sales prices for these products, provided that the price fixing by the joint venture is the effect of integrating the various functions (41).
In both scenarios the agreement on output or prices will not be assessed separately, but in light of the overall effects of the joint venture on the market in order to determine the applicability of Article 81(1).

3.3.1.3. Agreements that may fall under Article 81(1)

91. Production agreements that cannot be characterised as clearly restrictive or non-restrictive on the basis of the above factors may fall under Article 81(1) \(^{(2)}\) and have to be analysed in their economic context. This applies to cooperation agreements between competitors which create a significant degree of commonality of costs, but do not involve hard core restrictions as described above.

3.3.2. Market power and market structures

92. The starting point for the analysis is the position of the parties in the market(s) concerned. This is due to the fact that without market power the parties to a production agreement do not have an incentive to coordinate their competitive behaviour as suppliers. Secondly, there is no effect on competition in the market without market power of the parties, even if the parties would coordinate their behaviour.

93. There is no absolute market share threshold which indicates that a production agreement creates some degree of market power and thus falls under Article 81(1). However, agreements concerning unilateral or reciprocal specialisation as well as joint production are block exempted provided that they are concluded between parties with a combined market share not exceeding 20% in the relevant market(s) and that the other conditions for the application of the Specialisation block exemption Regulation are fulfilled. Therefore, for agreements covered by the block exemption, restrictive effects only have to be analysed if the parties combined market share exceeds 20%.

94. Agreements which are not covered by the block exemption Regulation require a more detailed analysis. The starting point is the market position of the parties. This will normally be followed by the concentration ratio and the number of players as well as by other factors as described in Chapter 1.

95. Usually the analysis will only involve the relevant market(s) with which the cooperation is directly concerned. Under certain circumstances, e.g. if the parties have a very strong combined position on up- or downstream markets or on markets otherwise closely related to the markets with which the cooperation is directly concerned, these spill-over markets may however have to be analysed as well. This applies in particular to cooperation in upstream markets by firms which also enjoy a strong combined market position further downstream. Similarly, problems of foreclosure may need to be examined if the parties individually have a strong position as either suppliers or buyers of an input.

96. If the parties' combined market share is larger than 20%, the likely impact of the production agreement on the market must be assessed. In this respect market concentration as well as market shares will be a significant factor. The higher the combined market share of the parties, the higher the concentration in the market concerned. However, a moderately higher market share than allowed for in the block exemption does not necessarily imply a high concentration ratio. For instance, a combined market share of the parties of slightly more than 20% may occur in a market with a moderate concentration (HHI below 1800). In such a scenario a restrictive effect is unlikely. In a more concentrated market, however, a market share of more than 20% may, alongside other elements, lead to a restriction of competition (see also example 1 below). The picture may nevertheless change, if the market is very dynamic with new participants entering the market and market positions changing frequently.

97. For joint production, network effects, i.e. links between a significant number of competitors, can also play an important role. In a concentrated market the creation of an additional link may tip the balance and make collusion in this market likely, even if the parties have a significant, but still moderate, combined market share (see example 2 below).

98. Under specific circumstances a cooperation between potential competitors may also raise competition concerns. This is, however, limited to cases where a strong player in one market cooperates with a realistic potential entrant, for instance, with a strong supplier of the same product or service in a neighbouring geographic market. The reduction of potential competition creates particular problems if actual competition is already weak and threat of entry is a major source of competition.

Cooperation in upstream markets

99. Joint production of an important component or other input to the parties' final product can cause negative market effects under certain circumstances:
— Foreclosure problems (see example 3 below) provided that the parties have a strong position on the relevant input market (non-captive use) and that switching between captive and non-captive use would not occur in the presence of a small but permanent relative price increase for the product in question.

— Spill-over effects (see example 4 below) provided that the input is an important component of costs and that the parties have a strong position in the downstream market for the final product.

Subcontracting agreements between competitors

100. Similar problems can arise if a competitor subcontracts an important component or other input to its final product from a competitor. This can also lead to:

— Foreclosure problems provided that the parties have a strong position as either suppliers or buyers on the relevant input market (non-captive use). Subcontracting could then either lead to other competitors not being able to obtain this input at a competitive price or to other suppliers not being able to supply the input competitively if they will be losing a large part of their demand.

— Spill-over effects provided that the input is an important component of costs and that the parties have a strong position in the downstream market for the final product.

Specialisation agreements

101. Reciprocal specialisation agreements with market shares beyond the threshold of the block exemption will almost always fall under Article 81(1) and have to be examined carefully because of the risk of market partitioning (see example 5 below).

3.4. Assessment under Article 81(3)

3.4.1. Economic benefits

102. Most common types of production agreements can be assumed to cause some economic benefits in the form of economies of scale or scope or better production technologies unless they are an instrument for price fixing, output restriction or market and customer allocation. Under these conditions it appears reasonable to provide for the examination of such agreements which result in a restriction of competition up to a market share threshold below which it can, for the application of Article 81(3), in general, be presumed that the positive effects of production agreements will outweigh any negative effects on competition. Therefore, agreements concerning unilateral or reciprocal specialisation as well as joint production are block exempted (Specialisation block exemption Regulation) provided that they do not contain hard core restrictions (see Article 5) and that they are concluded between parties with a combined market share not exceeding 20 % in the relevant market(s).

103. For those agreements not covered by the block exemption the parties have to demonstrate improvements of production or other efficiencies. Efficiencies that only benefit the parties or cost savings that are caused by output reduction or market allocation cannot be taken into account.

3.4.2. Indispensability

104. Restrictions that go beyond what is necessary to achieve the economic benefits described above will not be accepted. For instance, parties should not be restricted in their competitive behaviour on output outside the cooperation.

3.4.3. No elimination of competition

105. No exemption will be possible, if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products in question. Where as a consequence of a production agreement an undertaking is dominant or becoming dominant, such an agreement which produces anti-competitive effects in the meaning of Article 81 can in principle not be exempted. This has to be analysed on the relevant market to which the products subject to the cooperation belong and on possible spill-over markets.

3.5. Examples

Joint production

106. The following two examples concern hypothetical cases causing competition problems on the relevant market to which the jointly manufactured products belong.

