

GUIDELINES ON HORIZONTAL COOPERATION AGREEMENTS

1. INTRODUCTION

1.1. Purpose and Scope

1. The purpose of these Guidelines is to establish the principles that shall be taken into consideration in the assessment, within the framework of article 4 and 5 of the Act no 4054 on the Protection of Competition¹, of agreements between undertakings, decisions of associations of undertakings and concerted practices² with the nature of a horizontal cooperation.
2. If the agreement in question is between existing or potential competitors, the cooperation has a "horizontal" nature. In addition, these Guidelines also cover horizontal cooperation agreements³ between non-competing undertakings, for instance those between two undertakings which operate in the same product market but in different geographical markets and which are not potential competitors for each other.
3. Horizontal cooperation agreements may lead to significant economic benefits, especially when they combine complementary operations, skills or assets. Horizontal cooperation may be used as a tool to share risks, save costs, increase investments, pool know-how, improve the quality and range of products, and increase the rate of innovation.
4. On the other hand, horizontal cooperation agreements may also lead to various competitive problems. An agreement by the parties to maintain prices or amounts of production, distribution or supply, or the cooperation leading to the parties' acquiring, protecting or increasing market power and thereby to negative effects in the market in terms of prices, production amounts, product quality, product variety or innovation may be give as examples to such a situation.
5. While benefits that may arise from horizontal cooperation agreements need to be acknowledged, effective competition must be maintained as well. Articles 4 and 5 provide the necessary legal framework for a balanced assessment which takes into account the anti-competitive effects together with the pro-competitive effects.
6. The purpose of these Guidelines is to supply an analytical framework based on legal and economic criteria for production agreements, purchase agreements, commercialization agreements, standardization agreements and information exchange, including common research and development (R&D) agreements as well as horizontal contract manufacturing and specialization agreements. Economic criteria such as the market power of the parties and other factors related to the market structure constitute the key elements for the

¹ Any reference to "article 4" and "article 5" in the Guidelines should be understood as articles 4 and 5 of the Act no 4054 on the Protection of Competition, unless otherwise specified.

² Concerted practice refers to all types of practical cooperation or coordination between undertakings which, without having reached the stage where a proper agreement has been concluded, aims to eliminate risks created by competition and substitute the independent conduct of the undertakings themselves.

³ In the Guidelines, the concept of "agreement" is used to cover decisions of associations of undertakings and concerted practices, as well.

assessment of the effects an horizontal cooperation agreement may cause in the market under the framework of articles 4 and 5.

7. These Guidelines aim to provide guidance to undertakings concerning the assessment of horizontal cooperation agreements under articles 4 and 5. However, since horizontal cooperation may take different shapes depending on the conditions of the markets in which it exists, it is difficult to provide explanations specific to each potential case. Therefore, the criteria specified in these Guidelines should not be seen as a "checklist" to be implemented mechanically. Each concrete case must be assessed depending on its own characteristics, within the context of the general principles defined in the Guidelines.
8. The criteria established in these Guidelines shall be applied to horizontal cooperation agreements related to goods and services⁴. In assessing an agreement under articles 4 and 5 of the Act no 4054, it is first necessary to determine whether competition is restricted or not; if competition restrictions exist, the second step involves conducting an exemption assessment. As known, Competition Board (the Board) has published block exemption Communiqués concerning certain sectors and types of agreements. Block Exemption Communiqué on Research and Development Agreements, no 2003/2 (R&D Communiqué) and Block Exemption Communiqué on Specialization Agreements, no 2013/3 (Specialization Communiqué) provide the conditions for exemption of certain types of agreements falling under the scope of the Guidelines herein from the application the provisions of Article 4 of the Act no 4054. However, the clarifications given in these Guidelines concerning the types of agreements in question do not aim to explain the aforementioned Communiqués, but are meant to complement those Communiqués to the extent they are relevant. This is because the explanations in these Guidelines shall provide guidance when assessing whether an R&D or specialization agreement restricts competition and when conducting exemption assessments for agreements which are not covered by the relevant block exemption Communiqués.
9. "Competitors," as used in the Guidelines, cover both actual and potential competitors. Two undertakings operating in the same relevant market are considered actual competitors. If, in the absence of a cooperation agreement, in case of a small but permanent increase in prices, an undertaking is able to undertake the necessary additional investments or other necessary switching costs in a short period of time in order to enter the relevant market in which the other undertaking is operating, then this undertaking is considered a potential competitor for the other undertaking. However, this assessment must be made based on realistic grounds. The existence of a simple theoretical possibility of entry into the market is not sufficient.
10. For the purposes of these Guidelines, those companies which are included under the same economic entity in accordance with the definition of undertaking given in article 3 of the Act no 4054 are not considered to be competitors. Article 4 is only applied to agreements between independent undertakings. If a company holds a decisive influence on another company, these two companies form a single economic entity and therefore are considered to be a part of the same undertaking. This is also true for sister companies, i.e. those companies over which a parent company exerts a decisive influence. Consequently, these

⁴ Goods and services shall be referred to as "products" together.

companies are not considered competitors, even if they operate in the same relevant product and geographic markets.

11. Agreements concluded between undertakings which are active at different levels of the production or distribution chain, that is to say, vertical agreements, do not fall under the scope of these Guidelines, in principle. However, to the extent that vertical agreements, such as distribution agreements, are concluded between competitors, the effects of the agreements on the market can be similar to horizontal agreements. Therefore, vertical agreements between competitors fall under these Guidelines. On the other hand, such agreements may also require assessment under the Block Exemption Communiqué on Vertical Agreements, no 2002/2 (Communiqué no 2002/2) and the Guidelines on Vertical Agreements as well as under the Guidelines on Certain Subcontracting Agreements Between Non-Competitors.
12. Horizontal cooperation agreements may combine different stages of cooperation, such as R&D and the production and/or commercialization of its results. In general, such agreements also fall under the scope of these Guidelines. In the assessment of such a cooperation, as a general rule, it would be appropriate to take all chapters of the Guidelines pertaining to different characteristics of the cooperation into consideration. On the other hand, if the relevant chapters of the Guidelines contain different assessments for different stages of cooperation, then what is set out in the chapter pertaining to that part of a cooperation which can be considered its center of gravity shall be valid for the entire cooperation.
13. In determining the center of gravity for the cooperation, the starting point of the cooperation and the degree of integration of the different functions which are combined are particularly relevant. For instance, the center of gravity for an agreement which includes both R&D and cooperation in production shall be the R&D activities under the normal conditions. This is because in such a situation cooperation in production would only be possible if R&D cooperation is successful. This means that the results of R&D cooperation are decisive for realizing subsequent cooperation in production. The assessment of the center of gravity of the agreement shall be different where the parties will enter into cooperation in production in any event; for instance if the agreement provides for full integration in production regardless of R&D cooperation and only partial integration in R&D activities. In that case, the center of gravity for the cooperation will be the joint production activities.
14. The assessment of horizontal cooperation agreements within the framework of article 4 and 5 of the Act no 4054 in accordance with the relevant communiqués and the Guidelines herein do not prevent the application of article 6 and 7 of the Act.
15. Transactions aimed at the establishment of a joint venture which will permanently perform all functions of an independent economic entity are addressed under article 7 and the Communiqué Concerning the Mergers and Acquisitions Calling for the Authorization of the Competition Board, no 2010/4 On the other hand, the establishment of a joint venture by the undertakings which has, as its object or effect, the restriction of competition, and

which will permanently perform all functions of an independent economic entity is addressed under articles 4 and 5 of the Act.

1.2. Basic principles of the assessment conducted under articles 4 and 5 of the Act

16. The assessment under articles 4 and 5 of the act is comprised of two steps. The first step, is the assessment of whether, under article 4, the agreement between the parties has an anti-competitive object or actual or potential anti-competitive effects on competition. In case the agreement is found to be restrictive of competition under article 4, the second step becomes relevant. In this step, an exemption assessment is conducted under article 5, in light of the competitive benefits and anti-competitive effects that may arise as a result of the agreement.

1.2.1. Article 4 of the Act

17. According to article 4 of the Act, agreements and concerted practices between undertakings, and decisions and practices of associations of undertakings which have as their object or effect or likely effect the prevention, distortion or restriction of competition directly or indirectly in a particular market for goods or services are illegal and prohibited. Within this framework, the assessment under article 4 will examine whether the agreement has restriction of competition by object and/or restrictive effects on competition.

Restriction of competition by object

18. Since an agreement which restricts competition by object, by its nature, constitutes a violation under article 4, it is not necessary to analyze the actual or potential effects of the relevant agreement on the market. When assessing whether an agreement restricts competition by object, the contents of the agreement, the objectives it is trying to attain, and the economic and legal framework in which it exists must be taken into consideration. Although it is not a necessary factor in determining whether an agreement restricts competition by object, the intention of the parties may also be taken into consideration in the assessment.

Restrictive effects on competition

19. If a horizontal cooperation agreement does not restrict competition by object, it must be examined whether it has restrictive effects on competition. In this examination, account must be taken of both actual and potential effects. For restrictive effects on competition to exist, the agreement must have, or be likely to have, an appreciable adverse impact on at least one of the parameters of competition in the market, such as price, output, product quality, product variety or innovation. Agreements can have such effects by reducing competition between the parties to the agreement or between any one of them and third parties. This would depend on various factors such as the nature and content of the agreement, the degree at which the parties, either on their own or jointly, can acquire a certain level of market power, and to what extent the agreement allows the creation,

maintenance and strengthening of market power or the abuse of market power by the parties.

20. The assessment of whether a horizontal cooperation agreement has restrictive effects on competition within the meaning of article 4 must be made by comparing the economic and legal context in the situation where the agreement exists and where it does not (by taking into account the results the agreement would lead to if it is not yet implemented). Hence, in order to prove actual or potential restrictive effects on competition, it is necessary to examine actual and potential competition between the parties, as well as between the parties and third parties, in the situation where the agreement is implemented and in the situation where it is not. Since potential efficiency gains caused by the agreement are examined only under article 5, they will not be taken into account at this stage.
21. Horizontal cooperation agreements concluded in relation to those activities which a single undertaking would be unable to carry out due to various reasons, such as restricted technical capabilities, will not, in general, lead to restrictive effects on competition within the framework of article 4. However, this requires that it is established under objective criteria that the relevant activity cannot be conducted independently, and that the agreement is not more restrictive than necessary for the conduct of the relevant activities.
22. Horizontal cooperation agreements can restrict competition if they include exclusivity, or if they include financial or real obligations which would significantly reduce the ability of the parties to take independent decisions. Thus, prices in the relevant market may increase in the relevant market as a result of the elimination of competitive pressure in the relevant market and the exploitation of this situation both by the parties to the agreement and the competitors. When analyzing the effects of the agreement on competition, the size of the market shares of the parties to the agreement, whether the parties are close competitors⁵, whether consumers have the opportunity to switch suppliers, whether the competitors would be able to increase supply in response to an increase in prices, and whether one of the parties to the agreement is an important competitive force in the market are among the factors that require attention.
23. Horizontal cooperation agreements can lead to coordination between the parties in the area of cooperation or in other areas through disclosure of competition-sensitive (strategic) information. Horizontal cooperation agreements can also lead to coordination between the parties in relation to competitive parameters such as prices and output by ensuring commonality for the costs of the parties. Where the parties hold market power, the characteristics of the market is conducive to coordination, the area of cooperation constitutes a significant portion of the variable costs of the parties in the market, and the parties have significantly merged their operations in the area of cooperation, the commonality of costs achieved by the horizontal cooperation agreement allows the parties to more easily coordinate their prices and production. An example for this could be the

⁵ In a relevant market with differentiated products, some products would be closer substitutes than others. The higher the rate of substitution between the products of two undertakings, the closer competitors those undertakings are. In addition, undertakings in certain markets where it is relatively easier and less costly for undertakings to reposition their products or to expand their product range can also be considered close competitors.

case where the parties jointly manufacture or purchase an important intermediate product or jointly manufacture or distribute a large portion of a final product.

24. In addition, some horizontal cooperation agreements such as production and standardization agreements may result in market foreclosure for competitors as well.

Market power and other market characteristics

25. Market power is the ability to profitably maintain prices above competitive levels for a certain period of time or to profitably maintain certain elements such as output, product quality and variety or innovation below competitive levels for a certain period of time.
26. Variable costs are considered an important indication in terms of determining whether prices are above the competitive level. However, since especially in markets with high fixed costs undertakings must price above their variable costs in order to ensure a return on their investment, pricing above fixed costs by undertakings is not in itself a sign that they hold market power.
27. The creation, maintenance and strengthening of market power can result from the superior skill, foresight or innovation of the undertaking, or it can result from joint conduct by the parties to the agreement or by one of the parties and third parties. For instance, the agreement may lead to the foreclosure of the market to competitors by raising competitors' costs and removing their capacity to compete effectively with the parties to the agreement.
28. At this point, the important issue is the degree of the market power. The degree of market power required for an agreement to lead to restrictive effects on competition under article 4 is less than the degree of market power required for a finding of a dominant position under articles 6 and 7.
29. The starting point for the analysis of market power is the position of the parties in the markets affected by the cooperation. To carry out this analysis, the relevant market or markets must be defined as explained in the Guidelines on the Definition of Relevant Market.
30. If the combined market share of the parties is very low, the horizontal cooperation agreement is unlikely to give rise to restrictive effects on competition within the meaning of article 4 and, under the normal circumstances, no further analysis will be required. The assessment concerning the size of the combined market share of the parties can vary depending on the type of the agreement in question.
31. In light of the variety of horizontal cooperation agreements and the fact that they may cause different effects in different market conditions, it is not possible to identify a general market share threshold above which sufficient market power for causing restrictive effects on competition can be assumed.

32. In market share analysis, in addition to market shares, other factors such as the stability of market shares over time, entry barriers, and the countervailing power of buyers or suppliers must also be taken into consideration, depending on the market position of the parties and the concentration in the market.
33. Normally, in the competitive analysis, current market shares are used. However, this analysis may also take into account likely future developments in light of various indicators such as exits, new entries or expansion of the market volume, as well as historic data on the market in case market shares have been volatile. Changes in historic market shares may provide useful information about the competitive process and the future positions of competitors by indicating whether undertakings have been gaining or losing market shares. In any event, the assessment of market shares will take into account market conditions, such as whether the market dynamic and whether the market structure is variable due to innovation or growth.
34. When entering a market is sufficiently easy, a horizontal cooperation agreement will normally not be expected to give rise to restrictive effects on competition. To that end, new entries into the market must be shown to be likely, reasonably timely and sufficient. The existence or termination possibility of another horizontal cooperation agreement may influence market entry analysis.

1.2.2. Article 5 of the Act

35. For an agreement which is found to be restricting competition under article 4 of the Act, the burden of proof for showing that the agreement fulfills the conditions laid out in article 5 of the Act rests with the undertakings. Therefore, the arguments and evidence presented by the undertakings must convince the Board concerning the pro-competitive effects of the agreement.
36. Grant of an exemption to an agreement under article 5 depends on the existence of all of the following conditions:
 - a) Ensuring new developments and improvements, or economic or technical development in the production or distribution of goods and in the provision of services (Efficiency Gains),
 - b) Benefiting the consumer from the above-mentioned (Passing on to Consumers),
 - c) Not eliminating competition in a significant part of the relevant market (Non-Elimination of Competition),
 - d) Not limiting competition more than what is compulsory for achieving the goals set out in sub-paragraphs (a) and (b) (Indispensability).
37. R&D Communiqué and Specialization Communiqué exempts some horizontal cooperation agreements in those areas from the application of article 4 provisions. The aforementioned block exemption communiqués are based on the premise that the combination of complementary skills or assets by these agreements can lead to significant gains in efficiency. This may also be the valid for other types of horizontal cooperation

agreements. The analysis of the efficiencies of an agreement under article 5 is, to a large extent, a question of identifying the complementary skills and assets that each of the parties brings within the scope of the agreement and evaluating whether the resulting efficiencies can fulfill the conditions listed in article 5.

38. In horizontal cooperation agreements, complementary characteristics may arise in various ways. Research and development agreement may bring together different capabilities that allow the parties to produce better products more cheaply and shorten the time for those products to reach the market. Production agreements may allow the parties to achieve economies of scale or scope that they could not achieve individually.
39. Horizontal cooperation agreements that do not involve the combination of complementary skills or assets are less likely to lead to efficiency gains that benefit consumers. Such agreements may reduce certain duplicate costs, for instance by eliminating a portion of fixed costs. However, savings in fixed costs are generally not passed on to the consumers as compared to savings in, for instance, variable or marginal costs.

2. COMPETITIVE ASSESSMENT OF EXCHANGE OF INFORMATION

2.1. Definition and scope

40. Information exchange between undertakings may take place in various different ways. Information may be exchanged among undertakings directly, or indirectly via associations of undertakings such as professional associations, market research institutions and similar third parties or via the supply or distribution network of undertakings.
41. Information exchange may be the main subject of an agreement, or it may be a part of another horizontal agreement. For instance, parties to a production agreement may share some information on costs as part of the agreements. Such information exchanges are assessed in the light of the horizontal cooperation agreement as a whole.
42. Information exchange may generate various efficiency gains. For instance, information exchange may eliminate problems of information asymmetries between parties. Moreover, it may allow undertakings to benchmark themselves against their competitors, thereby improving their efficiency. In addition, sharing of information may also help undertakings to reduce their inventories, ensure quicker delivery of perishable products to consumers, or lower their costs caused by unstable demand. This may result in direct benefits for the consumers whose search costs are reduced and choices are increased.
43. However, the exchange of information may also lead to restrictions of competition, in particular in situations where it enables undertakings to be aware of market strategies of their competitors. The effect of information exchange on competition depends on elements related to the structure of the market, such as the degree of concentration, transparency and stability of the market and the similarity of the undertakings in it (symmetry), as well as on the nature of the information exchanged, since it can render the relevant market more favorable to coordination between competitors.
44. Moreover, information exchange among competitors is considered a cartel and fined as such if it shows the nature of an agreement with the object of fixing prices or quantities. Also exchanges of information which facilitate the operation of a cartel by enabling parties to monitor whether the participants comply with the agreed terms are also considered as part of the cartel.
45. Under the normal circumstances, undertakings prudently adapting themselves in accordance with the existing or anticipated conduct of their competitors is not considered a violation. However, any direct or indirect communication between competitors, the object or effect of which is to create conditions of competition differing from the normal conditions of the market are considered as violations and prohibited. For instance, an undertakings disclosing to its competitor the policy which it is implementing or is planning to implement may be evaluated under this framework. Therefore, if information exchange reduces uncertainty in the market through the exchange of competition-sensitive information and facilitates anti-competitive cooperation, then it may constitute a violation under article 4.