107. Example 1

**Situation:** Two suppliers, A and B, of the basic chemical product X decide to build a new production plant controlled by a joint venture. This plant will produce roughly 50 % of their total output. X is a homogeneous product and is not substitutable with other products, i.e. forms a relevant market on its own. The market is rather stagnant. The parties will not significantly increase total output, but close down two old factories and shift capacity to the new plant. A and B each have a market share of 20 %. There are three other significant suppliers each with 10-15 % market share and several smaller players.
**Analysis:** It is likely that this joint venture would have an effect on the competitive behaviour of the parties because coordination would give them considerable market power, if not even a dominant position. Severe restrictive effects in the market are probable. High efficiency gains which may outweigh these effects are unlikely in such a scenario where a significant increase in output cannot be expected.

However, only very rapid switching would counteract the high market share of 60%. Otherwise this production venture raises serious competition concerns which cannot be outweighed even by significant economic benefits.

108. Example 2

**Situation:** Two suppliers, A and B, form a production joint venture on the same relevant market as in example 1. The joint venture also produces 50% of the parties’ total output. A and B each have 15% market share. There are 3 other players: C with a market share of 30%, D with 25% and E with 15%. B already has a joint production plant with E.

**Analysis:** Here the market is characterised by very few players and rather symmetric structures. The joint venture creates an additional link between the players. Coordination between A and B would de facto further increase concentration and also link E to A and B. This cooperation is likely to cause a severe restrictive effect, and — as in example 1 — high efficiency gains cannot be expected.

109. Example 3 also concerns the relevant market to which the jointly manufactured products belong, but demonstrates the importance of criteria other than market share (here: switching between captive and non-captive production).

110. Example 3

**Situation:** A and B set up a production joint venture for an intermediate product X through restructuring current plants. The joint venture sells X exclusively to A and B. It produces 40% of A’s total output of X and 50% of B’s total output. A and B are captive users of X and are also suppliers of the non-captive market. A’s share of total industry output of X is 10%, B’s share amounts to 20% and the share of the joint venture to 14%. On the non-captive market, however, A and B have respectively 25% and 35% market share.

**Analysis:** Despite the parties’ strong position on the non-captive market the cooperation may not eliminate effective competition in the market for X, if switching costs between captive and non-captive use are small.

111. Example 4 concerns cooperation regarding an important intermediate product with spill-over effects on a downstream market.

112. Example 4

**Situation:** A and B set up a production joint venture for an intermediate product X. They will close their own factories, which have been manufacturing X, and will cover their needs of X exclusively from the joint venture. The intermediate product accounts for 50% of the total costs of the final product Y. A and B each have a share of 20% in the market for Y. There are two other significant suppliers of Y each with 15% market share and several smaller competitors.

**Analysis:** Here the commonality of costs is high; furthermore, the parties would gain market power through coordination of their behaviour on the market Y. The case raises competition problems and the assessment is almost identical to example 1 although here the cooperation is taking place in an upstream market.

**Reciprocal specialisation**

113. Example 5

**Situation:** A and B each manufacture and supply the homogeneous products X and Y, which belong to different markets. A’s market share of X is 28% and of Y it is 10%. B’s share of X is 10% and of Y it is 30%. Because of scale economies they conclude a reciprocal specialisation agreement according to which A will in future only produce X and B will produce only Y. Both agree on cross-supplies so that they will both remain in the markets as suppliers. Due to the homogeneous nature of the products, distribution costs are minor. There are two other manufacturing suppliers of X and Y with market shares of roughly 15% each, the remaining suppliers have 5-10% shares.

**Analysis:** The degree of commonality of costs is extremely high, only the relatively minor distribution costs remain separate. Consequently, there is very little room for competition left. The parties would gain market power through coordination of their behaviour on the markets for X and Y. Furthermore, it is likely that the market
supplies of Y from A and X from B will diminish over time. The case raises competition problems which the economies of scale are unlikely to outweigh.

The scenario may change if X and Y were heterogeneous products with a very high proportion of marketing and distribution costs (e.g. 65-70% of total costs). Furthermore, if the offer of a complete range of the differentiated products was a condition for competing successfully, the withdrawal of one or more parties as suppliers of X and/or Y would be unlikely. In such a scenario the criteria for exemption may be fulfilled (provided that the economies are significant), despite the high market shares.

Subcontracting between competitors

114. Example 6

**Situation:** A and B are competitors in the market for the final product X. A has a market share of 15%, B of 20%. Both also produce the intermediate product Y, which is an input into the production of X, but is also used to produce other products. It accounts for 10% of the cost of X. A only produces Y for internal consumption, while B is also selling Y to third party customers. Its market share for Y is 10%. A and B agree on a subcontracting agreement, whereby A will purchase 60% of its requirements of Y from B. It will continue to produce 40% of its requirements internally to not lose the know-how related to the production of Y.

**Analysis:** As A has only produced Y for internal consumption, it first needs to be analysed if A is a realistic potential entrant into the merchant market for sales of Y to third parties. If this is not the case, then the agreement does not restrict competition with respect to Y. Spill-over effects into the market for X are also unlikely in view of the low degree of commonality of costs created by the agreement.

If A were to be regarded a realistic potential entrant into the merchant market for sales of Y to third parties, the market position of B in the market for Y would need to be taken into account. As B’s market share is rather low, the result of the analysis would not change.

116. Purchasing agreements are often concluded by small and medium-sized enterprises to achieve volumes and discounts similar to their bigger competitors. These agreements between small and medium-sized enterprises are therefore normally pro-competitive. Even if a moderate degree of market power is created, this may be outweighed by economies of scale provided the parties actually bundle volume.

4. PURCHASING AGREEMENTS

4.1. Definition

115. This chapter focuses on agreements concerning the joint buying of products. Joint buying can be carried out by a jointly controlled company, by a company in which many firms hold a small stake, by a contractual arrangement or even looser form of cooperation.

117. Joint purchasing may involve both horizontal and vertical agreements. In these cases a two-step analysis is necessary. First, the horizontal agreements have to be assessed according to the principles described in the present guidelines. If this assessment leads to the conclusion that a cooperation between competitors in the area of purchasing is acceptable, a further assessment will be necessary to examine the vertical agreements concluded with suppliers or individual sellers. The latter assessment will follow the rules of the Block Exemption Regulation and the Guidelines on Vertical Restraints (43).

118. An example would be an association formed by a group of retailers for the joint purchasing of products. Horizontal agreements concluded between the members of the association or decisions adopted by the association have to be assessed first as a horizontal agreement according to the present guidelines. Only if this assessment is positive does it become relevant to assess the resulting vertical agreements between the association and an individual members or between the association and suppliers. These agreements are covered — up to a certain limit — by the block exemption for vertical restraints (44). Those agreements falling outside the vertical block exemption will not be presumed to be illegal but may need individual examination.

4.2. Relevant markets

119. There are two markets which may be affected by joint buying: First, the market(s) with which the cooperation is directly concerned, i.e. the relevant purchasing market(s). Secondly, the selling market(s), i.e. the market(s) downstream where the participants of the joint purchasing arrangement are active as sellers.
120. The definition of relevant purchasing markets follows the principles described in the Commission Notice on the definition of the relevant market and is based on the concept of substitutability to identify competitive constraints. The only difference to 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. These could be analysed for instance by examining the suppliers’ reaction to a small but lasting price decrease. If the market is defined, the market share can be calculated as the percentage for which the purchases by the parties concerned account out of the total sales of the purchased product or service in the relevant market.

121. Example 1

A group of car manufacturers agree to buy product X jointly. Their combined purchases of X account for 15 units. All the sales of X to car manufacturers account for 50 units. However, X is also sold to manufacturers of products other than cars. All sales of X account for 100 units. Thus, the (purchasing) market share of the group is 15%.

122. If the parties are in addition competitors on one or more selling markets, these markets are also relevant for the assessment. Restrictions of competition on these markets are more likely if the parties will achieve market power by coordinating their behaviour and if the parties have a significant proportion of their total costs in common. This is, for instance, the case if retailers which are active in the same relevant retail market(s) 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. The selling markets have to be defined by applying the methodology described in the Commission Notice on the definition of the relevant market.

4.3. Assessment under Article 81(1)

4.3.1. Nature of the agreement

4.3.1.1. Agreements that do not fall under Article 81(1)

123. By their very nature joint buying agreements will be concluded between companies that are at least competitors on the purchasing markets. If, however, competing purchasers cooperate who are not active on the same relevant market further downstream (e.g. retailers which are active in different geographic markets and cannot be regarded as realistic potential competitors), Article 81(1) will rarely apply unless the parties have a very strong position in the buying markets, which could be used to harm the competitive position of other players in their respective selling markets.

4.3.1.2. Agreements that almost always fall under Article 81(1)

124. Purchasing agreements only come under Article 81(1) by their nature if the cooperation does not truly concern joint buying, but serves as a tool to engage in a disguised cartel, i.e. otherwise prohibited price fixing, output limitation or market allocation.

4.3.1.3. Agreements that may fall under Article 81(1)

125. Most purchasing agreements have to be analysed in their legal and economic context. The analysis has to cover both the purchasing and the selling markets.

4.3.2. Market power and market structures

126. The starting point for the analysis is the examination of the parties’ buying power. Buying power can be assumed if a purchasing agreement accounts for a sufficiently large proportion of the total volume of a purchasing market so that prices can be driven down below the competitive level or access to the market can be foreclosed to competing buyers. A high degree of buying power over the suppliers of a market may bring about inefficiencies such as quality reductions, lessening of innovation efforts, or ultimately sub-optimal supply. However, the primary concerns in the context of buying power are that lower prices may not be passed on to customers further downstream and that it may cause cost increases for the purchasers’ competitors on the selling markets because either suppliers will try to recover price reductions for one group of customers by increasing prices for other customers or competitors have less access to efficient suppliers. Consequently, purchasing markets and selling markets are characterised by interdependencies as set out below.

Interdependencies between purchasing and selling market(s)

127. The cooperation of competing purchasers can appreciably restrict competition by means of creating buying power. Whilst the creation of buying power can lead to lower prices for consumers, buying power is not always pro-competitive and may even, under certain circumstances, cause severe negative effects on competition.
128. First, lower purchasing costs resulting from the exercise of buying power cannot be seen as pro-competitive, if the purchasers together have power on the selling markets. In this case, the cost savings are probably not passed on to consumers. The more combined power the parties have on their selling markets, the higher is the incentive for the parties to coordinate their behaviour as sellers. This may be facilitated if the parties achieve a high degree of commonality of costs through joint purchasing. For instance, if a group of large retailers buys a high proportion of their products together, they will have a high proportion of their total cost in common. The negative effects of joint buying can therefore be rather similar to joint production.

129. Secondly, power on the selling markets may be created or increased through buying power which is used to foreclose competitors or to raise rivals’ costs. Significant buying power by one group of customers may lead to foreclosure of competing buyers by limiting their access to efficient suppliers. It can also cause cost increases for its competitors because suppliers will try to recover price reductions for one group of customers by increasing prices for other customers (e.g., rebate discrimination by suppliers of retailers). This is only possible if the suppliers of the purchasing markets also have a certain degree of market power. In both cases, competition in the selling markets can be further restricted by buying power.

130. There is no absolute threshold which indicates that a buying cooperation creates some degree of market power and thus falls under Article 81(1). However, in most cases, it is unlikely that market power exists if the parties to the agreement have a combined market share of below 15% on the purchasing market(s) as well as a combined market share of below 15% on the selling market(s). In any event, at that level of market share it is likely that the conditions of Article 81(3) explained below are fulfilled by the agreement in question.

131. A market share above this threshold does not automatically indicate that a negative market effect is caused by the cooperation but requires a more detailed assessment of the impact of a joint buying agreement on the market, involving factors such as the market concentration and possible countervailing power of strong suppliers. Joint buying that involves parties with a combined market share significantly above 15% in a concentrated market is likely to come under Article 81(1), and efficiencies that may outweigh the restrictive effect have to be shown by the parties.

4.4. Assessment under Article 81(3)

4.4.1. Economic benefits

132. Purchasing agreements can bring about economic benefits such as economies of scale in ordering or trans-shipment which may outweigh restrictive effects. If the parties together have significant buying or selling power, the issue of efficiencies has to be examined carefully. Cost savings that are caused by the mere exercise of power and which do not benefit consumers cannot be taken into account.

4.4.2. Indispensability

133. Purchasing agreements cannot be exempted if they impose restrictions that are not indispensable to the attainment of the above mentioned benefits. An obligation to buy exclusively through the cooperation can 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.