46. There is no difference between an undertaking unilaterally disclosing its competition-sensitive information via various means such as e-mail, phone calls, meetings, etc. to its competitors who then explicitly or implicitly accept these information and many undertakings sharing information among themselves concerning their goals and plans. For example, mere attendance at a meeting where an undertaking discloses its pricing policy to its competitors may be caught by article 4 of the Act, even in the absence of an explicit agreement to raise prices. When an undertaking is sent competition-sensitive information by a competitor, the relevant undertaking will be presumed to have accepted the information and adapted its market conduct accordingly, unless it responds with a clear statement that it does not wish to receive such information.
47. In general, if an undertaking makes a unilateral disclosure concerning its competition-sensitive information in a genuinely public manner, for example through a newspaper, this does not constitute a violation. However, the characteristics of the underlying the case at hand will be decisive in terms of the assessment to be conducted under article 4. For example, competitors following such a disclosure with similar disclosures concerning their competition-sensitive information may indicate cooperation.

2.2. Assessment under Article 4 of the Act

2.2.1. Main competitive concerns

48. Once the existence of an agreement is established, main competitive concerns pertaining to information exchange will need to be addressed.

Collusive outcome

49. The exchange of competition-sensitive information can result in restrictive effects on competition by artificially increasing transparency in the market, thereby facilitating coordination of competitive behavior between undertakings. This can occur through different channels.
50. First of all, information exchange may lead to undertakings arriving at common and collusive expectations concerning the uncertainties in the market. Thus, undertakings can then reach a common understanding in order to coordinate their competitive behavior, without an explicit agreement. Information exchange in this way may lead to collusive outcome in the market. Exchange of information about the plans of the undertakings concerning future conduct is the most convenient means of such an understanding.
51. Secondly, through the use of a monitoring mechanism, information exchange can render the market transparent and allow collusive outcome in the market or improve the sustainability of such conduct (internal stability) by making it easier for undertakings to identify any practice of their competitors that is in violation of the anti-competitive agreement between them and to retaliate against such practices. Such a monitoring mechanism may be created by the exchange of current or historical data.

52. Thirdly, information exchange can lead to the exclusion of competitors who are not parties to the agreement (external stability) by improving the sustainability of collusive outcomes. When the market becomes sufficiently transparent due to exchanges of information, undertakings parties to the agreement can be informed on when and how potential competitors will enter the market, target the new entrants, and, as addressed in the next section, foreclose the market to potential competitors. Such a monitoring mechanism may be created by the exchange of current or historical data.

Foreclosure of the market to competitors

53. Apart from facilitating collusion, exchange of information can also lead to foreclosure of the market to competitors.
54. An exchange of information between only a portion of the undertakings in the market can lead to foreclosure in the relevant market. This can occur when those undertakings not taking part in the exchange of information is placed at a significant disadvantage as compared to the undertakings affiliated with the exchange of information. In order for such market foreclosure to occur, the information concerned must be significantly strategic with respect to competition and must cover a significant part of the relevant market.
55. Information exchange may also lead to foreclosure of the market to competitors for undertakings operating in related markets. For instance, vertically integrated undertakings which gain a certain amount of market power in the upstream market through an information exchange may raise the price of a key component for a downstream market, thereby increasing the costs of their rivals downstream and causing foreclosure of that market to competitors.

2.2.2. Restriction of competition by object

56. Any information exchange with the objective of restricting competition in the market will be considered as a restriction of competition, regardless of its effect. In assessing whether an information exchange constitutes a restriction of competition by object, the legal and economic context in which the information exchange took place will be taken into consideration. To this end, it will be evaluated whether the information exchange would lead to a restriction of competition by nature.
57. An exchange information concerning future plans is more likely to lead to restriction of competition by object as compared to the exchange of current data. Within this context, the exchange of competition-sensitive information among rivals such as future prices, outputs or sale amounts are normally considered cartels, since they generally aim to fix prices or quantities. Such exchanges of information are very unlikely to meet the exemption conditions listed in article 5.

2.2.3. Restrictive effects on competition

58. The potential effects of information exchange on competition must be analyzed on a case-by-case basis. This assessment is done by comparing the existing and likely effects of the information exchange with the competitive conditions that would prevail in the absence of that information exchange. For an information exchange to have restrictive effects on competition within the meaning of article 4, it must be of a nature to have an adverse impact on at least one of the parameters of competition such as price, output, product quality, product variety or innovation. When assessing the restrictive effects of information exchange on competition, the characteristics of the relevant market and the nature of the information exchange is taken into consideration.
59. Certain markets, due to their characteristics, may facilitate achieving coordination among undertakings or sustaining an existing coordination. Exchanges of information in such markets will lead to more restrictive effects compared to markets which do not have such characteristics. However, through various effects, including increasing transparency in the market, reducing market complexity and differences between undertakings (asymmetry) and stabilizing the market, the exchange of information can make coordination possible even in markets where cooperation was difficult before the change. For this reason, when assessing the restrictive effects of information exchange on competition, it is important to consider the characteristics of the market before the exchange of information and how these characteristics were changed by the information exchange. In addition, it is necessary to assess factors including the purpose of the information exchange system, conditions of access to the system and conditions of participation in the system. It is also necessary to examine the frequency of the information exchanges, the type of information exchanged (public or confidential, aggregated or detailed, historical or current information), and the importance of the information for the fixing of prices, volumes or conditions of service. Following are some of the factors that must be taken into consideration when assessing the restrictive effects of information exchange.

Market characteristics

60. It is easier for undertakings to achieve a collusive outcome in markets which are sufficiently transparent, concentrated, stable, symmetric and non-complex. Information exchange can facilitate a collusive outcome by increasing transparency in the market, reducing market complexity and asymmetry, and by stabilizing the market.

Market transparency

61. Collusive outcomes are more likely in transparent markets. Transparency can enable undertakings to conclude and maintain anti-competitive agreements. Information exchange can reduce uncertainties about competitively sensitive factors such as prices, volume, demand and costs by increasing transparency. The lower the level of transparency in the market before the information exchange, the higher the anti-competitive effect of the information exchange will be. An information exchange that contributes little to rendering the market transparent is less likely to restrict competition than an information exchange that significantly increases transparency in the market. Therefore, the level of transparency in the market both before and after the information exchange, and how the

information exchange changes that level, are the determining factors for the likelihood that an information exchange will have restrictive effects on competition. The level of transparency before the information exchange depends on the number of undertakings in the market and the degree of openness of the buying and selling transactions. The key element when evaluating the change in the level of transparency in the market is to identify to what extent the undertakings can use the available information to determine the actions of their competitors.

Degree of concentration of the market

62. Collusive outcomes are more likely in tight oligopolies, since it is easier for fewer undertakings to agree on the terms of coordination and to monitor deviations from the agreement. Therefore, exchanges of information in tight oligopolies are more likely to cause restrictive effects on competition than in other oligopolies. However, even in markets with numerous undertakings, information exchanges may facilitate coordination and monitoring of deviations among more undertakings by increasing transparency, or rendering the market more suitable for coordination.

Complexity of the market

63. It is harder for undertakings to achieve a collusive outcome in a complex market structure. However, information exchange may simplify such market structures to some extent. In a complex market structure, more information exchange is needed to come to an agreement on the terms of coordination and to monitor deviations. For example, achieving a collusive outcome concerning a price for a homogeneous product would be easier than it would be in a market with many differentiated products. Nonetheless, undertakings may exchange information and introduce rules to simplify pricing in order to circumvent the difficulties involved in achieving a collusive outcome on the prices of many differentiated products.

Stability of the market

64. Collusive outcomes are more likely in markets where the demand and supply conditions are relatively less volatile, in other words where they are stable. In an unstable environment, it may be difficult for an undertaking to know whether the reduction in its sales is due to an overall reduction in demand or due to a competitor offering relatively lower prices, and therefore it is difficult to sustain a collusive outcome. In this context, volatile demand, internal growth by some undertakings in the market, or frequent entry into the market, may indicate that the market is not sufficiently stable to ensure coordination. On the other hand, information exchange can increase stability in the market, and thereby may enable a collusive outcome. Moreover, in markets where innovation is decisive, coordination may be more difficult since significant innovations may allow undertakings to gain a major advantage over their competitors. For a collusive outcome to be sustainable, the reactions of third parties such as current and potential competitors not participating in the agreement and customers should not be at a level to jeopardize the

results expected from the collusive outcome. In this context, the existence of barriers to entry would make a collusive outcome more feasible and sustainable.

Similarity of firms (symmetry)

65. A collusive outcome is more likely in symmetric market structures. When undertakings are similar in terms of their costs, demand, market shares, product range, capacities etc., the possibility of coordination among undertakings increases because their competitive incentives would be similar as well. However, information exchange may allow collusive outcomes to occur even in markets with differentiated undertakings. Information exchange could help undertakings to develop tools to determine their differences and to eliminate those differences, thereby to facilitate coordination among themselves.

Other characteristics

66. The stability of collusive outcomes also depends on the current value of the profits the undertakings expect in the future, on the duration of the interaction between the undertakings, and on the efficiency of the retaliation mechanism for deviation from the agreement. Within this framework, the sustainability of the collusive outcome would diminish if undertakings consider current profits they may gain as a result of a price war more valuable than future profits they may bring as a result of a collusive outcome, or if the interaction between the undertakings is short-term, or if there are no efficient means of retaliation.

Characteristics of the information exchange

Competition sensitive (strategic) information

67. It is more likely for an exchange between competitors of strategic data that reduces uncertainty in the market to be caught by article 4 than exchanges of other types of information. Sharing of strategic data can give rise to restrictive effects on competition by reducing competitive incentives of the parties. Information related to prices, quantities, customers, costs, turnovers, sales, purchases, capacities, product characteristics, marketing plans, risks, investments, technologies, R&D programs and similar information are considered competition sensitive. Generally, information related to prices and quantities is the most strategic. These are followed by information about costs and demand. However, if undertakings compete with regard to R&D, for instance, then it may be the technology data that is the most strategic for competition. Also, the strategic importance of data also depends on factors such as the frequency of the information exchange and its market coverage as well as whether the data is aggregated and its age.

Market coverage

68. When assessing the restrictive effects of information exchange on competition, the market coverage of the undertakings exchanging information are taken into account. This is because the competitors that are not participating in the information exchange can constrain any anti-competitive behavior of the undertakings exchanging information. For example, undertakings not participating in the information exchange can threaten the sustainability of the anti-competitive agreement by pricing below the price level set via coordination. The assessment concerning the market coverage degree of the information exchange depends on the specific facts of each case and the type of information exchange in question.

Aggregated/individualized data

69. Exchanges of data that is aggregated in such a way as to make the identification of individual data of a particular undertaking sufficiently difficult are much less likely to lead to restrictive effects on competition than exchanges of individualized data. Collection and aggregated publication of data including data on sales, on capacities or on costs of inputs and components by a professional association or market research company may benefit suppliers and customers since it would shed light on the economic situation of the sector. Such data collection and publication allows undertakings in the market to make choices based on information and efficiently adapt their strategy to the market conditions. Generally, the exchange of aggregated data is unlikely to give rise to restrictive effects on competition, unless it takes place in a concentrated oligopoly. Conversely, the exchange of individualized data makes it easier for undertakings to come to a common understanding concerning the market on the one hand, and allows the parties to develop suitable punishment strategies by enabling them to target undertakings deviating from the agreement or new entrants. Nevertheless, the possibility cannot be excluded that even the exchange of aggregated data may lead to anti-competitive effects in certain markets. For instance, if the exchange of aggregated data among the members of a tight and stable oligopoly indicates that prices in the market are below a certain level, the undertakings may conclude that one of the parties to the agreement has deviated from the collusive outcome and decide to retaliate. In other words, in order to keep the anti-competitive agreement stable, undertakings do not need to know who deviated from the agreement, it is enough to know that "someone" did.

Age of data

70. The exchange of historic data is more unlikely to lead to a restriction of competition than the exchange of current or future data. This is due to the fact that exchanging historic data is unlikely to be an indicator for the future behavior of competitors or lead to a common understanding concerning the market. On the other hand, the older the data, the less probable it would be to detect deviations and retaliate. Whether data is historic depends on the characteristics of the relevant market and, in particular, on the frequency of price re-negotiations in the market. For example, data is considered historic if it is significantly older than the average length of contracts in the market. There is no predetermined threshold for how old the data must be not to pose a risk of distorting competition. This threshold depends various characteristics such as the nature of the data, whether it is aggregated, the frequency of the information exchange, and its stability and transparency.

Frequency of the information exchange

71. Frequent exchanges of information make it easier for undertakings to come to a better common understanding in the market and monitor deviations from the agreement, thereby increasing the risks of a collusive outcome. In unstable markets, more frequent exchanges of information is necessary to ensure a collusive outcome than in stable markets. In markets with long-term contracts (which means more infrequent price re-negotiations), even less frequent exchanges of information may be sufficient to achieve a collusive outcome. However, the frequency at which data needs to be exchanged to result in a collusive outcome depends on the nature of the data, its age and whether it is aggregated.

Public/non-public information

72. In general, exchanges of genuinely public information are not expected to constitute an infringement under article 4. Genuinely public information is information that is equally accessible to all competitors and customers in terms of costs of access. For information to be genuinely public, the cost for accessing it should not be higher for customers and undertakings not participating in the information exchange than for those who are parties to the exchange. Consequently, since, under the normal circumstances, competitors would not choose to exchange data that they can easily collect from the market, the exchange of genuinely public data is not frequently observed in practice. In contrast, if the cost of collecting the data exchanged among the competitors is deterring other undertakings and customers from collecting it, the data cannot be considered to be genuinely public. A possibility to gather the information from the market, for instance from the customers, does not mean that such information constitutes market data readily accessible to competitors.
73. Even if data is publicly available, (for example, information published by regulators), if the additional exchange of this information among competitors reduces uncertainty in the market, this may give rise to a collusive outcome.

Public/non-public exchange of information

74. A genuinely public information exchange may decrease the likelihood of a distortion of competition in the market, to the extent that cooperative effects of the exchange of information can be constrained by other undertakings, potential competitors and customers. However, genuinely public exchanges of information would not mean that the possibility of a collusive outcome in the market is completely eliminated.

2.3. Assessment under Article 5 of the Act

2.3.1. Efficiency gains

75. Information exchange may lead to efficiency gains. For instance, information about competitors' costs can enable undertakings to become increase their efficiency by benchmarking their performance against the best practices in the market.
76. Moreover, in certain situations, due to the information they acquire as a result of information exchange, undertakings can allocate production towards high-demand markets or low cost undertakings. The likelihood of achieving those types of efficiencies depends on market characteristics such as whether undertakings compete on prices or on quantities, as well as on the uncertainties of the market. Within this framework, some forms of information exchange may ensure substantial cost savings by reducing inventories or limiting the distribution of perishable products in areas with low demand.
77. In markets where undertakings have asymmetric information about consumers, the exchange of such information can also give rise to efficiencies. For instance, keeping a record on the traffic accidents or credits defaults of customers and sharing these records would ensure that consumers face prices which are in accordance with their risk levels and thereby constitute an incentive for them to reduce their risk exposure. This makes it easier to detect those consumers at lower risk levels who can benefit from lower prices. In this context, switching to other suppliers becomes easier for those consumers who cannot switch providers since information is relationship-specific, as a result of which consumer lock-in is reduced and competition is encouraged. Examples of such efficiencies are found in the banking and insurance sectors, where there are frequent exchanges of information about consumer risks and their defaults.
78. Exchanging historic and current data related to market shares may provide benefits to both undertakings and consumers if it allows undertakings to present these data as an indication of quality of their products. As a matter of fact, in case there is imperfect information about product quality, consumers resort to indirect means to gain information, by making use of the prices, market shares and similar characteristics of the products (for example, using best-selling lists when buying books).
79. Information exchange that is genuinely public helps consumers to reduce their search costs and to make more informed choices. Consumers mostly benefit from public exchanges of current data when making their purchasing decisions. Similarly, public information exchange about current input prices can lower search costs for undertakings, thereby benefiting consumers through lower final prices. Exchanges of information concerning prices to be implemented in the future are less likely to generate benefits for consumers, since undertakings would adapt the prices in question before consumers can actually make purchase. Consumers generally cannot rely on undertakings' future intentions when making their consumption plans. However, undertakings may face some pressure to implement the prices they announced when undertakings have repeated interactions with consumers, and when consumers have advance knowledge concerning the prices to be implemented, or can place advance orders. In that situation, genuinely public exchange of information concerning the future behavior of the undertakings may improve customers' plans for expenditure.

80. Exchanging future data is less likely to generate efficiency gains than exchanging current and historical data. However, in exceptional circumstances announcing future data can also give rise to efficiencies. For example, if undertakings were to know in advance who would be the winner of an R&D race, they could avoid duplicating costs and wasting resources.

2.3.2. Pass-on to consumers

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

2.3.3. Non-elimination of competition

82. If, as a result of the exchange of information, competition is eliminated in respect of a substantial part of the relevant market, then the agreement cannot benefit from exemption under article 5.

2.3.4. Indispensability

83. In order to fulfil the condition of indispensability, the parties must prove that the exchange of information carries the lowest risk of restricting competition for achieving the efficiency gains and passing them on to the consumers in terms of certain characteristics including subject matter, aggregation, age, openness to public, frequency, and coverage. Moreover, the exchange should not involve information beyond those required for the fulfillment of the above conditions. For instance, for the purpose of benchmarking, an exchange of data individualized for each undertaking would not be necessary. This is because efficiency gains that could be attained from benchmarking can also be generated through the creation of a form of industry ranking, by anonymizing and aggregating the data. Within that context, generally the exchange of individualized data will not be considered indispensable. Finally, it is generally unlikely that the sharing of individualized data on future plans, particularly concerning pricing and quantity, is indispensable for attaining efficiency gains and passing them on to consumers.
84. Similarly, information exchanges that form part of horizontal cooperation agreements are more likely to be assessed under article 5 if they do not go beyond what is indispensable for the implementation of the economic purpose of the agreement. For example, technology sharing necessary in an R&D agreement or the exchange of cost data necessary in production agreements can be considered indispensable.

Example 1

85. Sufficient efficiency gains for consumers with the exchange of information regarding current prices

Undertakings in a market that is concentrated, stable and non-complex where pricing has become transparent via information exchange have decided to announce information on current prices on a publicly accessible website. In this example, what is being announced are not intended future prices, but current prices over which consumers can purchase current and future services under the conditions specified in the information being exchanged. In addition to the prices, the information announced on the website include a wide range of other information on the product.