4.4.3. No elimination of competition

134. No exemption will be possible, if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products in question. This assessment has to cover buying and selling markets. The combined market shares of the parties can be regarded as a starting point. It then needs to be evaluated whether these market shares are indicative of a dominant position, and whether there are any mitigating factors, such as countervailing power of suppliers on the purchasing markets or potential for market entry in the selling markets. Where as a consequence of a purchasing agreement an undertaking is dominant or becoming dominant on either the buying or selling market, such an agreement which produces anti-competitive effects in the meaning of Article 81 can in principle not be exempted.

4.5. Examples

135. Example 2

Situation: Two manufacturers, A and B, decide to jointly buy component X. They are competitors on their selling market. Together their purchases represent 35% of the total sales of X in the EEA, which is assumed to be the relevant geographic market. There are 6 other manufacturers (competitors of A and B on their selling market) accounting for the remaining 65% of the purchasing market; one having 25%, the others accounting for significantly less. The supply side is rather concentrated with 6 suppliers of component X, two with 30% market share each, and the rest with between 10 and 15% (HHI of 2300-2500). On their selling market, A and B achieve a combined market share of 35%.
**Analysis:** Due to the parties' market power in their selling market, the benefits of possible cost savings may not be passed on to final consumers. Furthermore, the joint buying is likely to increase the costs of the parties' smaller competitors because the two powerful suppliers probably recover price reductions for the group by increasing smaller customers' prices. Increasing concentration in the downstream market may be the result. In addition, the cooperation may lead to further concentration among suppliers because smaller ones, which may already work near or below minimum optimal scale, may be driven out of business if they cannot reduce prices further. Such a case probably causes a significant restriction of competition which may not be outweighed by possible efficiency gains from bundling volume.

**Situation:** 150 small retailers conclude an agreement to form a joint buying organisation. They are obliged to buy a minimum volume through the organisation which accounts for roughly 50% of each retailer's total costs. The retailers can buy more than the minimum volume through the organisation, and they may also buy outside the cooperation. They have a combined market share of 20% on each of the purchasing and the selling market(s). A and B are their two large competitors, A has a 25% share on each of the markets concerned, B 35%. The remaining smaller competitors have also formed a buying group. The 150 retailers achieve economies by combining a significant amount of volume and buying tasks.

**Analysis:** The retailers may achieve a high degree of commonality of costs if they ultimately buy more than the agreed minimum volume together. However, together they only have a moderate market position on the buying and the selling market. Furthermore, the cooperation brings about some economies of scale. This cooperation is likely to be exempted.

**Situation:** Two supermarket chains conclude an agreement to jointly buy products which account for roughly 50% of their total costs. On the relevant buying markets for the different categories of products the parties have shares between 25% and 40%, on the relevant selling market (assuming there is only one geographic market concerned) they achieve 40%. There are five other significant retailers each with 10-15% market share. Market entry is not likely.

**Analysis:** It is likely that this joint buying arrangement would have an effect on the competitive behaviour of the parties because coordination would give them significant market power. This is particularly the case if entry is weak. The incentive to coordinate behaviour is higher if the costs are similar. Similar margins of the parties would add an incentive to have the same prices. Even if efficiencies are caused by the cooperation, it is not likely to be exempted due to the high degree of market power.

**Situation:** small cooperatives conclude an agreement to form a joint buying organisation. They are obliged to buy a minimum volume through the organisation. The parties can buy more than the minimum volume through the organisation, but they may also buy outside the cooperation. Each of the parties has a total market share of 5% on each of the purchasing and selling markets, giving a combined market share of 25%. There are two other significant retailers each with 20-25% market share and a number of smaller retailers with market shares below 5%.

**Analysis:** The setting up of the joint buying organisation is likely to give the parties a market position on both the purchasing and selling markets of a degree which enables them to compete with the two largest retailers. Moreover, the presence of these two other players with similar levels of market position is likely to result in the efficiencies of the agreement being passed on to consumers. In such a scenario the agreement is likely to be exempted.
5.2. Relevant markets

To assess the competitive relationship between the operating parties, first the relevant product and geographic market(s) directly concerned by the cooperation (i.e. the market(s) to which products subject to the agreement belong) have to be defined. Secondly, a commercialisation agreement in one market may also affect the competitive behaviour of the parties in a neighbouring market closely related to the market directly concerned by the cooperation.

5.3. Assessment under Article 81(1)

5.3.1. Nature of the agreement

5.3.1.1. Agreements that do not fall under Article 81(1)

The commercialisation agreements covered by this section only fall under the competition rules if the parties to the agreements are competitors. If the parties clearly do not compete with regard to the products or services covered by the agreement, the agreement cannot create competition problems of a horizontal nature. However, the agreement can fall under Article 81(1) if it contains vertical restraints, such as restrictions on passive sales, resale price maintenance, etc. This also applies if a cooperation in commercialisation is objectively necessary to allow one party to enter a market it could not have entered individually, for example because of the costs involved. A specific application of this principle would be consortia arrangements that allow the companies involved to mount a credible tender for projects that they would not be able to fulfil, or would not have bid for, individually. As they are therefore not potential competitors for the tender, there is no restriction of competition.

5.3.1.2. Agreements that almost always fall under Article 81(1)

The principal competition concern about a commercialisation agreement between competitors is price fixing. Agreements limited to joint selling have as a rule the object and effect of coordinating the pricing policy of competing manufacturers. In this case they not only eliminate price competition between the parties but also restrict the volume of products to be delivered by the participants within the framework of the system for allocating orders. They therefore restrict competition between the parties on the supply side and limit the choice of purchasers and fall under Article 81(1).

5.3.1.3. Agreements that may fall under Article 81(1)

For commercialisation arrangements that fall short of joint selling there will be two major concerns. The first is that the joint commercialisation provides a clear opportunity for exchanges of sensitive commercial information particularly on marketing strategy and pricing. The second is that, depending on the cost
structure of the commercialisation, a significant input to the parties' final costs may be common. As a result the actual scope for price competition at the final sales level may be limited. Joint commercialisation agreements therefore can fall under Article 81(1) if they either allow the exchange of sensitive commercial information, or if they influence a significant part of the parties' final cost.

147. A specific concern related to distribution arrangements between competitors which are active in different geographic markets is that they can lead to or be an instrument of market partitioning. In the case of reciprocal agreements to distribute each other's products, the parties to the agreement allocate markets or customers and eliminate competition between themselves. The key question in assessing an agreement of this type is if the agreement in question is objectively necessary for the parties to enter each other's market. If it is, the agreement does not create competition problems of a horizontal nature. However, the distribution agreement can fall under Article 81(1) if it contains vertical restraints, such as restrictions on passive sales, resale price maintenance, etc. If the agreement is not objectively necessary for the parties to enter each other's market, it falls under 81(1). If the agreement is not reciprocal, the risk of market partitioning is less pronounced. It needs however to be assessed if the non-reciprocal agreement constitutes the basis for a mutual understanding to not enter each other's market or is a means to control access to or competition on the ‘importing’ market.

5.3.2. Market power and market structure

148. As indicated above, agreements that involve price fixing will always fall under Article 81(1) irrespective of the market power of the parties. They may, however, be exemptable under Article 81(3) under the conditions described below:

149. Commercialisation agreements between competitors which do not involve price fixing are only subject to Article 81(1) if the parties to the agreement 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 of below 15 %. In any event, at that level of market share it is likely that the conditions of Article 81(3) explained below are fulfilled by the agreement in question.

150. If the parties' combined market share is greater than 15 %, the likely impact of the joint commercialisation agreement on the market must be assessed. In this respect market concentration, as well as market shares will be a significant factor. The more concentrated the market the more useful information about prices or marketing strategy to reduce uncertainty and the greater the incentive for the parties to exchange such information (**).
5.4.3. No elimination of competition

155. No exemption will be possible, if the parties are afforded the possibility of eliminating competition in respect of a substantial part of the products in question. In making this assessment, the combined market shares of the parties can be regarded as a starting point. One then needs to evaluate whether these market shares are indicative of a dominant position, and whether there are any mitigating factors, such as the potential for market entry. Where as a consequence of a commercialisation agreement an undertaking is dominant or becoming dominant, such an agreement which produces anti-competitive effects in the meaning of Article 81 can in principle not be exempted.

5.5. Examples

156. Example 1

Situation: 5 small food producers, each with 2 % market share of the overall food market, agree to: combine their distribution facilities; market under a common brand name; and sell their products at a common price. This involves significant investment in warehousing, transport, advertising, marketing and a sales force. It significantly reduces their cost base, representing typically 50 % of the price at which they sell, and allows them to offer a quicker, more efficient distribution system. The customers of the food producers are large retail chains.

Three large multinational food groups dominate the market, each with 20 % market share. The rest of the market is made up of small independent producers. The product ranges of the parties to this agreement overlap in some significant areas, but in no product market does their combined market share exceed 15 %.

Analysis: The agreement involves price fixing and thus falls under Article 81(1), even though the parties to the agreement cannot be considered as having market power. However, the integration of the marketing and distribution appears to provide significant efficiencies which are of benefit to customers both in terms of improved service, and lower costs. The question is therefore whether the agreement is exemptable under Article 81(3). To answer this question it must be established whether the price fixing is indispensable for the integration of the other marketing functions and the attainment of the economic benefits. In this case, the price fixing can be regarded as indispensable, as the clients — large retail chains — do not want to deal with a multitude of prices. It is also indispensable, as the aim — a common brand — can only be credibly achieved if all aspects of marketing, including price, are standardised. As the parties do not have market power and the agreement creates significant efficiencies it is compatible with Article 81.

157. Example 2

Situation: 2 producers of ball bearings, each having a market share of 5 %, create a sales joint venture which will market the products, determine the prices and allocate orders to the parent companies. They retain the right to sell outside this structure. Deliveries to customers continue to be made directly from the parents' factories. They claim that this will create efficiencies as the joint sales force can demonstrate the parties' products at the same time to the same client thus eliminating a wasteful duplication of sales efforts. In addition, the joint venture would, wherever possible, allocate orders to the closest factory possible, thus reducing transport costs.

Analysis: The agreement involves price fixing and thus falls under Article 81(1), even though the parties to the agreement cannot be considered as having market power. It is not exemptable under Article 81(3), as the claimed efficiencies are only cost reductions derived from the elimination of competition between the parties.

158. Example 3

Situation: 2 producers of soft drinks are active in 2 different, neighbouring Member States. Both have a market share of 20 % in their home market. They agree to reciprocally distribute each other's product in their respective geographic market.

Both markets are dominated by a large multi-national soft drink producer, having a market share of 50 % in each market.

Analysis: The agreement falls under Article 81(1) if the parties can be presumed to be potential competitors. Answering this question would thus require an analysis of the barriers to entry into the respective geographic markets. If the parties could have entered each other's market independently, then their agreement eliminates competition between them. However, even though the market shares of the parties indicate that they could have some market power, an analysis of the market structure indicates that this is not the case. In addition, the reciprocal distribution agreement benefits customers as it increases the available choice in each geographic market. The agreement would thus be exemptable even if it were considered to be restrictive of competition.
6. AGREEMENT ON STANDARDS

6.1. Definition

159. Standardisation agreements have as their primary objective the definition of technical or quality requirements with which current or future products, production processes or methods may comply (47). Standardisation agreements can cover various issues, such as standardisation of different grades or sizes of a particular product or technical specifications in 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.

160. Standards related to the provision of professional services, such as rules of admission to a liberal profession, are not covered by these guidelines.

6.2. Relevant markets

161. Standardisation agreements produce their effects on three possible markets, which will be defined according to the Commission notice on market definition. First, the product market(s) to which the standard(s) relates. Standards on entirely new products may raise issues similar to those raised for R & D agreements, as far as market definition is concerned (see Point 2.2). Second, the service market for standard setting, if different standard setting bodies or agreements exist. Third, where relevant, the distinct market for testing and certification.

6.3. Assessment under Article 81(1)

162. Agreements to set standards (69) may be either concluded between private undertakings or set under the aegis of public bodies or bodies entrusted with the operation of services of general economic interest, such as the standards bodies recognised under Directive 98/34/EC (69). The involvement of such bodies is subject to the obligations of Member States regarding the preservation of non-distorted competition in the Community.