Assessment: This information exchange does not constitute a restriction of competition by object. The undertakings are exchanging current prices over which they are effectively making sales in the present, rather than the future prices they intent to implement. Therefore, this exchange of information is less likely to constitute an efficient mechanism for coordination than the exchange of intended future prices. Nevertheless, given the market structure and strategic nature of the data, this information exchange may constitute an efficient mechanism for monitoring deviations from an anti-competitive agreement, thereby facilitating any coordination that is likely to occur in such a market structure. Therefore, this information exchange could give rise to restrictive effects on competition within the meaning of article 4. However, it is possible that efficiency gains stemming from the information exchange would be passed on to consumers to an extent that outweighs the restrictive effects on competition in terms of both their likelihood and magnitude. In this example the information exchange is public and consumers can make purchases at the announced prices and conditions. Therefore this information exchange is likely to directly benefit consumers by reducing search costs and improving choice, and thereby also stimulating price competition. Hence, the information exchange in question is likely to meet the exemption conditions of article 5.

Example 2

86. Deduction of current prices from information exchange

The luxury hotels in a city have homogeneous cost structures constituting a separate relevant market from other hotels and they operate in a non-complex, stable and tight oligopoly. The hotels in question exchange individual information about current occupancy rates and revenues. In this case, the parties can deduce the current prices of each other as a result of the exchange of information.

Assessment: Since the hotels exchange present data and not intended future data, this exchange of information would not constitute a restriction of competition by object, unless it is used as means of secretly exchanging information on future plans. However, this information exchange would give rise to restrictive effects on competition within the meaning of article 4, because knowing the competitors' current prices would facilitate coordination of undertakings' competitive behavior. Such an exchange of information would be most likely used to monitor deviations from the anti-competitive agreement. The

information exchange increases transparency in the market, since the hotels normally offer various discounts through negotiations or early or group reservations over the list prices they publish. Therefore, the exchange of information between the hotels is competitively sensitive and have strategic significance. This exchange is likely to lead to the restriction of competition in the market because the parties involved are involved in a long-term and constant interaction in a non-complex, stable and tight oligopoly. Moreover, the cost structures of the hotels are largely homogeneous. Finally, since consumers have little buyer power and barriers to entry are high, consumers or new entrants will not be able to constrain the anti-competitive behavior of incumbents. It seems unlikely in this case that the parties would be able to demonstrate that any efficiency gains would be generated by the information exchange to an extent that would outweigh the restrictive effects on competition which would then be passed on to the consumers; therefore neither is it likely that the exemption conditions listed in article 5 would be met.

Example 3

87. Exchange of individual/aggregated data

In a stable, non-complex, concentrated market with high barriers to entry, three large undertakings with an aggregate market share of 80% engage in direct, frequent and non-public exchanges of information concerning a significant portion of their costs. Undertakings claim that they exchange information in order to benchmark their performance against their rivals in order to become more efficient.

Assessment: Since this information exchange does not in principle constitute a restriction of competition by object, its effects on the market need to be assessed. Because of the market structure, the fact that the information exchanged relates to a large portion of the undertakings' variable costs, the fact that the data is presented in an individualized form and covers a significant part of the relevant market, this information exchange is likely to facilitate a collusive outcome and thereby give rise to restrictive effects on competition within the meaning of article 4. It is not possible to claim that exemption conditions are fulfilled because the claimed efficiency gains stemming from the information exchange can be achieved in a manner that is less restrictive for competition by way of a third party collecting, anonymizing and aggregating the data in some form of industry ranking. Finally, in this example, since the parties form a non-complex, stable and very tight oligopoly, even the exchange of aggregated data could lead to a collusive outcome. However, it would be very unlikely for the exchange of aggregated information to restrict competition if it happened in a non-transparent, fragmented, unstable, and complex market.

Example 4

88. Genuinely public information

The four undertakings owning all the petrol stations in a large city exchange information on the current gasoline prices over the telephone. These undertakings claim that this information exchange does not have restrictive effects on competition because the information is public as it is announced on large display panels at every petrol station.

Assessment: The pricing data exchanged over the telephone is not genuinely public, as in order to obtain that same data in another would require incurring substantial time and transport costs. One would have to travel large distances to collect the prices displayed on the boards of petrol stations spread all over the city. Since the costs for such a survey would be high, the information concerned could not be obtained by any means other than the information exchange, in practice. Moreover, this systematic exchange covering the entire relevant market, which is a non-complex, stable and tight oligopoly, is likely to lead to competing undertakings becoming certain of their rival's pricing policies, thereby restricting competition. As a result, this information exchange is likely to give rise to restrictive effects on competition within the meaning of Article 4.

Example 5

89. Efficiency gains

There are five undertakings producing fresh bottled orange juice in the relevant market. Demand for this product is very unstable and shows variations depending on location and time. The fruit juice in question has to be sold and consumed within one day from the date of production. The producers agree to establish an independent market research company that will collect information about unsold juice in each point of sale on a daily basis and publish the data it will aggregate on the basis of each point of sale on its website the following week. The published statistics allow producers and retailers to forecast demand and to better position the product. Before the information exchange was put in place, the retailers had reported large quantities of wasted juice and had reduced the quantity of juice purchased from the producers; that is to say, the market was not working efficiently. Consequently, in some periods and areas there were frequent instances of unmet demand. The information exchange system, which allows better forecasting of oversupply and undersupply, has significantly reduced the instances of unmet consumer demand and increased the quantity sold in the market.

Assessment: Even though this example involves the exchange of current and strategic data in a quite concentrated market, it is not very likely that this exchange would have restrictive effects on competition in such an unstable market. Even if the exchange creates some risk of giving rise to restrictive effects on competition, the efficiency gains stemming from increasing supply to places with high demand and decreasing supply in places with low demand is likely to offset potential restrictive effects. Since the information is exchanged in a public and aggregated form, it poses a lower risk of causing restrictive effects on competition than if it were non-public and individualized. Consequently, the information exchange does not go beyond what is necessary to correct the market failure. Therefore, it is likely that this information exchange meets the criteria of article 5.

3. RESEARCH AND DEVELOPMENT AGREEMENTS

3.1. Definition and Scope

90. Block Exemption Communiqué on Research and Development Agreements, no:2003/2 sets the conditions for the block exemption of R&D agreements concluded between undertakings from the application of the provisions of article 4 of the Act. As stated in paragraph 8 of the Guidelines herein, this chapter titled "Research and Development Agreements" is complementary in nature to the R&D Communiqué.
91. R&D agreements be concluded in different forms and scopes, ranging from outsourcing R&D activities to third parties to the joint improvement of existing technologies and cooperation concerning the research, development and marketing of completely new products. R&D agreements may be in the form of signing a cooperation agreement or establishing an undertaking under joint control. This chapter of the Guidelines applies to all forms of R&D agreements, including agreements concerning the production or commercialization of the R&D results.

3.2. Relevant markets

92. When assessing the effects of an R&D agreement, the key point in defining the relevant market is to identify those products, technologies or R&D efforts that will comprise the main competitive pressure on the parties. Innovation may result in a product or technology which competes with an existing product or technology in market, as is the case with R&D efforts directed towards slight improvements or variations. Here, possible effects are realized in the market for existing products. On the other hand, innovation may also result in an entirely new product which creates its own new product market, as is the case in the example of the discovery of a new vaccine for a previously incurable disease. However, many cases concern situations in between those two extremes. In other words, innovation efforts may result in new products or technologies which, over time, replace existing ones, such as in the example of CDs replacing cassettes. An analysis of such situations may require the examination of both existing markets and the impact of the agreement on innovation.

Existing product markets

93. Where the cooperation concerns R&D for the improvement of existing products, those existing products and their close substitutes form the relevant market concerned by the cooperation.
94. If the R&D efforts aim at significantly changing existing products or at new products to replace existing ones, it may be concluded that the old and the potentially new products do not belong to the same relevant market, since it may be impossible to fully substitute these with other products already in the market or substitute them in the short-term. Nevertheless, the market for existing products may be taken into consideration, if the

pooling of R&D efforts is likely to result in coordination between the suppliers of those existing products, for instance because of the exchange of competitively sensitive information.

95. If the R&D concerns an important component of a final product, not only the market for that component, but also the market for the final product may be taken into consideration in the assessment. For instance, if car manufacturers cooperate in R&D related to a new type of engine, the car market may be affected by that 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 those final products and if the parties to the R&D agreement have market power with respect to the final products.

Existing technology markets

96. R&D cooperation may concern not only products but also technology. When intellectual property rights are marketed separately from the products to which they relate, the relevant technology market has to be defined as well. Technology markets consist of the intellectual property rights that are licensed and other technologies which may be used as close substitutes thereof.
97. The definition of technology markets follows a similar method to the definition of product markets. Starting from the technology which is marketed by the parties, those other technologies to which consumers could switch in response to a small but non-transitory increase in relative prices need to be identified. Following that identification, market shares in the technology markets can be calculated based on the licensing incomes of undertakings.
98. The parties' position in the market in relation to the existing technology may be considered a suitable assessment criterion where the R&D cooperation concerns a significant improvement to an existing technology or a new technology that can replace the existing technology. The parties' market shares can, however, only be taken as a starting point for this analysis. In technology markets, potential competition is of particular import. If undertakings which do not currently license their technology are potential entrants on the relevant technology market, these undertakings could constrain the ability of the parties to the R&D agreement to profitably raise the price for their technology. In such a situation, the calculation of the market shares may also be based on the sales in the downstream product markets which include products incorporating the licensed technology.

Competition in innovation (R&D efforts)

99. R&D cooperation may affect not only competition in existing markets, but also competition in innovation and new product markets. Such may be the case where R&D cooperation replaces existing products or concerns the development of new products or technologies intended for a new use. In these situations, the effects on competition in innovation are important. However in some cases, it may not be sufficient to analyze actual or potential competition in existing product or technology markets in the assessment of

these effects. In this respect, two scenarios can be distinguished, depending on the nature of the innovation process in an industry

100. In the first scenario, examples for which may be observed in the pharmaceutical industry, it is possible to identify competing R&D efforts at an early stage in the innovation process. Competing R&D efforts are comprised of R&D efforts directed towards a certain new product or technology, and the substitutes for those efforts developed in a similar timing. In this case, it can be analyzed whether there will be a sufficient number of competing R&D efforts following the agreement. The starting point of the analysis is the R&D efforts of the parties, after which it is necessary to identify significant competing R&D efforts. In order to decide whether competing efforts are significant, various aspects must be taken into account, including the nature, scope and size of the other R&D efforts, their access to financial and human resources, know-how and patents, or some other assets, as well as their timing and their capability to exploit possible results.
101. Besides the direct effect on the innovation itself, the cooperation may also affect the market for a new product. Since such a market does not yet exist, it will often be difficult to analyze the effects on the market directly. Consequently, the analysis of such markets will generally be incorporated in the analysis of competition in innovation. On the other hand, in a competitive analysis, it may be necessary to directly consider the effects of those aspects of the agreement which go beyond the R&D activities on the market for a new product. For instance, an R&D agreement that also includes joint production and commercialization in the new product market may be assessed differently than an agreement aimed at pure R&D efforts.
102. The second scenario concerns the situation where innovative efforts in an industry are not sufficiently clear to allow the identification of R&D efforts. In this case, the impact of a given R&D cooperation on innovation shall not be assessed, except for exceptional circumstances. The assessment to be conducted shall be limited to existing product and/or technology markets which are related to the R&D cooperation in question, except for exceptional circumstances.

Calculation of market shares

103. Both for the purposes of the R&D Communiqué and of these Guidelines, the distinction between existing markets and competition in innovation needs to be distinguished in the calculation of market shares. At the beginning of an R&D cooperation, the existing market which includes products capable of being improved, substituted or replaced by the products under development shall be taken as the reference point. Where the R&D agreement only aims at improving or refining existing products, that market will include products directly concerned by the R&D effort. Thus, market shares can be calculated on the basis of the sales value of the existing products. If the R&D cooperation aims at developing a new product to replace existing products, it is again possible to calculate market shares on the basis of the sales value of the existing products.

104. For technology markets, it is possible to calculate each technology's share in the market which includes the competing licensed technologies by calculating its share in the total licensing income generated by intellectual property rights. However, this may often be a difficult method to implement due to various reasons including the lack of clear information on licensing costs, the use of cross-licensing, etc. An alternative approach is to calculate market shares in the technology market on the basis of sales of products or services incorporating the licensed technology in downstream markets. Under that approach, all sales in the relevant product market are taken into account, irrespective of whether the product incorporates a licensed technology. To be issued an exemption under the R&D Communiqué, the market share must not exceed the relevant thresholds, regardless of the calculation method used.
105. If R&D efforts are aimed at developing an entirely new product, then market shares cannot be calculated on the basis of sales. In that case, it is only possible to analyze the effects of the agreement on competition in innovation.

3.3. Assessment under Article 4 of the Act

3.3.1. Main competitive concerns

106. R&D cooperation can restrict competition in various ways. First, it may reduce or slow down innovation, leading to fewer or lower quality products coming to the market. Secondly, R&D cooperation may lead to increasing prices by significantly reducing competition between the undertakings which are not parties to the agreement in product or technology markets, or by making coordination of competitive conduct in those markets possible. Also, R&D cooperation may lead to market foreclosure for competitors. However, a market foreclosure effect may only arise if at least one of the parties holds, if not dominant position, significant market power concerning a key technology and derives exclusive benefits from the results of the R&D efforts of the parties.

3.3.2. Restriction of competition by object

107. If R&D efforts do not truly concern joint R&D efforts but instead serve as a tool for cartel activities such as price or quantity fixing or market allocation, they are considered to be agreements which restrict competition by object. However, for example, an R&D agreement which specifies the joint exploitation of possible future results may not be restrictive of competition.

3.3.3. Restrictive effects on competition

108. Most R&D agreements do not fall under article 4. This can be said for many R&D agreements which are related to cooperation at early stages and which would only allow exploitation of possible results in the very long term. Moreover, normally, R&D agreement would not give rise to restrictive effects on competition where, on the basis of objective factors, the parties are not able to carry out the R&D independently, for instance due to the limited technical capabilities of the parties. This situation can apply, for

example, to undertakings bringing together complementary skills, technologies and other resources they have.

109. R&D cooperation between non-competing undertakings would not generally give rise to restrictive effects on competition. However, if there is exclusive exploitation of the results obtained from the cooperation and if one of the parties to the agreement holds significant market power related to a key technology, then R&D cooperation between non-competing undertakings may result in market foreclosure.
110. When assessing an R&D agreement, the competitive relationship between the parties has to be analyzed in the context of affected existing markets and/or innovation. The issue of potential competition between the parties, on the other hand, has to be assessed on a realistic basis. For instance, parties cannot be defined as potential competitors simply because they cooperate to carry out the R&D activities. The decisive point here is whether each party independently has the necessary know-how and other resources.
111. Having third-party undertakings to carry out those R&D activities which were previously conducted in-house (outsourcing) is a specific form of R&D cooperation. In such a cooperation, the R&D activity is often carried out by companies, research institutes or academic institutions which are specialized on the subject but which do not play an active role in the exploitation of the results of the R&D effort. In general, such agreements include exclusive supply provisions concerning the transfer of know-how and/or the results of the R&D activities. Such provisions in the agreements in question are not expected to lead to restrictive effects on competition due to the complementary nature of the parties to the cooperation.
112. An R&D cooperation which does not include the joint exploitation of possible results by means of licensing, production and/or marketing rarely gives rise to restrictive effects on competition. Those pure R&D agreements can only cause a competition problem if competition with respect to innovation is appreciably reduced, leaving only a limited number of significant competing R&D efforts.
113. R&D agreements are only likely to give rise to restrictive effects on competition where the parties to the cooperation have market power in the existing markets and/or competition with respect to innovation is appreciably reduced.
114. There is no absolute threshold denoting the point where an R&D agreement can give rise to restrictive effects on competition under article 4 by creating or maintaining market power. However, R&D agreements between competitors can benefit from block exemption under the R&D Communiqué, provided that the combined market share of the parties does not exceed the market share thresholds specified in the abovementioned Communiqué and the other conditions are fulfilled.
115. Agreements falling outside the R&D Communiqué because the combined market share of the parties exceeds the relevant thresholds may not necessarily give rise to restrictive effects on competition. However, the stronger the combined position of the parties in

existing markets and/or the more competition in innovation is restricted, the more likely it is that the R&D agreement can cause restrictive effects on competition.

116. If the R&D activity is directed at the improvement or refinement of existing products or technologies, possible effects are observed in the relevant markets for those existing products or technologies as a rule. Restrictive effects on competition concerning product prices, output, quality, variety or innovation in existing markets can, however, only emerge if the parties together have a strong position, entry into the market is difficult and other innovation activities are few in number. Furthermore, if the R&D only concerns a relatively minor input for the production of the final product, only a very limited effect would be observed on competition in relation to those final products.
117. A distinction has to be made between pure R&D agreements and agreements providing for a more comprehensive cooperation involving the exploitation of results of the different stages of the R&D activity, such as licensing, production or marketing. As mentioned above, pure R&D agreements will rarely give rise to restrictive effects on competition. In particular, the likelihood of encountering restrictive effects on competition is low for R&D activities directed towards a limited improvement of existing products or technologies. If, in such a scenario, the joint exploitation of the R&D cooperation results is limited to licensing to third parties, restrictive effects on competition such as foreclosure of markets to competitors are unlikely. If, however, joint production and/or marketing of the slightly improved products or technologies are included, the effects on competition of the cooperation have to be examined more closely. The likelihood of facing restrictive effects on competition in the form of increased prices or reduced output in existing markets would increase if strong competitors are involved in such a cooperation as well.
118. If the R&D activity is directed at an entirely new product or technology which creates a new market, any effect on the price and output in existing markets are rather unlikely. In this case, the analysis has to focus on possible restrictions of innovation including, for instance, the quality and variety of possible future products or technologies, or the speed of innovation. Such restrictive effects can arise in case the cooperation is between two or more of a small number of undertakings which are independently engaged in the development of a new product and which are close to launch to product in the market. Such effects are, in general, the direct result of the agreement between the parties. Innovation may also be restricted by a pure R&D agreement. However, an R&D cooperation concerning entirely new products is unlikely to give rise to restrictive effects on competition, unless there are only a very limited number of competing R&D efforts. This principle is largely valid even when joint exploitation of the results of the R&D activity, including joint marketing, is involved. In those situations, the joint exploitation of R&D results may only give rise to restrictive effects on competition where there is market foreclosure due to key technologies. However, those problems would not arise if the parties allow third parties to compete effectively by granting licenses.
119. Many R&D agreements will lie somewhere in between the two situations described in the previous two paragraphs. Therefore, these agreements may have effects both on innovation and on existing markets. Consequently, both the existing market and the effect on innovation may have to be taken into consideration for the assessment conducted in relation to the combined positions of the parties, concentration ratios, number of players

or innovators in the market and entry conditions. In some cases there can be restrictive effects on competition in the form of increased prices or reduced output, product quality, product variety or innovation in relation to existing markets, and in the form of a slowing down in development in relation to innovation. For instance, a cooperation by the significant competitors in an existing technology market directed at developing a new technology which can replace existing products in the future may slow down the development of the new technology if the parties have market power in the existing market and a strong position with respect to R&D. A similar effect can occur if one of the major players in an existing market cooperates with a much smaller actual or potential competitor that is just about to emerge with a new product or technology which may endanger the position of the incumbent undertaking.