163. Where participation in standard setting is unrestricted and transparent, standardisation agreements as defined above, which set no obligation to comply with the standard or which are parts of a wider agreement to ensure compatibility of products, do not restrict competition. This normally applies to standards adopted by the recognised standards bodies which are based on non-discriminatory, open and transparent procedures.

164. No appreciable restriction exists for those standards that have a negligible coverage of the relevant market, as long as it remains so. No appreciable restriction is found either in agreements which pool together SMEs to standardise access forms or conditions to collective tenders or those that standardise aspects such as minor product characteristics, forms and reports, which have an insignificant effect on the main factors affecting competition in the relevant markets.

6.3.1.2. Agreements that almost always fall under Article 81(1)

165. Agreements that use a standard as a means amongst other parts of a broader restrictive agreement aimed at excluding actual or potential competitors will almost always be caught by Article 81(1). For instance, an agreement whereby a national association of manufacturers set a standard and put pressure on third parties not to market products that did not comply with the standard would be in this category.

6.3.1.3. Agreements that may fall under Article 81(1)

166. Standardisation agreements may be caught by Article 81(1) insofar as they grant the parties joint control over production and/or innovation, thereby restricting their ability to compete on product characteristics, while affecting third parties like suppliers or purchasers of the standardised products. The assessment of each agreement must take into account the nature of the standard and its likely effect on the markets concerned, on the one hand, and the scope of possible restrictions that go beyond the primary objective of standardisation, as defined above, on the other.

167. The existence of a restriction of competition in standardisation agreements depends upon the extent to which the parties remain free to develop alternative standards or products that do not comply with the agreed standard. Standardisation agreements may restrict competition where they prevent the parties from either developing alternative standards or commercialising products that do not comply with the standard. 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. Agreements that impose restrictions on marking of conformity with standards, unless imposed by regulatory provisions, may also restrict competition.
6.3.2. Market power and market structures

168. High market shares held by the parties in the market(s) affected will not necessarily be a concern for standardisation agreements. Their effectiveness is often proportional to the share of the industry involved in setting and/or applying the standard. On the other hand, standards that are not accessible to third parties may discriminate or foreclose third parties or segment markets according to their geographic scope of application. Thus, the assessment whether the agreement restricts competition will focus, necessarily on an individual basis, on the extent to which such barriers to entry are likely to be overcome.

6.4. Assessment under Article 81(3)

6.4.1. Economic benefits

169. The Commission generally takes a positive approach towards agreements that promote economic interpenetration in the common market or encourage the development of new markets and improved supply conditions. To materialise those economic benefits, the necessary information to apply the standard must be available to those wishing to enter the market and an appreciable proportion of the industry must be involved in the setting of the standard in a transparent manner. It will be for the parties to demonstrate that any restrictions on the setting, use or access to the standard provide economic benefits.

170. In order to reap technical or economic benefits, standards should not limit innovation. This will depend primarily on the lifetime of the associated products, in connection with the market development stage (fast growing, growing, stagnant...). The effects on innovation must be analysed on a case-by-case basis. The parties may also have to provide evidence that collective standardisation is efficiency-enhancing for the consumer when a new standard may trigger unduly rapid obsolescence of existing products, without objective additional benefits.

6.4.2. Indispensability

171. By their nature, standards will not include all possible specifications or technologies. In some cases, it would be necessary for the benefit of the consumers or the economy at large to have only one technological solution. However, this standard must be set on a non-discriminatory basis. Ideally, standards should be technology neutral. In any event, it must be justifiable why one standard is chosen over another.

172. All competitors in the market(s) affected by the standard should have the possibility of being involved in discussions. Therefore, participation in standard setting should be open to all, unless the parties demonstrate important inefficiencies in such participation or unless recognised procedures are foreseen for the collective representation of interests, as in formal standards bodies.

173. As a general rule there should be a clear distinction between the setting of a standard and, where necessary, the related R & D, and the commercial exploitation of that standard. Agreements on standards should cover no more than what is necessary to ensure their aims, whether this is technical compatibility or a certain level of quality. For instance, it should be very clearly demonstrated why it is indispensable to the emergence of the economic benefits that an agreement to disseminate a standard in an industry where only one competitor offers an alternative should oblige the parties to the agreement to boycott the alternative.

6.4.3. No elimination of competition

174. There will clearly be a point at which the specification of a private standard by a group of firms that are jointly dominant is likely to lead to the creation of a de facto industry standard. The main concern will then be to ensure that these standards are as open as possible and applied in a clear non-discriminatory manner. To avoid elimination of competition in the relevant market(s), access to the standard must be possible for third parties on fair, reasonable and non-discriminatory terms.

175. To the extent that private organisations or groups of companies set a standard or their proprietary technology becomes a de facto standard, then competition will be eliminated if third parties are foreclosed from access to this standard.

6.5. Examples

176. Example 1

**Situation:** EN 60603-7:1993 defines the requirements to connect television receivers to video-generating accessories such as video recorders and video games. Although the standard is not legally binding, in practice manufacturers both of television receivers and of video games use the standard, as the market requires so.

**Analysis:** Article 81(1) is not infringed. The standard has been adopted by recognised standards bodies, at national, European and international level, through open and transparent procedures, and is based on national consensus reflecting the position of manufacturers and consumers. All manufacturers are allowed to use the standard.
177. Example 2

**Situation:** A number of videocassette manufacturers agree to develop a quality mark or standard to denote the fact that the videocassette meets certain minimum technical specifications. The manufacturers are free to produce videocassettes which do not conform to the standard and the standard is freely available to other developers.

**Analysis:** Provided that the agreement does not otherwise restrict competition, Article 81(1) is not infringed, as participation in standard setting is unrestricted and transparent, and the standardisation agreement does not set an obligation to comply with the standard. If the parties agreed only to produce videocassettes which conform to the new standard, the agreement would limit technical development and prevent the parties from selling different products, which would infringe Article 81(1).

180. Environmental agreements may set out standards on the environmental performance of products (inputs or outputs) or production processes (52). Other possible categories may include agreements at the same level of trade, whereby the parties provide for the common attainment of an environmental target such as recycling of certain materials, emission reductions, or the improvement of energy-efficiency.