120. Agreements may also fall outside the scope of the R&D Communiqué irrespective of the parties' market power. This applies for instance to agreements which unduly restrict access of one of the parties to the results of the R&D cooperation.

3.4. Assessment under Article 5 of the Act

3.4.1. Efficiency gains

121. Many R&D agreements, with or without joint exploitation of possible results, bring about efficiency gains by combining complementary skills and assets, thus ensuring more rapid development and marketing of new or improved products and technologies. R&D agreements may also ensure further innovation by allowing wider dissemination of knowledge. R&D agreements may also give rise to cost reductions.

3.4.2. Pass-on to consumers

122. Efficiency gains attained must be passed on to consumers in a way that compensates for the restrictive effects of the R&D agreement on competition. For example, positive effects caused by the introduction of new or improved products in the market must outweigh price increases or other restrictive effects on competition. In general, it is more likely for R&D agreements combining complementary skills and assets to bring about efficiency gains that benefit consumers. On the other hand, those R&D agreements where the skills and assets of the parties are very similar may result in the elimination of part or all of the R&D efforts of one or more of the parties. Such an agreement would remove fixed costs for the parties, but would most probably fail to lead to benefits which would be passed on to consumers. Moreover, the higher the market power of the parties the less likely they are to pass on the efficiency gains to consumers in a way that would outweigh the restrictive effects on competition.

3.4.3. Non-elimination of competition

123. If competition is eliminated in a significant part of the relevant product or technology markets, the agreement may not benefit from exemption under article 5.

3.4.4. Indispensability

124. An R&D agreement which includes restrictions that go beyond what is necessary to achieve the efficiency gains would not meet the conditions listed in article 5 of the Act no 4054. In particular, it is unlikely for agreements to fulfil the conditions listed in article 5 of the Act no 4054 if they include the restrictions listed in article 6 of the R&D Communiqué and thus do not fall under the relevant block exemption. In this situation, in order to benefit from the exemption, it will be necessary for the parties of the R&D agreement to show that such restrictions are indispensable to the cooperation.

3.4.5. Assessment under article 5 of the Act with respect to time

125. The assessment of a restrictive agreement under article 5 is made within the framework of the conditions prevailing at the time the agreement was signed. The assessment is sensitive to material changes in these conditions, and the exemption granted to the agreements applies as long as the four conditions listed in article 5 are fulfilled. Within this framework, in an assessment under article 5, it is necessary to take into account the initial sunk costs incurred by any of the parties as well as the time and restraints required for making and recouping an efficiency enhancing investment. If the invention resulting from the investment grants exclusivity to the parties under intellectual property rights, it is generally unlikely for the recoupment period for such an investment to exceed the exclusivity period determined.

3.5. Examples

Example 1

126. Impact of R&D cooperation in innovation/new product markets

Undertaking A which is a small research company that does not have its own marketing division has discovered and patented a pharmaceutical substance based on new technology that will revolutionize the treatment of a certain disease. Undertaking A enters into an R&D agreement with undertaking B, which is a large pharmaceutical producer manufacturing the products that have so far been used for treating the disease in question. Undertaking B lacks any similar expertise and R&D program and would not be able to build such expertise within a relevant timeframe. For the existing products, undertaking B has a market share of around 75%; but the its patents will expire over the next five years. There exist two other competing R&D efforts comprised of undertakings using the same new technology and at approximately the same stage of development. Undertaking B will provide considerable funding and know-how for product development, as well as future access to the market for the products. Undertaking B is granted a license for the exclusive production and distribution of the resulting product for the duration of the patent. Th product is expected to be brought to market within five to seven years.

Assessment: The product will most probably 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 as a result of the cooperation. Although undertaking B is likely to hold significant market power in the existing market, that market power will start to decrease shortly. The agreement will not lead to a loss in R&D on the part of undertaking B, since undertaking B lacks any expertise in the area of R&D and the existence of rival R&D efforts are of a nature to eliminate any incentive to reduce R&D efforts. Undertaking B would need rights to exploit the results of the R&D efforts during the patent period in order to be able to make the necessary investments. Undertaking A, on the other hand, has no marketing resources of its own. Consequently, the relevant agreement is unlikely to give rise to restrictive effects on competition within the meaning of article 4. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met.

Example 2

127. Impact of R&D cooperation on dynamic product and technology markets and the environment

Two engineering companies that produce vehicle components agree to set up a joint venture with an aim to combine their R&D efforts to improve the production and performance of an existing component. The production of the relevant component would also have a positive effect on the environment; vehicles would consume less fuel and therefore emit less CO₂. The undertakings will pool their existing technology licensing activities, but will continue to manufacture and sell the components separately. The two undertakings have a domestic market shares of 15% and 20% in the "original equipment manufacturer" (OEM) market. There are two other major competitors in this area in addition to the in-house research programs by large-scale vehicle manufacturers. In the world-wide market for the licensing of technology for the products in question, the parties have 20% and 25% market shares on the basis of turnover, and there are two rival major technologies. The life cycle for the component is typically two to three years. For the past five years, one of the major undertakings has introduced a new version or upgrade for the component each year.

Assessment: Since neither undertaking's R&D effort is aimed at a completely new product, the markets to consider are those for the existing components and for the licensing of the relevant technology. The combined market share of the parties in both the OEM market (35%) and, in the technology market (45%) are quite high. However, the parties will continue to manufacture and sell the components separately. In addition, there are several competing technologies, which are regularly improved. Moreover, the vehicle manufacturers who do not currently license their technology are also potential entrants for the technology market, and thus constrain the ability of the parties to profitably raise prices. Within this context, even if the joint venture has restrictive effects on competition within the meaning of article 4, it could fulfil the criteria of exemption listed in article 5. For the assessment under article 5, it would be necessary to take into account that lower fuel consumption would be to the benefit of the consumers.

4. PRODUCTION AGREEMENTS

4.1. Definition and Scope

128. Block Exemption Communiqué on Specialization Agreements, no 2013/3 specifies the conditions for granting block exemption to specialization agreements between undertakings from the application of the provisions of article 4 of the Act. As also mentioned in paragraph 8 of these Guidelines, this chapter titled "Production Agreements" is complementary in nature to the Specialization Communiqué.
129. Production agreements may come in various forms and they are meant to ensure that production may be carried out by one or more undertakings. Undertakings can engage in joint production by way of a joint venture company under their shared control operating one or more production facilities, or via looser forms of cooperation such as subcontracting agreements where one party (the contractor) entrusts to another party (subcontractor) the production of a good.
130. There are different types of subcontracting agreements. Horizontal subcontracting agreements are concluded between undertakings operating in the same product market irrespective of whether they are actual or potential competitors, while vertical subcontracting agreements are concluded between undertakings operating at different levels of the market.
131. Horizontal subcontracting agreements comprise unilateral and reciprocal specialization agreements as well as subcontracting agreements with a view to expanding production. "Unilateral specialization agreements" are agreements between two parties which operate in the same product market or markets, wherein one party agrees to fully or partly cease production of certain products or to purchase them from the other party, and the other party agrees to produce and supply the products in question. "Reciprocal specialization agreements" are agreements between two or more parties which operate in the same products market or markets, wherein they agree, on a reciprocal basis, to fully or partly cease producing certain but different products or to purchase those products from the other parties, and the other parties agree to produce and supply the products in question. "Subcontracting agreements with a view to expanding production" are those agreements where the contractor entrusts the subcontractor with the production of a good, while the contractor does not cease or limit its own production of the relevant good.
132. The principles in these Guidelines are valid for all forms of joint production agreements and horizontal subcontracting agreements. Subject to certain conditions, joint production agreements as well as unilateral and reciprocal specialization agreements may benefit from block exemption under the Specialization Communiqué.
133. Vertical subcontracting agreements are not covered by these Guidelines; instead they fall within the scope of the Guidelines on Certain Subcontracting Agreements Between Non-Competitors and may benefit from block exemption under the Block Exemption Communiqué on Vertical Agreements, no 2002/2, subject to certain conditions.

4.2. Relevant markets

134. In order to assess the competitive relationship between the cooperating parties, it is necessary first to define the relevant market or markets directly concerned by the cooperation in production, that is to say, the markets to which the products manufactured under the production agreement belong.
135. A production agreement can also have spill-over effects in neighboring markets directly concerned by the cooperation (spill-over markets), for instance upstream or downstream to the agreement. The spill-over markets will be taken into consideration in the assessment to be conducted as well, if the markets are interdependent and the parties are in a strong position in the spill-over markets.

4.3. Assessment under Article 4 of the Act

4.3.1. Main competitive concerns

136. Production agreements, and in particular production joint ventures, may cause restriction of competition by leading the parties to align output volumes, product quality, product price and other competitively important parameters. This may happen even if the parties market the products independently.
137. Production agreements may lead to higher prices or reduced output, product quality, product variety or innovation, that is to say, to a collusive outcome, as a result of the parties' coordinating their competitive behavior as suppliers. This can happen, depending on market power of the parties and whether the market is conducive to coordination, in particular if the production agreement makes the variable costs of the parties similar to a degree which enables a collusive outcome, or if it involves an exchange of competitively sensitive information.
138. Production agreements may furthermore lead to the foreclosure of related markets to other undertakings. For instance, by gaining enough market power, parties engaging in joint production activities in the upstream market may be able to raise the price of a key component for a downstream market, and thus they could use the joint production activity to raise the costs of their competitors downstream and, ultimately, force these competitors off the market. This, as a result, could have adverse effects on the consumers by allowing the parties to increase their market power downstream and to sustain prices above the competitive level, or through other ways. Such competition concerns could materialize irrespective of whether the parties to the agreement are competitors in the market in which the cooperation takes place. However, in order to talk about this kind of market foreclosure, at least one of the parties must have a strong position in the market where the risk of foreclosure of the market to the competitors is identified.

4.3.2. Restriction of competition by object

139. Generally, agreements which involve price-fixing, limiting output or allocating markets or customers restrict competition by object. However, in the context of production agreements, this does not apply under the following circumstances:
- Where the parties agree on the elements directly concerned by the production agreement (for example, the capacity and production volume of a joint venture or the amount of products to be outsourced to third parties), provided that the other parameters of competition are not eliminated,
 - Where a production agreement that provides for the joint distribution of the products manufactured as a result of the cooperation also jointly determines the sales prices for the products manufactured, provided that this is absolutely necessary for the parties to come to an agreement concerning joint production.
140. In these two cases an assessment is required as to whether the agreement gives rise to restrictive effects on competition within the meaning of article 4. In both scenarios, the provisions of the agreement concerning output or prices will not be assessed separately, but in light of the overall effects of the entire production agreement on the market. 4.3.3. Restrictive effects on competition
141. The likely effects on competition of a production agreement and whether it would fall under article 4 depends on the characteristics of the market in which the agreement takes place, as well as on other variables such as the products covered by the cooperation and the nature and scope of the cooperation.
142. When assessing the likelihood of a production agreement causing restrictive effects on competition, a comparison must be made between the situation where the agreement exists together with all of its effects thought to restrict competition and the situation where such an agreement does not exist.
143. If a new market is created as a result production agreements, the agreement is no likely to give rise to restrictive effects on competition. For instance, if a new product or service is launched which would, on the basis of objective criteria, have been impossible for the parties to produce individually due to technical impracticalities, the likelihood of restricting competition would be low.
144. In those sectors where production is the main economic activity, even a pure production agreement can limit competition by eliminating key dimensions of competition.
145. A production agreement can lead to a collusive outcome in the market or to the foreclosure of the market to competitors, if it increases the undertakings' market power or their commonality of costs, or if it involves the exchange of competitively sensitive information. The parties of the agreement can only profitably maintain prices above the competitive level, or profitably maintain output, product quality or variety below the competitive level if they have market power.
146. In cases where an undertaking with market power in a certain market cooperates with a potential competitor in the position of a supplier of the same product in a neighboring

geographic or product market, the agreement would potentially increase the market power of the incumbent undertaking. This can lead to restrictive effects on competition if actual competition in the incumbent's market is already weak and the threat of entry forms significant competitive pressure.

147. Production agreements which also involve commercialization functions, such as joint distribution or marketing, carry a higher risk of restricting competition than pure joint production agreements. In cases of joint commercialization, cooperation happens closer to the consumer and usually involves practices that carry the highest risks for competition such as the joint setting of sales prices and amounts. However, joint distribution agreements for products which have been jointly produced are generally less likely to restrict competition than those agreements which involve pure joint distribution agreements. Also, a joint distribution agreement that is necessary for the joint production agreement to take place is less likely to restrict competition than a joint distribution agreement that is not necessary for joint production.

Market power

148. A production agreement is unlikely to restrict competition if the parties thereof do not hold market power. The analysis of market power takes into account various factors including the concentration ratio and the number of players in the market, potential entry opportunities into the market, variability of market shares and, in particular, the market shares of the parties.
149. Undertakings with a market share below a certain level are less likely to have market power. In any event, unilateral or reciprocal specialization agreements as well as joint production agreements that include certain commercialization activities such as joint distribution are covered by the Specialization Communiqué, provided that the combined market share of the parties in the relevant market or markets do not exceed 25% and that the other conditions listed in the Specialization Communiqué are fulfilled. Moreover, similarly, as regards horizontal subcontracting agreements with a view to expanding production, in most cases it is hard to talk about market power if the combined market share of the parties to the agreement does not exceed 20%.
150. However, if the combined market share of the parties exceeds 25%, the restrictive effects on competition would have to be analyzed, since the agreement would not be covered by the Specialization Communiqué. A market share that exceeds the above-mentioned threshold for the Specialization Communiqué or subcontracting agreements may not necessarily imply a highly concentrated market. In a market with moderate concentration, the combined market share of the parties may be 25% or slightly more than that. Generally, a production agreement is more likely to lead to restrictive effects on competition in a concentrated market than in a market which is not concentrated. Similarly, conclusion of a production agreement in a concentrated market may increase the risk of a collusive outcome in comparison to a market that is not concentrated, even if the parties only have a moderate combined market share.

151. Even if the market shares of the parties to the agreement and the market concentration are high, the risk of restriction of competition posed by an agreement concluded in a market in which new entries occur and market positions change frequently would be low.
152. In the analysis of whether the parties to a production agreement have market power, the number and intensity of relationships between the competitors (for example, other cooperation agreements) in the market are taken into account as well.
153. For the competitive assessment of the agreement, factors such as whether the parties to the agreement have high market shares, whether they are close competitors, whether the customers have limited possibilities of switching suppliers, whether competitors would be capable of increasing supply if prices increase, and whether one of the parties to the agreement exerts significant competitive pressure in the market are all taken into consideration.

Collusive outcome

154. The likelihood of a collusive outcome depends on the parties' market power as well as the characteristics of the relevant market. A collusive outcome can result in particular if the production agreement causes commonality of costs or an exchange of information.

Commonality of costs

155. A production agreement between parties with market power can cause restrictive effects on competition if it increases the commonality of the variable costs for the product in such a way as to enable the parties to collude.
156. If, prior to the agreement, the variable costs of the parties is mostly similar as in homogenous products, then increasing the commonality of production costs as well would increase the likelihood of a collusive outcome. On the other hand, if the commonality in the costs of the parties sees a significant increase as a result of the agreement, the risk of a collusive outcome for the agreement will be high, even if the level of commonality of costs before the agreement was low.
157. Commonality of costs increases the risk of a collusive outcome only if production costs constitute a large proportion of the variable costs concerned. This is, for instance, not the case where the cooperation concerns products which require incurring high costs for commercialization, since production costs would constitute a small portion of the variable costs. An example would be new or heterogeneous products requiring high marketing or transport costs.
158. Another situation where commonality of costs can lead to a collusive outcome could be where the parties form a joint venture concerning an intermediate product which accounts for a large proportion of the variable costs of the final product with respect to which the

parties compete in the downstream market. The parties could use the production agreement to increase the price of the important common input for their products in the downstream market. This would weaken competition downstream and would most likely lead to higher prices for the final product. The profit generated would be shifted from downstream to upstream to be shared between the parties through the joint venture.

159. Similarly, commonality of costs also increases the risk of restriction of competition with respect to a horizontal subcontracting agreement where the input contractor purchases from the subcontractor accounts for a large proportion of the variable costs of the final product in relation to which the parties compete.

Information exchange

160. Negative effects arising from exchange of information will not be assessed separately but in the light of the overall effects of the agreement. A production agreement can give rise to restrictive effects on competition if it involves an exchange of competitively sensitive information that can lead to a collusive outcome or to the foreclosure of the market to competitors. The likelihood of an exchange of information performed in the context of a production agreement to lead to restrictive effects on competition should be assessed according to the principles explained in the chapter of these Guidelines concerning information exchange.
161. If the information exchange does not exceed the sharing of data necessary for the joint production of the goods subject to the production agreement, then even if the information exchange had restrictive effects on competition within the meaning of article 4, the agreement would be more likely to meet the exemption criteria of Article 5. In this case the efficiency gains stemming from joint production are likely to outweigh the restrictive effects on competition stemming from the coordination of the parties' conduct. Conversely, where an information exchange that goes beyond what is necessary for joint production is concerned, such as the exchange of data on prices and sales, then it is less likely for the agreement to fulfil the conditions of article 5.

4.4. Assessment under Article 5 of the Act

4.4.1. Efficiency gains

162. Production agreements can provide efficiency gains such as cost savings or improvement in production technologies. By producing together, undertakings can save costs by avoiding cost duplication. If, as a result of the cooperation, marginal costs decrease in line with the increase in the output, that is to say, if economies of scale are utilized, then the production costs of the undertakings would also decline. Joint production can also help undertakings to improve product quality if they put together their complementary skills and know-how elements. Cooperation can also enable an increase in product variety, which the undertakings could not have financed or achieved otherwise. If joint production allows an increase in product variety, it can also provide cost savings by means of economies of scope.