181. Comprehensive, industry-wide schemes are set up in many Member States for complying with environmental obligations on take-back or recycling. Such schemes usually comprise a complex set of arrangements, some of which are horizontal, while others are vertical in character. To the extent that these arrangements contain vertical restraints they are not subject to these guidelines.

7. ENVIRONMENTAL AGREEMENTS

7.1. Definition

179. Environmental agreements (50) are those by which the parties undertake to achieve pollution abatement, as defined in environmental law, or environmental objectives, in particular, those set out in Article 174 of the Treaty. Therefore, the target or the measures agreed need to be directly linked to the reduction of a pollutant or a type of waste identified as such in relevant regulations (51). This excludes agreements that trigger pollution abatement as a by-product of other measures.

182. The effects are to be assessed on the markets to which the agreement relates, which will be defined according to the Notice on the definition of the relevant market for the purposes of Community competition law. When the pollutant is not itself a product, the relevant market encompasses that of the product into which the pollutant is incorporated. As for collection/recycling agreements, in addition to their effects on the market(s) on which the parties are active as producers or distributors, the effects on the market of collection services potentially covering the good in question must be assessed as well.

7.3. Assessment under Article 81(1)

183. Some environmental agreements may be encouraged or made necessary by State authorities in the exercise of their public prerogatives. The present guidelines do not deal with the question of whether such State intervention is in conformity with the Member State’s obligations under the Treaty. They only address the assessment that must be made as to the compatibility of the agreement with Article 81.

7.3.1. Nature of the agreement

184. Some environmental agreements are not likely to fall within the scope of the prohibition of Article 81(1), irrespective of the aggregated market share of the parties.
185. This may arise if no precise individual obligation is placed upon the parties or if they are loosely committed to contributing to the attainment of a sector-wide environmental target. In this latter case, the assessment will focus on the discretion left to the parties as to the means that are technically and economically available in order to attain the environmental objective agreed upon. The more varied such means, the less appreciable the potential restrictive effects.

186. Similarly, agreements setting the environmental performance of products or processes that do not appreciably affect product and production diversity in the relevant market or whose importance is marginal for influencing purchase decisions do not fall under Article 81(1). Where some categories of a product are banned or phased out from the market, restrictions cannot be deemed appreciable in so far as their share is minor in the relevant geographic market or, in the case of Community-wide markets, in all Member States.

187. Finally, agreements which give rise to genuine market creation, for instance recycling agreements, will not generally restrict competition, provided that and for as long as, the parties would not be capable of conducting the activities in isolation, whilst other alternatives and/or competitors do not exist.

7.3.1.2. Agreements that almost always come under Article 81(1)

188. Environmental agreements come under Article 81(1) by their nature if the cooperation does not truly concern environmental objectives, but serves as a tool to engage in a disguised cartel, i.e. otherwise prohibited price fixing, output limitation or market allocation, or if the cooperation is used as a means amongst other parts of a broader restrictive agreement which aims at excluding actual or potential competitors.

7.3.1.3. Agreements that may fall under Article 81(1)

189. Environmental agreements covering a major share of an industry at national or EC level are likely to be caught by Article 81(1) where they appreciably restrict the parties' ability to devise the characteristics of their products or the way in which they produce them, thereby granting them influence over each other's production or sales. In addition to restrictions between the parties, an environmental agreement may also reduce or substantially affect the output of third parties, either as suppliers or as purchasers.

190. For instance, environmental agreements, which may phase out or significantly affect an important proportion of the parties' sales as regards their products or production processes, may fall under Article 81(1) when the parties hold a significant proportion of the market. The same applies to agreements whereby the parties allocate individual pollution quotas.

191. Similarly, agreements whereby parties holding significant market shares in a substantial part of the common market appoint an undertaking as exclusive provider of collection and/or recycling services for their products, may also appreciably restrict competition, provided other actual or realistic potential providers exist.

7.4. Assessment under Article 81(3)

7.4.1. Economic benefits

192. The Commission takes a positive stance on the use of environmental agreements as a policy instrument to achieve the goals enshrined in Article 2 and Article 174 of the Treaty as well as in Community environmental action plans (53), provided such agreements are compatible with competition rules (54).

193. Environmental agreements caught by Article 81(1) may attain economic benefits which, either at individual or aggregate consumer level, outweigh their negative effects on competition. To fulfil this condition, there must be net benefits in terms of reduced environmental pressure resulting from the agreement, as compared to a baseline where no action is taken. In other words, the expected economic benefits must outweigh the costs (55).

194. Such costs include the effects of lessened competition along with compliance costs for economic operators and/or effects on third parties. The benefits might be assessed in two stages. Where consumers individually have a positive rate of return from the agreement under reasonable payback periods, there is no need for the aggregate environmental benefits to be objectively established. Otherwise, a cost-benefit analysis may be necessary to assess whether net benefits for consumers in general are likely under reasonable assumptions.

7.4.2. Indispensability

195. The more objectively the economic efficiency of an environmental agreement is demonstrated, the more clearly each provision might be deemed indispensable to the attainment of the environmental goal within its economic context.
196. An objective evaluation of provisions which might ‘prima facie’ be deemed not to be indispensable must be supported with a cost-effectiveness analysis showing that alternative means of attaining the expected environmental benefits, would be more economically or financially costly, under reasonable assumptions. For instance, it should be very clearly demonstrated that a uniform fee, charged irrespective of individual costs for waste collection, is indispensable for the functioning of an industry-wide collection system.

7.4.3. No elimination of competition

197. Whatever the environmental and economic gains and the necessity of the intended provisions, the agreement must not eliminate competition in terms of product or process differentiation, technological innovation or market entry in the short or, where relevant, medium run. For instance, in the case of exclusive collection rights granted to a collection/recycling operator who has potential competitors, the duration of such rights should take into account the possible emergence of an alternative to the operator.

7.5. Examples

198. Example

**Situation:** Almost all Community producers and importers of a given domestic appliance (e.g. washing machines) agree, with the encouragement of a public body, to no longer manufacture and import into the Community products which do not comply with certain environmental criteria (e.g. energy efficiency). Together, the parties hold 90% of the Community market. The products which will be thus phased out of the market account for a significant proportion of total sales. They will be replaced with more environmentally friendly, but also more expensive products. Furthermore, the agreement indirectly reduces the output of third parties (e.g. electric utilities, suppliers of components incorporated in the products phased out).

**Analysis:** The agreement grants the parties control of individual production and imports and concerns an appreciable proportion of their sales and total output, whilst also reducing third parties’ output. Consumer choice, which is partly focused on the environmental characteristics of the product, is reduced and prices will probably rise. Therefore, the agreement is caught by Article 81(1). The involvement of the public authority is irrelevant for this assessment.

However, newer products are more technologically advanced and by reducing the environmental problem indirectly aimed at (emissions from electricity generation), they will not inevitably create or increase another environmental problem (e.g. water consumption, detergent use). The net contribution to the improvement of the environmental situation overall outweighs increased costs. Furthermore, individual purchasers of more expensive products will also rapidly recoup the cost increase as the more environmentally friendly products have lower running costs. Other alternatives to the agreement are shown to be less certain and less cost-effective in delivering the same net benefits. Varied technical means are economically available to the parties in order to manufacture products which do comply with the environmental characteristics agreed upon and competition will still take place for other product characteristics. Therefore, the conditions for an exemption under Article 81(3) are fulfilled.
If there are more than two parties, then the collective share of all cooperating competitors has to be significantly greater than the share of the
A market consisting of four firms with shares of 30%, 25%, 25% and 20%, has a HHI of 2550 (900+625+625+400) pre-cooperation. If the first
This does, however, exceptionally not apply to a production joint venture. It is inherent to the functioning of such a joint venture that decisions
See Commission Notice on the definition of the relevant market for the purposes of Community competition law (OJ C 291, 13.10.2000, p. 1, paragraph 26) consider a period of maximum 1 year for the purposes of application of the Block Exemption Regulation on Vertical Restraints (see footnote 11). However, in individual cases longer time periods can be taken into account. The time period needed by companies already active on the market to adjust their capacities can be used as a yardstick to determine this period.
A firm is treated as an actual competitor if it is either active on the same relevant market or if, in the absence of the agreement, it is able to switch

(6) OJ C 75, 29.7.1968, p. 3.
(15) OJ L 209, 8.8.1990, p. 15. Market entry needs to take place sufficiently fast so that the threat of potential entry is a constraint on

The delineation between horizontal and vertical agreements will be further developed in the chapters on joint purchasing (Chapter 4) and joint
commercialisation (Chapter 5). See also the Guidelines on Vertical Restraints, paragraph 26 and 29.

A market consisting of four firms with shares of 30%, 25%, 25% and 20%, has a HHI of 2550 (900+625+625+400) pre-cooperation. If the first
two market leaders would cooperate, the HHI would change to 4050 (3025+625+400) post-cooperation. The HHI post-cooperation is relevant for
the assessment of the possible market effects of a cooperation.
(24) E.g. the three-firm concentration ratio CR3 is the sum of the market shares of the leading three competitors in a market.

(25) For market definition see the Commission Notice on the definition of the relevant market.

(26) See Commission Notice on the definition of the relevant market; see also, for example, Commission Decision 94/811/EC of 8 June 1994 in Case No IV/M269 — Shell/Montecatini (OJ L 332, 22.12.1994, p. 48).

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

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

(29) Article 7(e) of the R & D Block Exemption Regulation.

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

(31) An R & D cooperation between non-competitors can however produce foreclosure effects under Article 81(1) if it relates to an exclusive exploitation of results and if it is concluded between firms, one of which has significant market power with respect to key technology.

(32) Pursuant to Article 4(2)(3) of Regulation No 17, agreements which have as their sole object joint research and development need not to, but may, be notified to the Commission.

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

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

(35) As indicated above, joint ventures which fall under the Merger Regulation are not the subject of these guidelines. Full-function joint ventures below Community dimension are normally dealt with by the competition authorities of the Member States. The application of Regulation No 17 could be relevant only where such a full-function joint venture would lead to a restriction of competition resulting from the coordination of the parent companies outside the joint venture (spill-over effect'). In this respect, the Commission has declared that it will leave the assessment of such operations to the Member States as far as possible (see Statement for the Council Minutes on Regulation (EC) No 1310/97, pt. 4).

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

(37) Article 2(3) of the Block Exemption Regulation on Vertical Restraints. See also Guidelines on Vertical Restraints, paragraph 33, which notes that subcontracting arrangements between non-competitors under which the buyer provides only specifications to the supplier which describe the goods or services to be supplied are covered by the Block Exemption Regulation on Vertical Restraints.

(38) If a subcontracting agreement between competitors stipulates that the contractor will cease production of the product to which the agreement relates, the agreement constitutes a unilateral specialisation agreement which is covered, subject to certain conditions, by the Specialisation Block Exemption Regulation.

(39) Notice concerning the assessment of certain subcontracting agreements in relation to Article 85(1) of the EEC Treaty, OJ C 1, 3.1.1979, p. 2.

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

(41) As any subcontracting agreement such an agreement can however fall under Article 81(1) if it contains vertical restraints, such as restrictions on passive sales, resale price maintenance, etc.

(42) A production joint venture which also carries out joint distribution is, however, in most of the cases a full-function joint venture.

(43) Pursuant to Article 4(2)(3) of Council Regulation No 17, agreements which have as their sole object specialisation in the manufacture of products need, under certain conditions, not to be notified to the Commission. They may, however, be notified.

(44) See Guidelines on Vertical Restraints, paragraph 29.

(45) Article 2(2) of Block Exemption Regulation on Vertical Restraints.

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

(47) The exchange of sensitive and detailed information which takes place in an oligopolistic market might as such be caught by Article 81(1). The need, under certain conditions, not to be notified to the Commission. They may, however, be notified.

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

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

(50) As set out in Article 2(2) of Block Exemption Regulation on Vertical Restraints.

(51) See Guidelines on Vertical Restraints, paragraph 29.

(52) To the extent that some environmental agreements could be assimilated to standardisation, the same assessment principles for standardisation apply to them.


(54) Communication on environmental agreements COM(96) 561 final of 27.11.1996, paragraphs 27-29 and Article 3(1) of EP and Council Decision of 27.11.1996. The communication includes a 'Checklist for Environmental Agreements' identifying the elements that should generally be included in such an agreement.

(55) This is consistent with the requirement to take account of the potential benefits and costs of action or lack of action set forth in Article 174(3) of the Treaty and Article 7(d) of European Parliament and Council Decision of 27.11.1996.