4.4.2. Pass-on to consumers

163. Efficiency gains attained need to be passed on to consumers in the form of lower prices, better product quality or product variety to an extent that outweighs the restrictive effects on competition. Efficiency gains that only benefit the parties or cost savings caused by output reduction or market allocation are not sufficient to meet the conditions listed in article 5. Savings attained in fixed costs as a result of a production agreement is less likely to be passed-on to the consumers than savings attained in variable costs. Moreover, the higher the market power of the parties the less likely they are to pass on the efficiency gains to consumers in a way that would outweigh the restrictive effects on competition.

4.4.3. Non-elimination of competition

164. If competition is eliminated in respect of a substantial part of the relevant market, then the agreement cannot benefit from exemption under article 5. The assessment to be conducted within this framework must analyze the relevant market to which the products subject to the cooperation belong as well as any possible spill-over markets.

4.4.4. Indispensability

165. A production agreement which includes restrictions that go beyond what is necessary to achieve the efficiency gains would not meet the conditions listed in article 5. For instance, restrictions imposed in a production agreement on the parties' competitive conduct with regard to products outside the scope of the cooperation will normally not be considered to be indispensable. Similarly, where the production agreement does not involve joint commercialization, joint price setting will not be considered to be indispensable for the agreement.

4.5. Examples

Example 1

166. Commonality of costs and collusive outcome

Undertakings A and B, two suppliers of a product K, agree to replace their existing production plants by building a modern and more efficient production plant with a higher capacity than the total capacity of their old plants, which will be run by a joint venture to be established. no such investments are planned by competitors, which are using their facilities at full capacity. Undertakings A and B have market shares of 20% and 25% respectively. The products of the two undertakings are the closest substitutes for each other in this concentrated market. The market is rather transparent and stagnant, there is no new entry into the market and the current market shares have been stable over time. Production costs constitute a major part of the variable costs for undertakings A and B with respect to product K. Since product K is homogenous and established, its commercialization costs are low and transportation costs do not constitute a key element in terms of competition.

Assessment: If undertakings A and B share all or most of their variable costs, this production agreement could lead to a direct limitation of competition between the parties. This may lead the parties to limit the output of the joint venture compared to what they would have produced independently. In the light of the capacity constraints of the competitors, this reduction in output could lead to higher prices.

Even if undertakings A and B were not sharing most of their variable costs, but only a significant part thereof, the agreement could lead to a collusive outcome, thereby indirectly eliminating competition between the two parties. This likelihood depends not only on the commonality of costs, but also on certain characteristics of the relevant market such as transparency, stability and level of concentration.

In either of the two situations mentioned above, it is likely, in the market configuration of this example, that the production joint venture created by undertakings A and B would give rise to restrictive effects on competition within the meaning of article 4 in the market to which product K belongs.

It is possible for the joint venture to benefit consumers by offering more output at lower prices through the replacement of two smaller old production plants with a larger, modern and more efficient facility. However, in order for the production agreement to meet the conditions of article 5, the parties must prove that the efficiency gains would be passed on to consumers to such an extent as to outweigh the restrictive effects on competition.

Example 2

167. Links between competitors and collusive outcome

Undertakings A and B which are the suppliers for product K, form a production joint venture with respect to product K. Undertakings A and B each have a 15% market share in the market for K. Also in the market are undertaking C with a market share of 30%, D with a market share of 25%, and E with a market share of 15%. Undertakings B and D already have a facility for joint production.

Assessment: There are very few undertakings in the market with similar sizes. A cooperation between undertakings A and B would also link undertaking D with undertakings A and B, thereby creating an additional link in the market and leading to a de facto increase in market concentration. This cooperation is likely to increase the risk of a collusive outcome in the market, giving rise to restrictive effects on competition within the meaning of article 4. The agreement would only benefit from the exemption of article 5 in the presence of significant efficiency gains which are passed on to consumers to such an extent that they would outweigh the restrictive effects on competition.

Example 3

168. Foreclosure of a downstream market

Undertakings A and B set up a joint venture for the production of the intermediate product K. The production costs of K account for 70% of the variable costs of the final product L with respect to which undertakings A and B compete downstream. Undertakings A and B each have a market share of 20% on the product market for L, where there is limited entry and the market shares have been stable. Undertakings A and B can cover the entirety of their own demand for K and each have a market share of 40% on the market for K. There are high barriers to entry on the market for K and existing producers are operating near full capacity. On the market for L, there are two other significant competitors, each with a market share of 15% as well as several smaller competitors. The production agreement in question generates economies of scale.

Assessment: By virtue of the production joint venture, undertakings A and B would be able to largely control the supply for K, which is an essential input for their competitors in the market for L. This situation could give undertakings A and B the ability to raise their competitors' costs by artificially increasing the price or reducing the output of K, and thus lead to the foreclosure of the L market to competitors. Due to the possibility of downstream market foreclosure, this agreement is likely to give rise to restrictive effects on competition within the meaning of article 4. The economies of scale generated by the production joint venture agreement are unlikely to outweigh the restrictive effects on competition, and therefore this agreement would most likely not meet the conditions of article 5.

Example 4

169. Market allocation via specialization agreements

Undertakings A and B both manufacture products K and L. Undertaking A's market share of K is 30% and of L 10%. B's market share is 10% for K and 30% for L. To obtain economies of scale, the undertakings conclude a specialization agreement according to which undertaking A will only produce product K, and undertaking B only product L. Undertakings do not engage in cross-supply; thus, undertaking A only sells product K and undertaking B sells only product L. The parties claim that by specializing in this way they will save costs due to the economies of scale and that focusing on only one product will improve their production technologies, which will increase the quality of their products.

Assessment: With regard to its effects on competition in the market, this specialization agreement is similar to a hardcore cartel for market allocation. Therefore, this agreement restricts competition by object. Because the claimed efficiencies such as economies of scale and improving production technology are directly linked to the allocation of the market, these would not outweigh the restrictive effects on competition, and conditions listed article 5 would not be fulfilled. On the other hand, if undertakings A and B believe that it would be more efficient to focus on only one product, they can take the unilateral decision to only produce K or L without a simultaneous decision by the other undertaking to focus on the production of the remaining product at the same time.

The analysis would be different if undertakings A and B continue to produce products K and L, and concluded an agreement to supply each other with the product they specialize on. In such a case, especially where production costs do not constitute a major share of the variable costs of the products, undertakings A and B could still continue competing on price in both markets. Hence, the specialization agreement would not be able to restrict competition if K and L were largely heterogeneous products, with a high proportion of marketing and distribution costs within total costs (for example, 65-70%). In such a scenario, the risks of a collusive outcome would not be high and the conditions of article 5 can be fulfilled, provided that the efficiency gains can be passed on to consumers to such an extent that they would outweigh the restrictive effects on competition of the agreement.

Example 5

170. Information exchange in a production agreement

Undertakings A and B with high market power decide to produce together to become more efficient. Within the context of this agreement, the undertakings secretly exchange information about their future prices. The agreement does not cover joint distribution.

Assessment: This information exchange is likely to restrict competition by object within the meaning of article 4, since it strengthens the likelihood of collusive outcome. The agreement would be unlikely to meet the conditions of article 5, because the sharing of information by the parties concerning their future prices is not indispensable for ensuring joint production and cost savings.

5. JOINT PURCHASING AGREEMENTS

5.1. Definition and scope

171. Joint purchasing can be carried out by a company jointly controlled by more than one undertaking, by a company in which many other undertakings hold non-controlling stakes, by a contractual arrangement or by looser forms of cooperation. Joint purchasing arrangements aim at the creation of buying power, thereby usually ensuring lower prices or better quality products or services for consumers. However, buying power may, under certain circumstances, also give rise to competition problems.
172. Joint purchasing agreements may involve both horizontal and vertical arrangements. In these cases a two-stage analysis is necessary. First, the horizontal agreements between the undertakings engaging in joint purchasing have to be assessed according to the principles described in these Guidelines. If that assessment leads to the conclusion that the joint purchasing arrangement does not give rise to competition concerns, a further assessment will be necessary to examine the relevant vertical arrangements. The latter assessment will follow the rules of the Block Exemption Communiqué on Vertical Agreements, no 2002/2 and the relevant Guidelines.
173. Joint purchasing agreements are generally observed in the form of associations of undertakings 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 first have to be assessed as a horizontal cooperation agreement according to these Guidelines. If no competition problems are found as a result of that assessment, it becomes relevant to assess the vertical agreements concluded between the association and a member thereof and between the association and suppliers. Those agreements are covered by block exemption under the Communiqué no 2002/2, subject to certain conditions. Those vertical agreements which fall under article 4 of the Act but which are not covered by block exemption under the Communiqué no 2002/2 mentioned above are subject to exemption assessment under article 5 of the Act.

5.2. Relevant markets

174. There are two markets which may be affected by joint purchasing agreements. The first of these is the markets with which the joint purchasing arrangement is directly concerned, that is to say, the relevant purchasing markets. The second are the selling markets, which are the downstream markets where the parties to the agreement are active as sellers.
175. The definition of relevant purchasing markets is based generally on the concept of substitutability. The only difference between the definition of purchasing markets from the definition of selling markets is that substitutability has to be defined from the viewpoint of supply instead of demand. In other words, the supplier alternatives have decisive effect on identifying the competitive constraints on purchasers. Those alternatives could be analyzed, for instance by examining the suppliers' reaction to a small but non-transitory decrease in prices. Once the market is defined, the market share can be

calculated as the percentage of the purchases by the parties out of the total sales of the purchased product or products in the relevant market.

176. If the parties are, in addition, competitors on one or more selling markets, those markets must also be considered within the scope of the relevant market for the purposes of the assessment. The selling markets have to be defined within the framework of the methodology described in the Guidelines on the Definition of Relevant Market.

5.3. Assessment under Article 4 of the Act

5.3.1. Main competitive concerns

177. Joint purchasing arrangements may lead to restrictive effects on competition in the purchasing and/or downstream selling markets, such as increase in product prices, reduction in output, product quality and variety or innovation, market allocation, or foreclosure of the market to other possible purchasers.
178. If downstream competitors purchase a significant part of their products together, the incentive for price competition on the selling markets may be considerably reduced. Even though this does not necessarily amount to dominant position, if the parties hold significant market power in the selling markets, it is likely that the lower purchase prices achieved by the joint purchasing arrangement would not be passed on to consumers.
179. In case the parties have a significant degree of market power on the purchasing market (buying power), there is a risk that they may force suppliers to reduce the variety or quality of products they produce. This situation may bring about certain restrictive effects, such as reduction in quality, lessening of innovation efforts, or ultimately sub-optimal amount of supply.
180. Buying power of the parties to the joint purchasing arrangement could be used to foreclose competing purchasers by limiting their access to efficient suppliers. This is more likely where there are a limited number of suppliers and there are barriers to entry on the supply side of the upstream market.
181. In general, however, joint purchasing arrangements are less likely to give rise to competition concerns if the parties do not have market power in the selling markets.

5.3.2. Restriction of competition by object

182. Joint purchasing arrangements restrict competition by object if they do not truly concern joint purchasing, but serve as a tool to form a disguised cartel, that is to say, to engage in activities such as price fixing, output limitation or market allocation which are otherwise prohibited.

183. Agreements which involve the fixing of purchase prices can restrict competition by object in accordance with article 4. However, where the parties to the arrangement concerning the joint purchasing agreement settle on the purchasing prices the arrangement would pay to suppliers for the products subject to the supply contract, an assessment is required as to whether the agreement is likely to give rise to restrictive effects on competition within the meaning of article 4. In both scenarios the agreement on purchase prices will not be assessed on its own, but in light of the overall effects of the purchasing agreement on the market.

5.3.3. Restrictive effects on competition

184. The actual and potential competitive effects of joint purchasing arrangements which do not restrict competition by object must be analyzed in light of their own legal and economic context. The analysis of the restrictive effects on competition generated by a joint purchasing agreement must cover the negative effects on both the purchasing and the selling markets.

Market power

185. There is no absolute threshold which demonstrates that one of the parties to a joint purchasing arrangement holds market power and thus the agreement is likely to give rise to restrictive effects on competition in accordance with article 4. However, in most cases, it is unlikely that market power exists if the combined market share of the parties to the joint purchasing *arrangement* does not exceed 15% in the purchasing markets and 15% in the selling markets. Besides, if the combined market shares of the parties do not exceed 15% on both the purchasing and the selling markets, it is likely that the conditions of article 5 are fulfilled.
186. A market share above that threshold in one market or both does not automatically indicate that the joint purchasing arrangement would give rise to restrictive effects on competition. In such a case, it is necessary to assess the joint purchasing arrangement in terms of its effects on the market, by taking into consideration factors such as market concentration and possible countervailing power of strong suppliers.
187. Buying power may, under certain circumstances, cause restrictive effects on competition. Anti-competitive buying power is likely to arise if purchases made by a joint purchasing arrangement accounts for a sufficiently large proportion of the purchasing market so that access to the market may be foreclosed to competing purchasers. A high degree of buying power may indirectly affect the output, quality and variety of products in the selling market.
188. When analyzing whether the parties to a joint purchasing arrangement have buying power, the number and intensity of links (for example, other purchasing agreements) between the competitors in the market are important.

189. However, in case of cooperation by competing purchasers who are not active on the same relevant selling market (for example, retailers which are active in different geographic markets and cannot be regarded as potential competitors), the joint purchasing arrangement is unlikely to have restrictive effects on competition, provided that the parties does not have a position in the purchasing markets which may harm the competitive position of other players in their respective selling markets.

Collusive outcome

190. Joint purchasing arrangements which make it easier for the parties to coordinate their behavior in the selling market may lead to a collusive outcome. This can be the case particularly where joint purchasing creates a high degree of commonality of costs for the parties, provided the parties have market power and the market characteristics are conducive to coordination.
191. The relevant cooperation is more likely to lead to restrictive effects on competition if the parties to the joint purchasing arrangement have a significant proportion of their variable costs in the relevant downstream market in common. For instance, if retailers active in the same market jointly purchase a significant amount of the products they offer for resale or if undertakings which compete with each other in the market related to the final product jointly purchase a high proportion of their input together, the aforementioned types of cooperation would be highly likely to lead to restrictive effects on competition.
192. A joint purchasing arrangement may require the exchange of commercially important information such as purchase prices and volumes. The exchange of such information may facilitate coordination with regard to sales prices and output, thus leading to a collusive outcome in the selling markets. However, spill-over effects from the exchange of competitively sensitive information can be minimized where, in a joint purchasing arrangement, data is collected without being passed on to the parties thereto.
193. Any negative effects arising from the exchange of information will not be assessed separately, but in light of the overall effects of the agreement. Whether the exchange of information within the framework of a joint purchasing arrangement is likely to lead to restrictive effects on competition should be assessed according to the general principles included in the chapter on exchange of information. If the information exchange does not go beyond the sharing of data necessary for the joint purchasing arrangement, then there is a high likelihood that the agreement would meet the conditions specified in article 5.

5.4. Assessment under Article 5 of the Act

5.4.1. Efficiency gains

194. Joint purchasing arrangements can give rise to significant efficiency gains. In particular, economies of scale may be realized by ensuring savings in cost items by various means such as lower purchase prices or reducing transaction, transportation and storage costs.

Moreover, joint purchasing arrangements may give rise to qualitative efficiency gains by leading suppliers to innovate and introduce new or improved products in the markets.

5.4.2. Pass-on to consumers

195. Efficiency gains attained, such as cost efficiencies or qualitative efficiencies in the form of introduction of new or improved products in the market, must be passed on to consumers to an extent that outweighs the restrictive effects of competition caused by the joint purchasing arrangement. Cost savings need to be passed on to consumers, that is to say, the parties' customers, for example by lowering prices in the selling markets. In case the purchasers together have market power in the selling markets, lower purchasing prices resulting from the mere exercise of buying power are not likely to be passed on to consumers. In this case, the conditions of article 5 would not be met. Moreover, the higher the market power of the parties in the selling markets, the less likely they are to pass on the efficiency gains to consumers in a way that would outweigh the restrictive effects on competition created by the joint purchasing agreement.

5.4.3. Non-elimination of competition

196. If, as a result of the joint purchasing agreement, competition is eliminated in respect of a substantial part of the relevant market, then the agreement cannot benefit from exemption under article 5. This assessment has to cover both purchasing and selling markets.

5.4.4. Indispensability

197. A joint purchasing agreement which includes restrictions that go beyond what is necessary to achieve the efficiency gains would not meet the conditions listed in article 5. Obligations to procure the products exclusively through joint purchasing may, in certain cases, be indispensable to achieve the volume necessary for the realization of economies of scale. However, such an obligation needs to be assessed in the context of each individual case.

5.5. Examples

Example 1

198. Joint purchasing by small undertakings

150 small retailers conclude an agreement to form a joint purchasing organization. The undertakings are obliged to purchase a minimum volume through the organization, corresponding to roughly 50% of each retailer's total costs. The retailers can purchase more than the minimum volume through the organization, and they may also purchase outside the framework of the agreement. The undertakings have a total market share of 23% in both the purchasing and the selling markets. Undertaking A and undertaking B are the two large competitors of these retailers. The share of undertaking A in the purchasing

and selling markets is 25% and that of undertaking B is 35%. There are no barriers which would prevent the remaining smaller competitors from also forming a purchasing group. These 150 retailers achieve substantial cost savings by virtue of purchasing jointly through the purchasing organization.

Assessment: The retailers have a moderate market position in the purchasing and the selling markets. Furthermore, the cooperation brings about some economies of scale. Even though the retailers achieve a high degree of commonality of costs, the retailers are unlikely to have market power in the selling market due to the market presence of undertakings A and B, which are both individually larger than the joint purchasing organization. Consequently, the retailers are unlikely to coordinate their behavior and cause a collusive outcome. Therefore, the formation of the joint purchasing organization is unlikely to give rise to restrictive effects on competition within the meaning of article 4. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met.

Example 2

199. Commonality of costs and market power in the selling market

Two supermarket chains conclude an agreement to jointly purchase products which account for roughly 80% of their variable costs. In the relevant purchasing markets for the different product categories, the total market shares of the parties are between 25% and 40%. Their combined market share in the relevant selling market is 60%. There are four other large retailers in the market, each with a market share of 10%. Market entry by new retailers is unlikely.

Assessment: This purchasing agreement is likely to lead to a collusive outcome by allowing the parties to coordinate their behavior in the selling market. The parties have market power in the selling market and the purchasing agreement gives rise to a significant commonality of costs. Moreover, market entry by new retailers is unlikely. The incentives for the parties to coordinate their behavior would be reinforced if their cost structures were already similar prior to the conclusion of the agreement. Moreover, the parties' having similar profit margins would further increase the risk of a collusive outcome. This agreement also poses the risk of increased selling prices in the downstream market as a result of reduced quantity caused by a reduction of demand by the parties. Hence, the purchasing agreement is likely to give rise to restrictive effects on competition within the meaning of article 4. Even though the agreement is quite likely to give rise to efficiency gains in the form of cost savings, due to the significant market power held by the parties in the selling market, these gains are unlikely to be passed on to consumers to an extent that would outweigh the restrictive effects on competition. Therefore, the purchasing agreement is unlikely to fulfil the conditions listed in article 5.

Example 3

200. Parties operating in different geographic markets

Six large retailers, each of which are based in a different region, form a purchasing group to buy durum wheat products of different brands. The parties are allowed to purchase other similar branded products outside the cooperation. Moreover, five of them also offer similar products in the market under private labels. The combined market share of the members of the purchasing group is approximately 25% of the relevant national purchasing market. In the purchasing market there are three other players of similar size. Each of the parties to the purchasing group has a market share between 20% and 30% in the regional selling markets in which they operate. None of the members is active in a region where another member of the group is operating. The parties are not potential entrants to each other's markets.

Assessment: The purchasing group will be able to compete with the other existing major players in the purchasing market. The selling markets are much smaller (in terms of turnover and geographic scope) than the nation-wide purchasing market and some of the members of the group may have market power in those markets. Even though the combined market share of the members of the purchasing group in the purchasing market is not very low, the parties are unlikely to coordinate their conduct in the selling markets since the members are not actual or potential competitors in the downstream markets. Consequently, the agreement is unlikely to give rise to restrictive effects on competition within the meaning of article 4. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met.

Example 4

201. Information exchange

Three competing manufacturers A, B and C, entrust an independent joint purchasing organization with the purchase of product L, which is an intermediary product used by all of the three undertakings in the production of the final product K. L is not a significant cost factor for the production of K. The joint purchasing organization is not in competition with the parties in the selling market for K. All information necessary for the purchases, such as quality specifications, quantities, delivery dates and maximum purchase prices, is only disclosed to the joint purchasing organization, not to the other parties. The joint purchasing organization agrees on the purchasing prices with the suppliers. A, B and C have a combined market share of 30% in each of the purchasing and selling markets. These manufacturers have six competitors in the purchasing and selling markets, two of which have a market share of 20%.

Assessment: Since there is no direct information exchange between the parties, the transfer of the information necessary for the purchases to the joint purchasing organization is unlikely to lead to a collusive outcome. Consequently, the exchange of information is unlikely to give rise to restrictive effects on competition within the meaning of article 4. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met.

6. COMMERCIALIZATION AGREEMENTS

6.1. Definition and scope

202. Commercialization agreements involve cooperation between competitors related to the selling, distribution or promotion of substitute products. This type of agreement can take widely varying forms, depending on the commercialization functions covered by the cooperation. These agreements may lead to a joint determination of all commercial aspects related to the sale of the product, including the price, and they may also take a more limited form which only concern a specific commercialization function, such as distribution, after-sales service, or advertising.
203. An important category within commercialization agreements is distribution agreements. The Block Exemption Communiqué on Vertical Agreements, no 2002/2 and the related Guidelines generally cover distribution agreements, unless the parties to the agreement are comprised of actual or potential competitors. Even if the parties are competitors, such agreements would be assessed under the Communiqué no 2002/2 in case the supplier is both a manufacturer and a distributor of the goods covered by the agreement, while the buyer is simply a distributor and not a manufacturer of the competing goods.
204. If competitors agree to distribute their substitute products on a reciprocal basis (in particular if they do so on different geographic markets), it is possible that the agreements have as their object or effect the partitioning of markets between the parties or that they lead to a collusive outcome. The same can be true for non-reciprocal agreements between competitors. Hence, agreements between competitors that are not covered by the Communiqué no 2002/2 must be assessed according to the principles set out in this chapter.
205. A distinction must be drawn between agreements which only concern joint commercialization and agreements in which commercialization is related to another type of cooperation in the upstream market, such as joint production or joint purchasing. When analyzing commercialization agreements combining different stages of cooperation, it is necessary to determine the center of gravity of the cooperation (see paragraph 12, paragraph 13).

6.2 Relevant markets

206. In order to assess the competitive relationship between the parties, the relevant product and geographic markets directly concerned by the cooperation need to be defined. Since a commercialization agreement in one market may also affect the competitive behavior of the undertakings in a neighboring market with close ties to the relevant market, any such neighboring market must also be defined. The neighboring market in question may be horizontally or vertically related to the market where the cooperation takes place.

6.3. Assessment under Article 4 of the Act

6.3.1. Main competitive concerns

207. Commercialization agreements can lead to restrictions of competition in several ways. First of all, commercialization agreements may lead to price fixing. Secondly, in commercialization agreements, the parties may restrict supply by determining the production volume to be put on the market. Thirdly, commercialization agreements may become a means for dividing the markets or allocating customers, for example in cases where the parties' production facilities are located in different geographic markets or when the agreements are reciprocal. Finally, such agreements may also result in a collusive outcome by leading to an exchange of competitively sensitive information related to subjects falling within or outside the scope of the cooperation or by leading to a commonality of costs.

6.3.2. Restriction of competition by object

208. Price fixing is one of the major competition problems arising from commercialization agreements between competitors. Agreements limited to joint selling generally aim to coordinate the pricing policy of competitors. Such agreements can not only eliminate price competition between the parties in terms of substitute products, but they can also restrict the total volume of products to be offered by the parties within the framework of a system for allocating orders. Such agreements are therefore highly likely to restrict competition by object.
209. The agreement would be likely to restrict competition by object, even if the agreement is non-exclusive (that is to say, even if the parties are free to sell individually outside the agreement), as long as it is possible to conclude that it will lead to an overall coordination of prices.
210. Another important competition problem related to distribution arrangements between parties which are active in different geographic markets is that these agreements can be used as an instrument of market allocation. If the parties have concluded a reciprocal distribution agreement to distribute each other's products in order to eliminate actual or potential competition between them by allocating markets or customers, the agreement is likely to restrict competition by object. If the agreement is not reciprocal, the risk of market allocation is smaller. However, it is necessary to assess whether the non-reciprocal agreement would lead to a mutual understanding where the parties avoid entering each other's markets.

6.3.3. Restrictive effects on competition

211. Under normal circumstances, a commercialization agreement is not likely to give rise to competitive problems if it is objectively deemed to be necessary in order to allow one of the parties to the agreement to enter a market it could not have entered individually (or with a fewer number of parties than are effectively taking part in the cooperation), for example, because of the costs involved. A specific application of this principle would be consortia which allow the undertakings involved to participate in projects that they would

not be able to undertake individually. As the parties to the consortium are not potential competitors for the implementation of the project, no restriction of competition is expected under these circumstances.

212. Similarly, all reciprocal distribution agreements do not necessarily have restriction of competition as their object. Nevertheless, depending on the facts of the case at hand, some reciprocal distribution agreements may have restrictive effects on competition. The key issue in assessing such an agreement is whether the agreement in question is objectively necessary for the parties to enter each other's markets. If it is, the agreement is not expected to create competition problems of a horizontal nature. However, if the agreement reduces the incentives for one of the parties to enter the other parties' market, then the agreement is likely to give rise to restrictive effects on competition. This assessment also applies to non-reciprocal agreements, where the risk of restrictive effects on competition is less pronounced.
213. In addition, a distribution agreement may also lead to restrictive effects on competition if it includes vertical restraints such as restriction of passive sales and resale price maintenance.

Market power

214. Commercialization agreements between competitors can have restrictive effects on competition if the parties have a certain degree of market power. If the combined market share of the parties to the agreement does not exceed 15%, it is not likely that market power exists in most cases. Besides, if the combined market shares of the parties do not exceed 15%, it is likely that the conditions of article 5 of the Act are fulfilled.
215. The fact that the parties have a combined market share above this ratio does not necessarily mean that the commercialization agreement would lead to restrictive effects on competition. In this case, the likely impact of the joint commercialization agreement on the market must be assessed.

Collusive outcome

216. A joint commercialization agreement that does not involve price fixing is also likely to give rise to restrictive effects on competition if it increases the parties' commonality of variable costs to an extent that is likely to lead to a collusive outcome. This is likely to be the case for joint commercialization agreements where the variable costs of the parties were already significantly similar prior to the agreement. This is because increasing the commonality of commercialization costs as a result of the agreement can raise the likelihood of collusive outcome. On the other hand, where the costs become significantly common as a result of the agreement, the risk of a collusive outcome may be high even if the initial level of commonality of costs is low.

217. The likelihood of collusive outcome depends on the parties' market power and the characteristics of the relevant market. Commonality of costs can only increase the risk of a collusive outcome if the parties have market power and if the commercialization costs constitute a large portion of the variable costs related to the products in question. This is, for example, not the case for homogeneous products for which the highest cost factor is production. However, commonality of commercialization costs increases the risk of a collusive outcome if the commercialization agreement covers products with high distribution and marketing costs. Consequently, where those items constitute a significant cost factor, joint advertising or joint promotion agreements can also give rise to restrictive effects on competition.
218. Joint commercialization agreements generally involve the exchange of competitively sensitive information, such as marketing strategy and pricing. In most commercialization agreements, some degree of information exchange is required in order to implement the agreement. It is necessary to determine whether the information exchange concerned can give rise to a collusive outcome with regard to the parties' activities falling within and outside the scope of the cooperation. Any negative effects arising from the exchange of information will not be assessed separately, but in light of the overall effects of the agreement.
219. For example, where the parties to a joint advertising agreement exchange pricing information, a collusive outcome may emerge concerning the sale of these jointly advertised products. In any event, the exchange of such information in the context of a joint advertising agreement goes beyond what would be necessary to implement the agreement in question. The likely effects on competition of information exchange in the context of commercialization agreements depends on the characteristics of the market and the data shared, and should be assessed in light of the principles included in the chapter concerning information exchange.

6.4. Assessment under Article 5 of the Act

6.4.1. Efficiency gains

220. Commercialization agreements can give rise to significant efficiency gains. The efficiencies to be taken into account when assessing whether a commercialization agreement fulfils the criteria of article 5 depend on the nature of the activity and of the parties to the cooperation. Price fixing is not acceptable, unless it is absolutely indispensable for generating substantial efficiencies. Joint distribution can generate significant efficiencies, especially for smaller producers, stemming from economies of scale or scope.
221. In addition, the efficiency gains must not merely be savings resulting from the elimination of the costs incurred due to the existence of competition; they must also result from the integration of economic activities. For instance, a reduction of transport cost which is only a result of customer allocation without any integration of the logistical system cannot be regarded as an efficiency gain within the meaning of article 5.

222. Efficiency gains must be demonstrated by the parties to the agreement. In this respect, it is important for the parties to make significant contributions to capital, technology, or other assets within the framework of the cooperation. Cost savings through a reduction in the number of resources and facilities used for the same job will also be deemed as acceptable gains. On the other hand, a joint commercialization agreement which lacks any investments and is no more than a sales department is likely to be a disguised cartel and is unlikely to fulfil the conditions of article 5.

6.4.2. Pass-on to consumers

223. Efficiency gains attained must be passed on to consumers in a way that compensates for the restrictive effects of the commercialization agreement on competition. This can happen in the form of lower prices or better product quality or variety. However, the higher the market power of the parties, the less likely they are to pass on the efficiency gains to consumers in a way that would outweigh the restrictive effects on competition created by the agreement. Where the combined market share of the parties is below 15%, it is highly likely that any efficiency gains generated by the agreement will be sufficiently passed on to consumers.

6.4.3. Non-elimination of competition

224. If, as a result of the commercialization agreement, competition is eliminated in respect of a substantial part of the relevant market, then the agreement cannot benefit from exemption under article 5. This analysis must also be conducted in relation to the relevant market to which the products subject to the cooperation belong, as well as in relation to the possible spill-over markets.

6.4.4. Indispensability

225. A commercialization agreement which includes restrictions that go beyond what is necessary to achieve the efficiency gains would not meet the conditions listed in article 5. The question of indispensability is especially important for those agreements involving price fixing or market allocation, which can be considered indispensable only under exceptional circumstances.

6.5. Examples

Example 1

226. Joint commercialization necessary to enter a market

Four undertakings providing laundry services in a large city, each with a 3 % market share in the laundry market for that city, agree to create a joint marketing arm for selling laundry services to institutional customers such as hotels, hospitals and offices, whilst keeping their freedom to compete for individual clients. In view of the new segment of demand,

i.e. the institutional customers, these undertakings establish a common brand name, a common price and common standard terms including a maximum period of 24 hours before deliveries and schedules for delivery; they also set up a common call center where institutional clients can request express services. Within this framework, they hire a receptionist for the call center and several drivers. Further, they invest in vans for dispatching, and in brand promotion to increase their recognition. The agreement does not fully reduce the infrastructure costs of the parties since they are keeping their own premises and still compete with each other for individual clients; however, it increases their economies of scale, allowing them to offer a more comprehensive service to other clients for a longer period of time and in a wider geographic area. In order to ensure the realization of the project, it is necessary for all four of the undertakings to sign the agreement. The market is very fragmented, with no individual undertaking having more than 20% market share.

Assessment: Although the combined market share of the parties is low, the fact that the agreement involves price fixing means a violation of article 4 may be at issue. However, the parties would not have been able to enter the market for providing laundry services to institutional customers, either individually or in cooperation with a fewer number of parties than the four currently taking part in the agreement. As such, in this particular case, the agreement may not create competition concerns despite the price-fixing restriction it includes, since it can be considered as indispensable for the promotion of the common brand and the success of the project. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met.

On the other hand, in a situation where four undertakings enter into the agreement when just three would have been sufficient for the realization of the project, the fact that the agreement involves price fixing and could have been carried out by fewer than four parties means that article 4 was violated. Therefore, the agreement needs to be assessed under article 5. The agreement gives rise to efficiency gains as the parties are now able to offer improved services for a new category of customers on a larger scale, which they would not have been able provide individually. In light of the fact that the combined market share of the parties is low, it is likely that efficiency gains will be sufficiently passed on to consumers. It is further necessary to consider whether the restrictions imposed by the agreement are indispensable to achieve the efficiencies and whether the agreement eliminates competition. Given that the aim of the agreement is to provide new and more comprehensive services to an additional category of customers, under a single brand with common standards, the price fixing can be considered as indispensable for the promotion of the common brand and, consequently, for the success of the efficiencies resulting from the project. Additionally, due to the fragmented market structure, the agreement is not likely to eliminate competition. The fact that there are four parties to the agreement allows for increased capacity and contributes to simultaneously fulfilling the demand of several institutional customers in compliance with the standard terms such as meeting maximum delivery time. As such, the efficiency gains are likely to outweigh the restrictive effects on competition arising from the reduction of competition between the parties and the agreement is likely to fulfil the conditions of Article 5.

Example 2

227. Joint internet platform

A number of small florist firms join an electronic web-based platform for the promotion, sale and delivery of flower arrangements. There are a number of competing web-based platforms. By means of a monthly fee, member businesses share the operating costs of the platform and make joint investments in brand promotion. Through the webpage, where a wide range of different types flower arrangements are offered for sale, customers can order and pay for the type of flower arrangements they want to be delivered. The order is then forwarded to the firm closest to the address of delivery. The firm individually bears the costs of preparing the flower arrangement and delivering it to the client. The firm is paid 90% of the final price, which is set by the web-based platform and applies to all participating firms, whilst 10% of the final price is used for funding the operating costs of the web-based platform and also for common promotion costs. Apart from the payment of the monthly fee, there are no further restrictions for firms to join the platform. Moreover, florist firms with their own websites are also able to sell flower arrangements on the internet under their own brand and thus the firms are still able to compete among themselves outside the cooperation. Customers purchasing over the web-based platform are guaranteed same day delivery of the flower arrangements and they can also choose a delivery time convenient to them.

Assessment: Although the agreement is of a limited nature, as it only covers the joint selling of a particular type of product through a specific marketing channel (the web-based platform), it is likely to constitute a violation under article 4 since it involves price-fixing. The agreement therefore needs to be assessed under article 5. The agreement gives rise to efficiency gains by offering benefits to consumers such as greater choice, higher quality service and the reduction of search costs. These efficiencies are likely to outweigh the restrictive effects on competition brought about by the agreement. Florist firms taking part in the cooperation are still able to continue their individual operations and compete one with another, through both their shops and websites. Therefore, price-fixing could be considered as indispensable for the promotion of the product and the efficiency gains, since when buying through the web-based platform consumers do not know which store they are buying the flower arrangement from and do not wish to deal with a multitude of different prices. In the absence of other restrictions, the agreement fulfils the conditions of article 5. Moreover, competition in the market will not be eliminated, as other competing web-based platforms exist and the parties continue to compete with each other through their shops or over the internet.

Example 3

228. Sales joint venture

Undertakings A and B, located in two different regions, produce bicycle tires. The undertakings have a combined market share of 15% in the nation-wide market for bicycle tires. The undertakings decide to set up a non full-function joint venture for sales in order to market the tires jointly and agree to sell all their production through the joint venture. The production and transport infrastructure remains within each party. The parties claim to have attained considerable efficiency gains from the agreement. It is claimed that such

gains basically stem from being able to fulfil the demands of their existing and potential customers due to increased economies of scale and from being able to compete better with rival tires. The joint venture negotiates the prices and allocates orders to the closest tire manufacturer, with a view to keep transport costs which arise during delivery to the customer at an optimum level.

Assessment: Even though the combined market share of the parties is low, the agreement restricts competition by object since it involves customer allocation and the setting of prices by the joint venture. The claimed efficiencies deriving from the agreement do not result from the integration of economic activities or from common investment. The joint venture would have a very limited function since it would only serve as an interface for allocating orders between the production facilities. Therefore, the conditions of article 5 would not be fulfilled since it is unlikely that any efficiency gains would be passed on to consumers to such an extent that they would outweigh the restrictive effects on competition brought about by the agreement.

7. STANDARDIZATION AGREEMENTS

7.1. Definition and scope

Standardization agreements

229. The primary objective of standardization agreements is to establish the technical requirements or quality standards for the alignment of current or future products, production processes, services or methods. Standardization agreements can cover various issues, such as standardization of different grades or sizes of a particular product, or standardization of technical specifications in product or services markets where compatibility and interoperability with other products or services is essential. The terms required for access to a particular quality standard or for approval by a regulatory body can also be regarded as a standard. Agreements setting out standards on the environmental performance of products or production processes are also covered by this chapter.
230. Standardization bodies are assessed under the Act no 4054 if they are considered as undertakings or associations of undertakings. However, preparation of technical standards as part of the exercise of public mandates or standards related to the provision of professional services such as rules of admission to liberal professions do not fall under the scope of these Guidelines.

Standard terms

231. In certain sectors, standard terms of sale or purchase elaborated by an association of undertakings or directly by the competing undertakings (standard terms) are used. For instance, standard terms play an important role in banking and insurance sectors. Standard terms which establish standard conditions of sale or purchase for substitute products between competing undertakings and consumers are covered by these Guidelines. Standard terms related to sale or purchase between competitors, on the other hand, do not fall within this framework. When standard terms find wide utilization within a sector, the conditions of purchase or sale used in the sector may be aligned without being tied to an agreement.
232. Standard terms elaborated individually by an undertaking solely for its own use in contracts signed with its suppliers or customers are not covered by these Guidelines as they are not horizontal agreements.

7.2. Relevant markets

233. Standardization agreements may demonstrate their effects on four possible markets. Standard-setting may first have an impact on the product or services market to which the standard or standards relates. Second, where the standard-setting involves the selection of technology and where intellectual property rights (IPR) are marketed separately from the

products to which they relate, the relevant technology market may be affected. Third, the market for standard-setting may be affected if different standard-setting bodies or agreements exist. Lastly, if a distinct market for testing and certification exists, this market may be affected.

234. The effects of standard terms are in general felt on the downstream market where the undertakings using the standard terms compete with each other by selling their products to their customers.

7.3. Assessment under Article 4 of the Act

7.3.1. Main competitive concerns

Standardization agreements

235. Standardization agreements usually produce significant positive economic effects through various means such as creating new and improved products or markets and promoting the improvement supply conditions. Normally, standards benefit economies as a whole by increasing competition and lowering production and sales costs. Standards can maintain and enhance quality, provide information, ensure interoperability and compatibility and thus increase benefits for consumers.
236. Standard-setting can, however, in certain circumstances, also give rise to restrictive effects on competition by potentially restricting price competition and limiting or controlling production, market, innovation or technical development. This can occur through three main channels: Reduction in price competition, foreclosure of the market to innovative technologies, and exclusion of, or discrimination against, certain undertakings by prevention of effective access to the standard.
237. First, if undertakings were to engage in anti-competitive discussions in the context of standard-setting, this could reduce or eliminate price competition in the markets concerned, thereby facilitating a collusive outcome in the market.
238. Second, standards that set detailed technical specifications for a product or service may limit technical development and innovation. While a standard is being developed, alternative technologies can compete with each other for inclusion in the standard. Once one technology has been chosen and the standard has been set, competing technologies and undertakings may face a barrier to entry and may potentially be excluded from the market. In addition, standards which require the exclusive use of a particular technology for a standard or which force the members of the standard-setting organization to exclusively use a particular standard, may lead to the same effect. The risk of limiting innovation is increased if one or more undertakings are excluded from the standard-setting process without an objective reason.
239. The third channel in which standard-setting results in anti-competitive effects is where standardization leads to restrictive effects on competition by preventing certain

undertakings from obtaining effective access to the results of the standard-setting process, that is to say, to the technical specifications and/or to the intellectual property rights⁶ essential for the implementation of the standard. In case an undertaking's access to the results of the standard is either completely prevented or is tied to prohibitive or discriminatory terms, there is a risk of creating restrictive effects on competition. A system where intellectual property rights which are likely to be used in setting the standard are disclosed up-front may ensure effective access to the standard, since it would allow the participants to identify which technologies are covered by intellectual property rights. In this way, the participants will be able to both factor in the potential effect of the results of the standard on the final price, and know if the IPR holder would accept to license if their technology is included in the standard.

240. Intellectual property law and competition law have similar objectives with respect to promoting innovation and enhancing consumer welfare. Intellectual property rights promote dynamic competition by encouraging undertakings to invest in new or improved products and processes. However, a participant holding IPR essential for the implementation of a standard, could, by virtue of these rights, acquire control over the use of a standard. Therefore, where the standard constitutes a barrier to entry, the aforementioned participant could thereby control the product or service market to which the standard relates. This in turn could allow undertakings to behave in anti-competitive ways, for example by preventing users' effective access to the standard after the adoption of the standard either through refusing to license the necessary IPR or through extracting excessive royalty fees. However, even if the establishment of a standard can create or increase the market power for those undertakings which hold the intellectual property rights essential for that standard, simply holding the IPR essential for a standard does not necessarily equate to the direct possession or exercise of market power. The question of market power, therefore, can only be assessed on a case by case basis.

Standard terms

241. Standard terms can give rise to restrictive effects on competition by limiting product choice and innovation. If a large part of an industry adopts the standard terms and chooses not to deviate from them, or only deviates from them in exceptional cases of strong buyer power, then customers might have no option other than to accept the standard terms. However, the risk of limiting choice and innovation is only likely in cases where the standard terms define the scope of the final product. As regards classical consumer goods,

⁶ In the context of standards involving intellectual property rights, different groups of undertakings with different interests in standard-setting can be identified. The first of these groups consists of technology development and marketing undertakings which are solely active in the upstream market. Their only source of income is licensing revenues and their goal is to maximize their royalties. The second group consists of downstream-only undertakings which manufacture products or provide services developed by other undertakings but which do not hold relevant IPR. Royalties represent a cost for these undertakings, and their goal is to avoid these costs. The last group consists of vertically integrated undertakings that both develop technology and sell products. They have mixed incentives. On the one hand, they can draw licensing revenue from their IPR; on the other hand, they may have to pay royalties to other undertakings holding IPR essential to the standard. Therefore, these undertakings may cross-license their own essential IPR in exchange for the essential IPR held by other undertakings.

standard terms of sale generally do not limit innovation, quality and variety related to the product.

242. In addition, depending on their content, standard terms might pose the risk of affecting the commercial conditions of the final product. In particular, there is a serious risk that price-related standard terms would restrict price competition.
243. Moreover, if the standard terms become industry practice in a general sense, access to these standard terms might become vitally important for entry into the market. In such cases, refusing access to the standard terms could risk causing foreclosure of the market to competitors. As long as the standard terms remain effectively open for use by anyone that demands access to them, the possibility of foreclosure of the market to competitors would be low.

7.3.2. Restriction of competition by object

Standardization agreements

244. Standardization agreements which are used as part of another agreement aimed at excluding actual or potential competitors restrict competition by object. For instance, an agreement whereby an association of manufacturers sets a standard and puts pressure on third parties not to market products that do not comply with that standard, or whereby the producers of an existing product come to an understanding to exclude new technologies from an existing standard could be assessed under this category.
245. Agreements where restrictive licensing terms⁷ are disclosed prior to the adoption of a standard in order to cover joint price fixing related to downstream products, substitute intellectual property rights or technologies will be considered under the scope of restriction of competition by object. On the other hand, prior disclosure of restrictive terms on a unilateral basis should not be seen as a direct violation of article 4 of the Act.

Standard terms

246. Agreements including standard terms, which are used as part of another agreement aimed at excluding actual or potential competitors restrict competition by object. An example would be where an association of undertakings refuses to allow a new entrant access to standard terms, the use of which is vital for entry to the market.
247. Any standard terms containing provisions which directly influence prices, such as recommended prices and discounts, would fall under the scope of restriction of competition by object.

⁷ Maximum licensing price to be implemented may be given as an example.

7.3.3. Restrictive effects on competition

Standardization agreements

Agreements normally not restrictive of competition

248. Standardization agreements which do not restrict competition by object must be analyzed in light of their own legal and economic context with regard to their actual and potential effects on competition. In the absence of market power, a standardization agreement is not expected to produce restrictive effects on competition. Therefore, restrictive effects on competition are unlikely to arise in a situation where there is effective competition between a number of voluntary standards.
249. The following paragraphs describe the situations under which standardization agreements posing a risk of creating market power could normally fall outside of the scope of article 4.
250. Even in case the conditions principles set out in this section are absent, an assessment must be carried out to establish whether the agreement falls under article 4 and, if so, whether or not the conditions of article 5 are fulfilled. It is recognized that a positive aspect of market economy is the existence of different models for standard-setting as well as the competition between those models. Therefore, standard-setting organizations are entirely free to establish rules and procedures completely different from those described in the paragraphs, as long as they do not violate competition rules.
251. Normally, where **participation** in standard-setting is **unrestricted** and the procedure for adopting the standard in question is **transparent**, standardization agreements which **contain no obligation to comply** with the standard and provide **access to the standard on fair, reasonable and non-discriminatory (FRAND) terms** are not expected to restrict competition under article 4.
252. In particular, **to ensure unrestricted participation**, the rules established by the standard-setting organization must guarantee that all competitors in the market or markets affected by the standard can participate in the selection process of the standard. Standard-setting organizations must establish non-discriminatory and objective procedures for allocating voting rights as well as objective criteria for selecting the technologies to be included in the standard, where relevant.
253. With respect to **transparency**, the relevant standard-setting organization must introduce methods which allow stakeholders to gather timely and effective information concerning upcoming, on-going and finalized standardization work, at each stage of the development of the standard.

254. Furthermore, the rules introduced by the standard-setting organization need to ensure effective **access** to the standard on **fair, reasonable and non-discriminatory terms**.
255. In case of a standard involving intellectual property rights, **a clear and balanced IPR policy, adapted to the relevant industry** and the needs of the standard-setting organization, increases the likelihood that those implementing the standard can have effective access to the standards established.
256. In order to ensure effective access to the standard, those participants wishing to have the IPR they hold included in the standard must provide an irrevocable commitment in writing to offer to license the essential rights to all third parties under fair, reasonable and non-discriminatory terms. That commitment to license under fair, reasonable and non-discriminatory terms should be given prior to the adoption of the standard. Moreover, holders of these rights should be able to exclude specified technology from the scope of the standard-setting process and thereby from the commitment to offer licenses, provided that this takes place at the first stages of the standard development process. To ensure the effectiveness of the aforementioned commitment, IPR holder participants who provide such a commitment must ensure that any undertaking to which they transfers their intellectual property rights, including licensing rights, is bound by that same commitment.
257. As well, participants must **disclose, on a good faith basis**, any of their intellectual property rights which might be essential for the implementation of the standard under development. This disclosure would facilitate efficient access to the standard by enabling the industry to make an informed choice of technology. Such a disclosure obligation could also include ongoing disclosure as the standard is developed as well as objective efforts to identify IPR related to the potential standard. It is also sufficient if the participant declares that it is likely to hold intellectual property rights over a particular technology, without mentioning any specific IPR claims or applications. Since aforementioned risks with regard to effective access do not apply to cases of standards which do not require intellectual property rights, IPR disclosure concerning such standards would not be necessary, either.

FRAND commitments

258. FRAND commitments are designed to ensure that any essential technology under IPR protection incorporated in a standard is accessible to the users of that standard on a fair, reasonable and non-discriminatory basis. In particular, these commitments can prevent IPR holders from making the implementation of a standard difficult by refusing to license or by requesting unfair or unreasonable (excessive) fees or discriminatory fees after the industry has been locked-in to a standard.
259. In order to ensure that a standardization agreement is not caught by article 4, the relevant standard-setting organization does not need to demonstrate that the licensing terms of the participants themselves fulfil the FRAND commitments. Participants will have to assess for themselves whether the licensing terms and in particular the fees they charge fulfil the relevant commitments. Therefore, when deciding to undertake such commitments for a

particular IPR, participants will need to accept the implications of the commitment, notably on the freedom to set their fees.

260. In case of a dispute, the assessment of whether fees charged for access to IPR in the standard-setting context are unfair or unreasonable should be based on whether there is reasonable relationship between these fees and the economic value of the IPR. In general, there are various methods available to make this assessment. In principle, cost-based methods are not suitable, because of the difficulty in assessing the costs attributable to the development of a particular patent. Instead, it is possible to compare the licensing fees charged by the undertaking in question for the relevant patents in a competitive environment before the sector has been locked into the standard (ex ante) with those charged after the sector has been locked in (ex post). This method may be applied where the comparison can be made in a consistent and reliable manner. Licensing fees charged for the same intellectual property rights within the context of similar standards may also be used as an indicator for FRAND licensing fees. However, these Guidelines do not include an exhaustive list of appropriate methods to assess whether licensing fees are excessive.
261. Also, an independent expert analysis may be requested, stating that the relevant IPR portfolio is objectively important and essential for the standard at issue. In certain cases, it may also be possible to refer to ex ante disclosures concerning licensing terms in relation to a specific standard-setting process.

Effects based assessment for standardization agreements

262. The assessment of standardization agreements must take into account the likely effects of the standard on the markets concerned. The following considerations apply to all standardization agreements that depart from the principles set out in paragraphs 251 to 257.
263. Whether standardization agreements will give rise to restrictive effects on competition may depend on whether the members of the standard-setting organization are **free to develop alternative standards or products** that do not comply with the agreed standard. For example, if the standard-setting agreement forces its members to only produce products in compliance with the standard, the risk of the agreement giving rise to negative effects on competition is significantly increased, which could, in certain circumstances, lead to the agreement to have restriction of competition as its object. On the other hand, the likelihood of standards which only cover elements of limited importance for the production of the final product to lead to competitive problems is lower when compared to those standards which concern more important aspects of the final product.
264. The assessment of whether the agreement restricts competition must also analyze the issue of **access to the standard**. Where the result of a standard (that is to say, technical specification on how to comply with the standard and the essential IPR for implementing the standard) is not accessible, or only accessible on discriminatory terms, to members or third parties who are not members of the relevant standard-setting organization, this may

lead to discrimination between undertakings or to segmentation or foreclose of the markets. Thus, such an agreement is highly likely to restrict competition. However, in case of several competing standards or in case of effective competition between the standardized products and non-standardized products, access limitations may not produce restrictive effects on competition.

265. If **participation in the standard-setting process** is open, that is to say if all competitors and/or stakeholders in the market affected by the standard are allowed to take part in choosing and elaborating the standard, the risk of restriction of competition will decrease. The greater the likely impact of the standard on the market, and the wider its potential fields of application, the more important it is to allow equal access to the standard-setting process. However, if it can be demonstrated that, under the current circumstances, there is effective competition between several similar standards and standard-setting organizations and that it is not necessary for the whole sector to utilize the same standards, then it can be said that there are no restrictive effects on competition. At the same time, if in the absence of a limitation on the number of participants it would have been impossible to adopt the standard, the agreement is not expected to lead to any restrictive effects on competition under article 4. In certain situations, the potential negative effects of restricted participation may be eliminated, or at least lessened, by ensuring that stakeholders are **kept informed and consulted** on the work in progress. The more transparent the adoption process for the standard, the more likely it is that the adopted standard will take into account the interests of all stakeholders.
266. When assessing the effects of a standard-setting agreement, the **market shares of the goods or services based on the standard** should be taken into account. However, at the early stages, it might not always be possible to estimate with any certainty whether the standard will be adopted by a large part of the sector or whether it will only be a standard used by a small part of the relevant sector. Since most of the undertakings participating in setting the standard would participate in implementing the standard as well, the relevant market shares of these undertakings can, in many cases, be used in estimating the likely market share of the standard. However, as the effectiveness of standardization agreements is often proportional to the share of those involved in setting and/or implementing the standard, high market shares held by the parties in the market or markets affected by the standard will not necessarily lead to the conclusion that the standard is likely to restrict competition.
267. Any standard-setting agreement which **clearly discriminates** against any of the participating or potential members could lead to a restriction of competition. For example, if a standard-setting organization explicitly excludes undertakings operating only in the upstream markets, this could lead to the exclusion of potentially better technologies.
268. For standard-setting agreements which adopts methods different than those laid out in paragraph 257 **concerning the disclosure of intellectual property rights**, it would have to be assessed on a case by case basis whether the methods which, for example, does not require but only encourage IPR disclosure, guarantee effective access to the standard. In other words, it needs to be assessed in the specific context whether the IPR disclosure method prevents, in practice, an informed choice between technologies and associated IPR.

269. Finally, standard-setting agreements providing for **ex ante disclosures of restrictive licensing terms**, are not, in principle, expected to restrict competition within the meaning of article 4. Within that framework, it is important that parties involved in the selection of a standard be fully informed not only as to the available technical options and the intellectual property rights associated with them, but also as to the likely costs of those intellectual property rights. Therefore, should the IPR policy of a standard-setting organization provide for IPR holders to unilaterally disclose their restrictive licensing terms, including the maximum royalty rates they would charge, prior to the adoption of the standard, this is normally not expected to lead to a restriction of competition within the meaning of article 4⁸. Such unilateral ex ante disclosures of restrictive licensing terms would be one way to enable the standard-setting organization to take an informed decision based on both technical and price-related advantages and disadvantages of different alternative technologies.

Standard terms

270. When assessing whether standard terms would lead to restrictive effects on competition, existing economic conditions and the situation of the relevant market should be taken into consideration.

271. Such agreements are not likely to give rise to restrictive effects on competition, as long as competitors in the relevant market **are not restricted** from participating in the establishment of standard terms, the established standard terms are **non-binding** and are **effectively accessible** for anyone.

272. Effectively accessible and non-binding standard terms related to the sale of goods and services which have no effect on price generally do not have any restrictive effects on competition. This is because these terms are unlikely to lead to any negative effects on product quality, product variety or innovation. There are, however, two general exceptions where a more in-depth assessment would be required.

273. Firstly, where standard terms related to the sale of goods or services define the scope of the product sold to the customer, thus increasing the risk of limiting product variety, the widespread application of these terms could give rise to restrictive effects on competition within the meaning of article 4. The limitation innovation and product variety due to widespread use of the standard terms may, for instance, arise as a result of standard terms in insurance contracts where limits are placed on customer choice related to the key elements of the contract, such as the standard risks covered. Even if their use is not compulsory, such standard terms might eliminate the incentives of the competitors to compete on product variety.

274. When assessing whether there is a risk that the standard terms are likely to have restrictive effects by way of a limitation of product choice, factors such as existing competition in the market and the scope of the standard terms should be taken into account. For example,

⁸ As outlined in paragraph 245, the use of unilateral ex ante disclosures of restrictive licensing terms to cover joint price fixing of either downstream products or of substitute IPR/technologies would constitute a restriction of competition by object.

in a market with a large number of smaller competitors, the risk of a limitation of product choice would be lower than in a market with a few bigger competitors. The market shares of the undertakings participating in the establishment of the standard terms might provide an indication of the likelihood of adoption of the standard terms or of the likelihood that the standard terms will be used by a large part of the market. However, the assessment must analyze not only whether the standard terms elaborated are likely to be used by a large part of the market, but also whether these terms cover only part of the product or the whole of it. This is because the less extensive the standard terms, the less likely that these terms will lead to a limitation of product choice. Moreover, in cases where it would not be possible to offer a certain product in the market without establishing standard terms, there would likely be no restrictive effects on competition within the meaning of article 4. In that scenario, product choice is increased rather than decreased by the establishment of the standard terms.

275. Secondly, even if the standard terms are not directly related to the final product, they might comprise a decisive part of the relevant commercial transaction due to other reasons. An example would be standard terms which become de facto standards in online shopping. In online shopping, where customer trust is of vital importance within the framework of various elements including the use of safe payment systems, proper description of the products, clear and transparent pricing rules and return policy, it is difficult for customers to make a clear assessment of all those elements. Therefore, due to customers adopting widespread practices, standard terms regarding those elements might become de facto standards with which undertakings would need to comply to sell their products in the market. Even though non-binding, these standard terms would become de facto standards with effects very close to a binding standard, and they would need to be analyzed accordingly.
276. If standard terms are binding, their impact on product quality, product variety and innovation must be assessed. This assessment is particularly important if the standard terms are binding for the entire market.
277. Moreover, binding or non-binding, should the standard terms contain any provisions which are likely to have a negative effect on rice competition, such as terms defining discounts, these terms would be highly likely to lead to restrictive effects on competition within the meaning of article 4.

7.4. Assessment under Article 5 of the Act

7.4.1. Efficiency gains

Standardization agreements

278. Standardization agreements generally give rise to significant efficiency gains. For example, standards which establish technical interoperability and compatibility often encourage performance-based competition between technologies from different undertakings, thereby preventing dependency on a single supplier. Furthermore, standards

may reduce transaction costs for buyers and sellers. For instance quality, safety and environment standards related to a product can lead to increased product quality by facilitating consumer choice. Standards, which also play an important role for innovation, can reduce the time it takes to bring a new technology to the market and facilitate innovation by allowing undertakings to work on common solutions.

279. To achieve those efficiency gains in the case of standardization agreements, the information necessary to apply the standard must be accessible to those wishing to enter the market.
280. The use of marks or logos certifying compliance to a standard and thereby providing certainty to customers can enhance the dissemination of a standard. On the other hand, agreements for testing and certification go beyond the main objective of defining the standard and normally constitute a distinct agreement and market.
281. The effects of standardization agreements on innovation must be analyzed on a case-by-case basis. However, standards creating compatibility on a horizontal level between different technology platforms are generally considered to be likely to give rise to efficiency gains.

Standard terms

282. The use of standard terms can provide economic benefits such as making it easier for customers to compare the conditions offered and thus facilitate switching between undertakings. Standard terms can also lead to efficiency gains in the form of savings in transaction costs and can, particularly in sectors where the contracts are of a complex legal structure, facilitate entry. Moreover, standard terms may also increase legal certainty for the contract parties
283. The higher the number of competitors in the market, the greater the efficiency gains created by facilitating the comparison of contract conditions.

7.4.2. Pass-on to consumers

284. Efficiency gains attained must be passed on to consumers in a way that compensates for the restrictive effects of the standardization agreement or standard terms on competition.

Standardization agreements

285. An important part of the analysis of pass-on to consumers relates to which procedures are employed in order to ensure that the interests of the users of the standards and of end consumers are protected. Where standards facilitate technical interoperability and compatibility or competition between new and existing products, services and processes, it can be presumed that the standard will benefit consumers.

Standard terms

286. Both the risk of potential restrictive effects on competition and the likelihood of creating efficiency gains increase in line with the market shares of the undertakings and with the extent to which the standard terms are used. Hence, it is not possible to establish a general market share threshold presuming there would be no risk of restrictive effects on competition or efficiency gains would be passed on to consumers to an extent that would compensate for the restrictive effects on competition.
287. However, certain efficiency gains generated by standard terms, such as increased comparability of the offers on the market, facilitated switching between providers, and legal certainty of the clauses set out in the standard terms, are deemed to be beneficial for the consumers. As regards other possible efficiency gains, such as lower transaction costs, it is necessary to make an assessment on a case-by-case basis and in the relevant economic context whether these gains are likely to be passed on to consumers.

7.4.3. Non-elimination of competition

288. Whether a standardization agreement affords the parties the ability to eliminate competition depends on the other sources in the market, on the level of competitive constraint that these sources impose on the parties, and on the impact of the agreement on those competitive constraints. While market shares are important for that analysis, the magnitude of existing sources of competition outside the scope of the agreement cannot be assessed exclusively on the basis of market share, except in cases where a standard becomes a de facto sector standard. This is because if the relevant standard has become a de facto sector standard, competition may be eliminated in cases where effective access to the standard by third parties are prevented. Standard terms used by a majority of the sector might also create a de facto sector standard and thus raise similar competitive concerns. However, if the standard or the standard terms only concern a limited part of the product or service, competition is not likely to be eliminated.

7.4.4. Indispensability

289. A standardization agreement or standard terms which include restrictions that go beyond what is necessary to achieve the efficiency gains would not meet the exemption conditions listed in article 5.

Standardization agreements

290. In the assessment of standardization agreements, the likely effects on the markets concerned on one hand, and the scope of restrictions which can possibly go beyond the objective of achieving efficiencies on the other hand must be taken into consideration.

291. Participation in standard-setting should normally be open to all competitors in the markets affected by the standard, unless this leads to significant inefficiencies or unless recognized procedures are foreseen for the collective representation of interests.
292. As a general rule, standardization agreements should cover no more than what is necessary to achieve their identified goals, even when interoperability, compatibility or a certain level of quality is concerned. In cases where there is only one technological solution which would ensure efficiency gains, those standards should be set on a non-discriminatory basis. Technology neutral standards can, in certain circumstances, lead to larger efficiency gains. Setting substitute intellectual property rights as essential elements of a standard while at the same time forcing the users of the standard to pay for more IPR than technically necessary would go beyond what is necessary to achieve any efficiency gains. In the same vein, including substitute IPR as essential elements of a standard and then limiting the use of that technology exclusively to that particular standard would not be necessary to achieve the intended efficiencies and could limit competition between technologies.
293. In a standardization agreement, restrictions which make a standard binding and obligatory for the sector are in principle not indispensable.
294. Similarly, standardization agreements that entrust certain organizations with exclusive rights to test compliance with the standard go beyond the primary objective of standard-setting and may also restrict competition. However, it can be claimed that the exclusivity in question is mandatory for a certain period of time, for example due to the need to recoup significant start-up costs. In that case, the standardization agreement should include the necessary measures to eliminate possible risks to competition resulting from exclusivity. These measures may include certification fees at a reasonable level which are proportionate to the cost of the standard compliance test.

Standard terms

295. It is generally not justified to make standard terms binding and obligatory for the sector or for the members of the association of undertakings that established them. However, under certain circumstances, making standard terms binding may be indispensable for the attainment of the efficiency gains generated by them.

7.5. Examples

Example 1

296. Setting standards competitors cannot satisfy

A standard-setting organization sets and publishes safety standards that are widely used by the relevant industry. Most competitors in the industry participate in the setting of the standard. An undertaking which entered the market prior to the adoption of the standard has developed a product which is equivalent in terms of performance and functional

requirements and which is approved by the technical committee of the standard-setting organization. However, the technical specifications of the safety standard are, without any objective justification, drawn up in such a way as to not allow for this or other new products to comply with the standard.

Assessment: This standardization agreement is expected to give rise to restrictive effects on competition under article 4, and it is unlikely to meet the conditions of article 5. The members of the standards development organization have, without any objective justification, set a standard which cannot be satisfied by those products manufactured by competitors based on other technological solutions, even though they have equivalent performance. Hence, this standard, which is based on a discriminatory basis, will reduce or prevent innovation and product variety. It is unlikely that the way the standard is drafted will lead to greater efficiency gains than a neutral one.

Example 2

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

A number of consumer electronics manufacturers with high market shares agree to develop a new standard for a product that is more advanced than DVD.

Assessment: Competitive concerns should not arise, provided that the manufacturers remain free to produce other new products which do not conform to the new standard, participation in the standard-setting is unrestricted and transparent, and the standardization agreement does not otherwise restrict competition. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met. If the parties agreed to only manufacture products which conform to the new standard, the agreement would lead to restrictive effects on competition within the meaning of article 4 by limiting technical development, reducing innovation and preventing the parties from selling different products. Also, under such circumstances, conditions listed in article 5 are not likely to be fulfilled.

Example 3

298. Standards related to the protection of the environment

Almost all producers of washing machines agree, with the encouragement of a public body, to no longer manufacture products which do not comply with certain environmental criteria, such as energy efficiency. Together, the parties hold 90% of the market. The products which will be phased out of the market as a result of this decision account for a significant proportion of total sales. They will be replaced by more environmentally friendly, but also more expensive products. Furthermore, the agreement indirectly reduces the output of third parties such as electric utilities companies and suppliers of components incorporated in the products phased out. However, without the agreement, the parties

would not shift their production and marketing efforts to the more environmentally friendly products.

Assessment: The agreement grants the parties control of individual production, concerns an appreciable proportion of their sales and total production, and at the same time reduces the output of third parties. As a result of the agreement, product variety arising from the environmental characteristics of the product will be reduced and prices will probably rise. Consequently, the agreement is likely to give rise to restrictive effects on competition within the meaning of article 4. The involvement of the public authority in this particular case is irrelevant for that assessment. However, newer and more environmentally friendly products are more technically advanced, offering qualitative efficiencies in the form of more washing machine programs which can be used by consumers. Furthermore, there are also efficiencies for the purchasers of the washing machines resulting from lower running costs in the form of reduced consumption of water, electricity and detergent. Those cost efficiencies are realized in markets which are different from the relevant market of the agreement. Nevertheless, those efficiencies may be taken into account as the markets in which the restrictive effects on competition and the efficiency gains arise are related and the consumer group affected by the restrictions and the efficiency gains is substantially the same. The efficiency gains outweigh the restrictive effects on competition in the form of increased costs. Other alternatives to the agreement are shown to be less certain in delivering the same net benefits and less effective in terms of cost reduction. Various technical means are economically available for the parties to manufacture washing machines which comply with the environmental characteristics agreed upon, and the parties will continue to compete in relation to other product characteristics. Therefore, it seems likely that the conditions of article 5 would be fulfilled.

Example 4

299. Government encouraged standardization

In response to the findings of research into the recommended levels of fat in certain processed food conducted by a public institution, several major undertakings manufacturing processed foods agree, as a result of discussions conducted at the industry association, to set recommended fat levels for the products. The sales of the parties to the agreement represent 70% of the total sales of the products. This initiative of the parties will be supported by a national advertising campaign funded by the institution which conducted the research, highlighting the dangers of a high fat content in processed foods.

Assessment: Although the fat levels are presented only as recommendations and therefore their implementation is voluntary, due to the wide publicity resulting from the national advertising campaign, these levels are likely to be implemented by all manufacturers. Therefore, de facto maximum fat levels in the processed foods are likely to be fixed. Consumer choice in the product markets concerned could therefore be reduced. However, the parties will be able to continue to compete with regard to some other characteristics of the products, such as price, product size, quality, taste, other nutritional ingredients, salt content, balance of ingredients, and branding. Moreover, competition regarding the fat levels in the products offered in the market may increase if parties seek to offer lower

levels. Consequently, the agreement is unlikely to give rise to restrictive effects on competition within the meaning of article 4. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met.

Example 5

300. Open standardization related to product packaging

The major undertakings which produce a fast-moving consumer product in a competitive market and those which sell that product from abroad (importers) agree with major packaging firms to start and implement a voluntary initiative to standardize the size and shape of the packaging of the product sold. There is currently a wide variation in packaging sizes and materials for the product. This shows that packaging does not represent a high proportion of the total production costs of the product and that switching costs for packaging producers are not significant. There is no existing standard for packaging. The parties have concluded the agreement voluntarily and in response to pressure from the public authority to meet environmental targets. Together, the manufacturers and importers meet 85% of the domestic sales of the product. This voluntary agreement will ensure that the product offered for sale will be at the same size and will use less packaging material, occupy less shelf space, have lower transport and packaging costs, and be more environmentally friendly through reduced packaging waste. The relevant agreement will also reduce the recycling costs of manufacturers. The standard does not specify which types of packaging materials must be used. The specifications of the standard have been agreed between manufacturers and importers in an open and transparent manner, since the draft specifications were published on the website of the sectoral association a reasonable period of time prior to adoption. The final specifications adopted are also published on the sectoral association website that is freely accessible to any new entrants, even if they are not members of the association.

Assessment: Although the agreement is voluntary, the standard is likely to become a de facto industry practice because the parties represent a high proportion of the market for the product and the public authority is encouraging the retailers to reduce packaging waste. Consequently, the agreement could, in theory, create barriers to entry and lead to market foreclosure. This would in particular be a risk for importers who may need to repackage the product to comply with the de facto national standard, if the package size used in other countries does not meet the de facto standard. However, significant barriers to entry and foreclosure are unlikely to occur in practice. This is because the agreement is voluntary. Major importers have agreed on the standard in an open and transparent manner, switching costs are low, and the technical details of the standard are accessible to new entrants, importers and all packaging suppliers. In particular, importers will be aware of potential changes to packaging at an early stage of the process and will have the opportunity to present their views before the standard is completed due to the open consultation process for the draft standards. Consequently, the agreement is unlikely to give rise to restrictive effects on competition within the meaning of article 4. Even if such effects were to arise, it is likely that conditions specified in article 5 would be met. First of all, the agreement will give rise to quantitative efficiencies through lower transport and packaging costs. Secondly, due to the prevailing competitive conditions in the market, these costs

reductions are likely to be passed on to consumers. Thirdly, the agreement includes only the minimum restrictions necessary to comply with the packaging standard and is unlikely to result in significant foreclosure effects. Lastly, competition will not be eliminated with respect to a substantial part of the products in question.

Example 6

301. Closed standardization related to product packaging

In this example, the situation is the same as in Example 5, except only the manufacturers based within the country representing 65% of the domestic sales of the product agree on the standard, no open consultation is conducted on the specifications adopted including detailed standards on the packaging material that must be used, and the specifications of the voluntary standard are not published. This resulted in higher switching costs for importers as compared to domestic producers.

Assessment: Although the agreement is voluntary as in Example 5, it is very likely for the standard to become de facto industry practice since retailers are being encouraged by the public authority to reduce packaging waste and the domestic manufacturers account for 65% of the national sales of the product. The fact that importers were not consulted resulted in the adoption of a standard which imposes higher switching costs on importers as compared to domestic manufacturers. The agreement may therefore create barriers to entry for packaging suppliers, new entrants and importers who, if the package size used in other countries does not meet the de facto standard, may need to repackage the product to meet the standard in and who were not involved in the standard-setting process, and it may lead to foreclosure of the market to the competitors.

Also in this example, unlike in Example 5, the standardization process has not been carried out in an open and transparent manner. Since importers, packaging suppliers and new entrants have not been given the opportunity to comment on the proposed standard, it is possible that these undertakings were not aware of the standard for a significant period of time. This situation may lead to undertakings' being unable to change their production methods or switch suppliers quickly and effectively. Moreover, if the standard is unknown or difficult to comply with, importers, packaging suppliers and new entrants may be unable to compete with the parties to the agreement, as well. An issue that is of particular relevance here is the fact that the standard includes detailed specifications concerning packaging materials, with which importers and new entrants will struggle to comply due to the closed nature of the consultation and the standard. The agreement may therefore restrict competition within the meaning of article 4. This conclusion is not affected by the fact the agreement has been entered into in order to meet environmental targets agreed with the public authority.

It is unlikely that the conditions of article 5 will be fulfilled in this scenario. Although the agreement results in similar quantitative efficiencies as listed in Example 5, the closed and private nature of the standardization agreement and the non-published detailed standard

on the type of packaging material that must be used are unlikely to be indispensable to achieving the efficiencies under the agreement.

Example 7

302. Standard terms used for contracts between undertakings

In this example, construction companies come together to establish non-binding and open standard terms and conditions for use by contractors when submitting a quotation for construction work to a client. A quotation form is included with terms and conditions suitable for building or construction work. Together, these documents create the construction contract. Contract clauses cover such matters as contract formation, general obligations of the contractor and the client and non-price related payment conditions, insurance, duration, handover and defects, limitation of liability, and termination. These standard terms would often be used between undertakings one of which is active in the upstream and the other is active in the downstream market.

Assessment: These standard terms are not likely to have restrictive effects on competition within the meaning of article 4. Under the normal circumstances, the aforementioned standard terms would not introduce any significant limitations on the customer's choice of the end-product, namely the construction work. Other restrictive effects on competition do not seem likely, either. Indeed, several of the contract clauses above are already regulated by law.

Example 8

303. Standard terms facilitating the comparison of products by different undertakings

A national association for the insurance sector lays down non-binding standard policy conditions for house insurance contracts. The conditions concerned include no provisions on insurance premiums, the amount of coverage, or the excesses payable by the insured. Standard conditions do not impose comprehensive cover which includes risks to which a significant number of policyholders are not simultaneously exposed, and they do not require the policyholders to obtain cover from the same insurer for different risks. While the majority of insurance companies use these standard policy conditions, not all contracts contain the same conditions as they are adapted according to each client's individual needs. Therefore there is no de facto standardization in insurance products offered to consumers. The standard policy conditions enable consumers and consumer organizations to compare the policies offered by different insurers. A consumer association is also involved in the process of laying down the standard policy conditions. These conditions are also available for use by new entrants, on a non-discriminatory basis.

Assessment: Standard policy conditions relate to the structure of the final insurance product. Even if the market conditions and other factors shows that standard policy conditions used by insurance companies create a risk of limitation in product variety, it is

likely that such possible limitation would be outweighed by efficiencies created by the conditions in question, such as facilitation of comparison by consumers of conditions offered by insurance companies. This convenience in conducting comparisons enhance competition by facilitating switching between insurance companies. Furthermore the switching of providers and market entry by competitors constitutes an advantage for consumers. The fact that a consumer association has participated in the process could, in certain instances, increase the likelihood of those efficiencies which do not automatically benefit the consumers being passed on. It is also likely for the standard policy conditions to reduce transaction costs and facilitate entry for insurers in different geographic and/or product markets. Moreover, the restrictions do not seem to go beyond what is necessary to achieve the identified efficiencies and competition would not be eliminated. Consequently, the conditions of article 5 are likely to be fulfilled.